## STATE COLLEGE RECORD

Vol. 45

**\PRIL**, 1946

No. 8

# The North Carolina State College

### Agriculture and Engineering

of

THE UNIVERSITY OF NORTH CAROLINA



## CATALOG ISSUE

#### 1945-46

Announcements for the Session 1946-1947

STATE COLLEGE STATION RALEIGH

13Sep '51

.

# Educational Opportunities For Veterans

×

INTRODUCTION.—The educational opportunities offered to the personnel of the military forces of the United States during and following the present war provide the greatest program of education ever planned by any nation. Never before have so many individuals beyond high-school age been given the privilege of securing training in any field they desire, with little or no expense and with compensation to pay all or nearly all of their personal living expenses. No matter what job, trade, or profession a serviceman may have been engaged in prior to the war, he will have a good chance to improve his knowledge and skills in that field or some other occupation.

Every serviceman should consider, carefully and seriously, how he can use this opportunity to the best advantage. Many should not enter college, but nearly everyone will find some opportunity for selfimprovement through additional organized training.

The information given regarding educational advantages for veterans has been gathered from a study of the laws, from interpretations made by the Veterans Bureau, and from other reliable sources. The information has been prepared in question-answer style to be of most help to servicemen. This information may be used as a guide, but each veteran should procure definite information concerning his status from the Veterans Administration.

Brief information is also given concerning the college program for returning servicemen, and certain suggestions are offered regarding educational training while in military service for those planning to enter college.

We trust that this material will be helpful to servicemen and women in taking advantage of their educational opportunities. We will be glad to forward a copy of Form 1950 or answer any specific inquiry. For a copy of the Application Form 1950 or for further information write

W. L. MAYER, Director of Registration North Carolina State College Raleigh, North Carolina TWO TYPES OF EDUCATIONAL ASSISTANCE.—On March 24, 1943, the 78th Congress approved a bill providing for the education or retraining of servicemen (or women) who are discharged with a service-incurred disability. This law is commonly referred to as P. L. 16.

Veterans eligible for assistance under this law are those who meet the four following requirements.

- The person must have been in the active military or naval service any time after September 16, 1940, and during the present war;
- He or she has been discharged or released from the active service under conditions other than dishonorable;
- 3. He or she must have a disability incurred in or aggravated by such service for which pension is payable under law administered by the Veterans Administration, or would be but for the receipt of retirement pay; and
- He or she must be in need of vocational rehabilitation to overcome the handicap of such disability.

The filing of application for Pension. Veterans Administration, Form 526, will initiate a determination as to the presence or absence of a pensionable disability producing a vocational handicap. Any veteran discharged because of service-connected disability should first determine whether he is eligible for training under this act. The advantages under this act are usually more liberal, and more careful direction and supervision are given to veterans under this act.

The Servicemen's Readjustment Act of 1944 (Public Law 346), commonly referred to as the "G. I. Bill of Rights." and hereafter referred to in this bulletin as P. L. 346, contains the educational provisions for veterans not eligible for aid under P. L. 16. The information which follows pertains only to P. L. 346 unders otherwise noted.

Who Is Eligible?—Any veteran of the Armed Forces (including Waves, Wacs, Spars, et al.) who served on or after September 16, 1940, who was in service at least ninety days, and whose dismissal was other than dishonorable is eligible for educational training.

What Kind of Education Can Be Procured?—The veteran may choose any type of education for which schools are organized—High School, Business School, Trade School, College, University, Professional School, or Graduate School. The veteran is free to choose his major field of study. Where Can This Education Be Procured?—The veteran is free to select the school he desires to attend without reference to the state in which he resides. The school attended must be approved by the Veterans Administration, but this list is secured from the official accrediting agency in each state, and therefore will include all schools normally approved by a state's Educational Accrediting Agency.

How Much Education Can Be Procured?—The maximum time allowed any veteran will be forty-eight months. Each qualified veteran is entitled to twelve months plus as many months as time of active service since September 16, 1940. The time spent in organized college programs such as ASTP and Navy V-12 may be deducted from the total time. Not more than twelve months may be devoted to refresher courses. A veteran will receive additional assistance to complete the term in progress when his allotted time expires.

How Can This Education Be Procured?—The educational training is figured in months and may be taken in any time sequence desired by the veterans and provided by the school—continuous school attendance, normal school attendance (college year), broken attendance, or part-time attendance. Part-time attendance provides for pro rata financial assistance.

When Can a Veteran Begin Training?—A veteran may begin his training immediately after his discharge. He must begin his training within four years after his discharge or the termination of the war, whichever is later. Educational opportunities must be completed within nine years after the termination of the war.

What Compensation Is Received While Attending School?—A veteran receives \$65.00 per month, or \$90.00 per month if married (or having dependents), during the months he attends school. Payments are not made during long vacation periods, but such periods do not count in the time allowance. This payment is for room, board, and other personal expenses. The Government pays the school for all educational expenses including tuition, fees, books, supplies, etc., not to exceed \$500.00 for the college year (September to June). Any excess above the \$500.00 must be paid by the veteran unless he elects to reduce his period of training in proportion to the excess amount of educational costs. Pro rata educational costs are allowed for summer school attendance.

How Should a Veteran Apply for Educational Benefits<sup>2</sup>—Application should be made on Veterans Administration Form 1950 which can be secured from any regional office of the Veterans Administration or from many educational institutions. This form should not be filed until the serviceman has received his discharge from military service. Disabled veterans should first write a letter to the Veterans Administration, giving full information concerning their previous service connections and requesting educational assistance under P. L. 16. If this is denied, they should then file form 1950.

The veteran will receive a communication (in duplicate) from the office of the Veterans Administration, indicating approval (or disapproval) of his application and stating the number of months of education to which he is entitled. The veteran should retain these letters until a copy is requested by the school. The letter is used in lieu of regular payments of tuition, fees, and other educational costs.

Where Should a Veteran Write?—If a veteran knows the school he will attend, he should write to the Veterans Administration's regional office which has jurisdiction where the school is located. If a school has not been selected, the veteran may apply to the office nearest his home or point of discharge. A list of the Regional Offices will be found elsewhere in this publication.

How Should a Veteran Enroll in School2—A veteran enrolls in exactly the same manner as any other student. A school may have a special organization for veterans and may have special regulations concerning the admission of veterans, but so far as the Veterans Administration is concerned, he applies in a normal manner.

Is a Veteran Given Special Supervision?—Veterans attending school under P. L. 346 are regularly enrolled students subject to the normal rules and regulations of the institution and no special supervision is provided by the Veterans Administration. Individual schools may have special administrative or supervisory regulations to assist veterans in their readjustment to school life.

Veterans attending under P. L. 16 are supervised by an educational officer of the Veterans Administration as well as by the college administration.

When Do Monthly Allotments Begin?—The institution notifies the Veterans Administration of the date the veteran enrolls. Allotments begin as of that date and continue until the institution notifies the Veterans Administration of the withdrawal of the student or the closing of a school session. However, allotments are paid at the close of each month, and some time may elapse in getting allotments started. Therefore, veterans should make personal financial arrangements for room, board, and other personal expenses until allotments are received. Payments for subsistence allowances are based on calendar months and a veteran is paid for the exact period he is in attendance plus Albuquerque, New Mexico Atlanta, Georgia Baltimore, Maryland Batavia, New York Bay Pines, Florida Boise, Idaho Boston, Massachusetts Brecksville, Ohio Chevenne, Wyoming Columbia, South Carolina Davton, Ohio Dearborn, Michigan Denver, Colorado Des Moines, Iowa Fargo, North Dakota Ft. Harrison, Montana Hines, Illinois Huntington, West Virginia Indianapolis, Indiana Jackson, Mississippi Jefferson Barracks, Missouri Kansas City, Missouri Lexington, Kentucky Lincoln, Nebraska Little, Rock, Arkansas Los Angeles, California Lyons, New Jersey

Manchester, New Hampshire Minneapolis, Minnesota Montgomery, Alabama Murfreesboro, Tennessee Muskogee, Oklahoma Newington, Connecticut New Orleans, Louisiana New York, New York Philadelphia, Pennsylvania Pittsburgh, Pennsylvania Portland, Oregon Providence, Rhode Island Reno, Nevada Roanoke, Virginia Salt Lake City, Utah San Francisco, California Seattle, Washington Sioux Falls, South Dakota Togus, Maine Tucson, Arizona Waco, Texas Washington, D. C. White River Junction, Vermont Wichita, Kansas Winston-Salem, North Carolina Wood, Wisconsin

### **College Program For Veterans**

#### \*

Scope of Training Available.—The North Carolina State College of Agriculture and Engineering of the University of North Carolina is the State's technological institution giving instruction in Agriculture and Forestry, Engineering, Vocational Teacher Training, and Textiles. Detailed information concerning the majors in these general fields is given in the regular college publications, which will be furnished on request. All qualified veterans are eligible to enroll in any major offered by the college.

In addition, the college will permit a veteran to enroll as a special student to take such specialized work as may be arranged between the student and the Dean of the School. Special students are not granted degrees.

Admission and Guidance. All veterans will apply for admission and have their credentials approved in the same manner as other students. Special guidance assistance will be available whenever needed.

Special Admission.—In addition to the admission of veterans in the customary manner, the North ('arolina College Conference with the approval of the State Department of Public Instruction has approved the admission of veterans at any college in the state under the regular procedure governing the admission of mature students. Under this provision a veteran not qualified for admission based on high school graduation may be admitted through special examinations.

Refresher Courses.—Realizing that veterans who had been in college prior to military service would, in most cases, need to spend some time in review before beginning advanced work, the government has provided a maximum of twelve months of refresher work under Public Law 346.

The facilities of the college will not permit us to accept veterans in need of preparatory refresher work, except those needing only high school algebra and plane geometry. Veterans should contact junior college and city school systems regarding special refresher courses sponsored and approved by the Veterans Administration.

Credit for Military Service.—Ii is not the policy of colleges to allow credit for military service in lieu of regular academic courses. At this institution the credits required for graduation include thirty-six term credits which may be earned in military science and physical education. The college will allow this amount of credit toward graduation to any veteran who has been in active military service as much as one year. Whenever this maximum is allowed, no credits previously or thereafter earned in military science or physical education can be used toward fulfilling graduation requirements. The War Department has ruled that any veteran desiring to compete for a reserve commission under the organized college ROTC program may substitute six months of military training for the freshman basic course and six additional months for the sophomore basic course. Thus, a veteran in service as much as one year is eligible to compete for advanced ROTC which, if completed in a satisfactory manner, will entitle the individual to a commission in the Army Reserve. Veterans who have been in service as much as six months are excused from all requirements in Physical Education and Military Science and receive the normal credit allowance toward graduation.

Credits for Service Courses of Instruction.—The American Council on Education, with the cooperation and support of most of the national deducational organizations, has selected a national committee to evaluate and make recommendations concerning credit for the various types of instruction provided by the Armed Forces. This institution will be guided by the recommendations made by this committee.

The allowance of credit indicated in the preceding section usually does not permit the acceptance of much Service School credit unless it is usuable as a substitute for a required course in the student's major field.

### **Miscellaneous Items of Information**

Rooms and Apartments.—Until some action is taken to increase the space for student housing the college will not be able to provide rooms for all students properly qualified for admission. Therefore the acceptance of a student for admission does not mean that the college can provide living quarters.

The college is endeavoring to secure some temporary housing for married students. The housing situation in the city is very acute and no student should bring his family to Raleigh until he has secured living accommodations.

Education Costs.—The \$500 allowed by the Veterans Administration is sufficient for all items chargeable as educational expense: tuition, fees, books and supplies. (It is sufficient to pay the etxra out-of-state tuition charge.) The \$65.00 (or \$90.00) per month subsistence allowance is for room, board, and other personal expenses.

Veterans Administration Form 1950.—It is required that Veterans Administration Form 1950 be filed in the office of one of the Regional Offices of the Veterans Administration before a student is eligible to receive benefits under Public Law 346 (G. I. Bill of Rights). However, when this Form has been filed he may enter school even though he has not received his certificate of eligibility. It is suggested that a Veteran forward his Form 1950 to the Veterans Administration by registered mail, requesting a return registry delivery card. The Veteran then has proof that his application has been properly received and filed with the Veterans Administration.

Any wounded Veteran should not file Form 1950 until his status under Public Law 16 (Rehabilitation) has been established. No Veteran can enter school under P. L. 16 until his case has been finally acted upon and the institution properly notified by the Veterans Administration.

Entrance Examinations.—Veterans who cannot satisfy the regular entrance requirements are entitled to qualify by examination. Such Veterans are urged, however, to take some refresher work before entering college unless they have had very good training in mathmatics and English.

#### TABLE OF CONTENTS

College (	aler	dar		3
Calendar	for	1916-47		- 9

#### I

#### Officers

The Consolidated University of North	
Board of Trustees	
Executive Committee of the Trustees Administrative Council	
The North Carolina State College	
Officers of Administration	
Other Administrative Officers	
Special Officers	
Officers of Instruction: Faculty	
п	

#### General Information

The College
Information for Applicants
L. Admission
II. Expenses
III. Registration
IV. Grades and Honor Points
V. Scholarship
VI. Classification of Students
VIII. Financial Aids and Scholar-
ships
Student Activities
Medals and Prizes
Physical Education and Athletics
Music
College Publications
Health of Students
General Alumni Association
D. H. Hill Library
Young Men's Christian Association
Military Training

#### ш

#### Schools, Divisions, and Departments

The Basic Division		47
Organization and Objects .		42
Programs of Study		49
The School of Agriculture and	Forestey	61
Organization and Objects	. orearry	61
General Agriculture		62
Curricula (See Index)		04
Agricultural Chemistry		64
Agricultural Engineering	1.1.1. A.1. A.	67
Forestry	- 영화학 전 전	73
Landscape Architecture		79
Wildlife Conservation and	Manage-	10
ment	a a 12 a	84
Agricultural Experiment Stati	on	86

Cooperative	Agricultu	ral H	Extent	ion	
Wurk					85
The School o	f Engineer	ing .			89
Organizatio	n and Obl	ects			89
					95
Engineering	z Experim	ent Sta	ition		96
Service Dep Engineering Engineering	Curricula				
Aeronautica	d			101.	102
Architectur	al Enginee	ring a	nd		
Aeronautica Architectur Architect	ure			103	106
Cerumic				106	108
Chemical			S - 24	108	111
Ceramic Chemical Civil	tion and B				111
Materia	ds	unung			112
Sanitary					113
Transuer	notion				111
Electrical					116
Ganaral					109
Coulorioni	S 8.				195
Indentainl					107
Mechanical					170
Farmitare					190
Heating	and Ale C	(case of the second	a ta da		191
Metula	and An-C	onuncio	mug		194
Division of T	eacher Edu	cation			136
Organizatio	n Objects	Rent	irem	ante:	136
Agricultura	1 Educatio			cures.	129
Industrial	Arts Educa	tion		1.4	140
Industrial 1	Education				1.12
The School o	Textiles				111
Organizatio	n Ohierta	Rem	dinam.	inte	111
Construct Materia Sanitary Transpor Electrical General Industrial Mechanical Furniture Heating Metals Division of T Grganizatic Organizatic Organizatic Organizatic Organizatic Moustrial Industrial Industrial The School o Organizatic Yan Manu	facturing	and			
Knitting					146
Weaving an	nd Designit	38			148
Textile Che	mistry and	Dyein	157		149
Textile Res	earch				149
Textile Ma:	nufacturing	r			151
Textile Ma	nagement				156
Division of 4	Graduate 1	nstrue	tion .		157
Organizatio	n and Fac	lities			159
Degrees					160
Fees .					165
Yarn Manu Knitting Weaving at Textile Che Textile Res Textile Ma Division of ' Organizatio Degrees Fees . Division of C	ollege Exte	nsion.		166.	167
	17				

Page

#### v

#### Scholastic Records

Summary	of	Enrollr	nent,	194	5 - 46		317
Degrees,	Con	ferred,	Max	28.	194	5	319
Medals 1945	and	Prizes	Sch	olars	hip	Day,	323
		2	VI				

annex		- 1951	- H -	325

	J	AN	UA	RY		1			AI	RI	L					J	JL	e				0	CI	ов	ER		
s	м	т	w	т	F	S	s	м	т	w	т	F	s	s	м	т	W	т	F	S	s	М	т	w	т	F	s
6 13 20 27	7 14 21 28	1 8 15 22 29	23	3 10 17 24 31	4 11 18 25	6 12 19 26	7 14 21 28	1 8 15 22 29	2 9 16 23 30	3 10 17 24	18	19	6 13 20 27	7 14 21 28	1 8 15 22 29	2 9 16 23 30	3 10 17 24 31	4 11 18 25	5 12 19 26	6 13 20 27	6 13 20 27	21	1 8 15 22 29	2 9 16 23 30	3 10 17 24 31	4 11 18 25	5 12 19 26
	F	EBI	RU	AR	Y	-	-	-	D	143	1		-	-	- 2	AU	GU	ST	-	-	-	N	οv	EM	BE	R	
s	м	т	w	т	F	s	s	М	т	w	т	F	s	s	м	т	w	т	F	s	s	м	т	w	т	F	5
3 10 17 24	4 11 18 25	5 12 19 26	6 13 20 27	7 14 21 28	1 8 15 22	2 9 16 23	5 12 19 26	6 13 20 27	7 14 21 28	1 15 22 29	2 9 16 23 30	3 10 17 24 31	4 11 18 25	4 11 18 25	5 12 19 26	6 13 20 27	7 14 21 28	1 8 15 22 29	2 9 16 23 30	3 10 17 24 31	3 10 17 24	18	5 12 19 26	6 13 20 27	7 14 21 28	1 8 15 22 29	16230
t		M/	ARC	н	-	_	-		J	UN	E	-	_	-	SI	PI	EM	BE	R		-	D	EC	EM	BE	R	_
s	м	т	w	т	F	s	s	М	т	W	т	F	s	s	м	т	w	т	F	s	s	м	т	w	т	F	5
3 10 17 24	4 11 18 25	5 12 19 26	6 13 20 27	7 14 21 28	1 8 15 22 29	2 9 16 23 30	2 9 16 23 30	3 10 17 24	4 11 18 25	5 12 19 26	20	7 14 21 28	1 8 15 22 29	1 8 15 22 29	2 9 16 23 30	3 10 17 24	4 11 18 25	5 12 19 26	6 13 20 27	7 14 21 28	1 8 15 22 29	2 9 16 23 30	3 10 17 24 31	4 11 18 25	19	6 13 20 27	14
31													19	47													
		-	U A	_	_	s	8	M		PR			_			_	UL		F	s	8		_	-	BER	_	5
31 S	J	ANT	w	т	F	S	s	м	т	W 2	T	F	s	47 5	м	т	w	т	F		s	M	_	w	т	F	-
S 5 12 19	M 6	T 7 14	-	_	F 3 10 17 24	4 11 18	6	7 14 21	T 1 8	W 29	T 3 10 17	F	S 5 12 19	5 6 13 20	M 7	T 1 8 15 22	W 2 9		4 11 18	5 12 19	5 12	M 6 13	T 7	W 1 15 99	T 9 16 23	F 3 10 17	1
S 5 12 19	M 6 13 20 27	T 7 14 21 28	W	T 9 16 23 30	F 3 10 17 24 31	4 11 18	6 13 20	7 14 21	T 15 22 29	W 29 16 23	T 3 10 17 24	F 4 11 18	S 5 12 19	5 6 13 20	M 14 21 28	T 1 8 15 22 29	W 2 9 16 23	T 3 10 17 24 31	4 11 18	5 12 19	5 12	M 6 13 20 27	T 14 21 28	W 1 8 15 22 29	T 9 16 23	F 3 10 17 24 31	1
S 5122	M 6 13 20 27 F	T 7 14 21 28 EB	W 1 8 15 22 29	T 29 16 23 30 AR	F 3 10 17 24 31	4 11 18 25	6 13 20	7 14 21 28	T 15 22 29	W 29 16 23 30	T 3 10 17 24	F 4 11 18	5 12 19 26	5 6 13 20	M 7 14 21 28	T 1 8 15 22 29	W 2 9 16 23 30 GU	T 3 10 17 24 31	4 11 18	5 12 19	5 12 19 26	M 6 13 20 27	T 14 21 28	W 15 22 29 EM	T 9 16 23 30	F 3 10 17 24 31	11122
S 5122 19 26	M 6 13 20 27 F M 3 10 17	T 14 21 28 EB. T 4 11 18	W 1 8 15 22 29 RU W 5 12	T 29 16 23 30 AR	F 3 10 17 24 31 Y F 7 14	4 11 18 25	6 13 20 27	7 14 21 28 M	T 15 222 29 M T 6 13 20	W 29 16 23 30 4A' W 7 14	T 3 10 17 24 Y T T 18 15 22	F 4 11 18 25	5 12 19 26	5 613 200 27 8 3 100 17	M 714 21 28 M 411	T 18 15 22 29 AU T 5 12	W 29 16 23 30 GU W 6 13 20	T 3 10 17 24 31 ST T 7 14	4 11 18 25	5 12 19 26	5 12 19 26 S 29 16	M 6 13 20 27 N	T 714 211 28 0V T	W 1 8 15 22 29 EM W 5 12 19	T 9 16 23 30 IBE T 13 20	F 3 10 17 24 31 R F 7 14	1 1 1 1 2 1 2 1 2 1 2 1 2 1
S 51219 26 S 29 16	M 6 13 20 27 F M 3 10 17	T 14 21 28 EB. T 4 11 18 25	W 1 8 15 22 29 RU W 5 12 19	T 29 16 23 30 AR T 6 13 20 27	F 30 10 17 24 31 31 Y F 7 14 21	4 11 18 25 S	6 13 20 27 S 4 11 18	7 14 21 28 M 5 12 19	T 15 222 29 M T 6 13 20 27	W 29 916 233 30 4A <sup>*</sup> W 7 144 21	T 3 10 17 24 Y T T 18 15 22 29	F 4 11 18 25 F 29 16 23	S 512 19 26 S 310 17 24	S 6 13 20 27 8 3 10 17 24	M 7 14 21 28 M 11 18 25	T 15 222 29 AU T 5 12 19 26	W 29 16 23 30 GU W 6 13 20	T 3 10 17 24 31 ST T 7 14 28	4 11 18 25 F 15 22 29	5 12 19 26 S 2 9 16 23	5 12 19 26 S 29 16 23	M 6 13 20 27 N M M 3 10 17 24	T 714 21 28 0V T 4 11 18 25	W 1 8 15 22 29 EM W 5 12 19 26	T 2 9 16 23 30 BE T 6 13 20	F 310 17 24 31 R F 7 14 21 28	111111111111111111111111111111111111111
S 51219 26 S 29 16	M 6 13 20 27 F M 3 10 17	T 14 21 28 EB. T 4 11 18 25 M/	W 1 8 15 22 29 RU W 5 12 19 26	T 2 9 16 23 30 AR T 6 13 20 27 27 21	F 30 10 17 24 31 31 Y F 7 14 21	4 11 18 25 S	6 13 20 27 S 4 11 18	7 14 21 28 M 5 12 19	T 18 15 22 29 M T T 6 13 20 27 J	W 2 9 16 23 30 4A' W 7 14 21 28	T 3 10 17 24 Y T T 18 15 22 29	F 4 11 18 25 F 29 16 23	S 5122 19 26 S 310 177 224 31	S 6 13 20 27 8 3 10 17 24	M 7 14 21 28 M 11 18 25	T 15 222 29 AU T 5 12 19 26	W 29 16 23 30 GU W 6 130 27 27 EM	T 3 10 17 24 31 ST T 7 14 28	4 11 18 25 F 15 22 29	5 12 19 26 S 2 9 16 23	5 12 19 26 S 29 16 23 30	M 6 13 20 27 N M M 3 10 17 24	T 714 21 28 0V T 4 11 18 25 EC	W 1 8 15 22 29 EM W 5 12 19 26	T 2 9 16 23 30 BE T 6 13 20 27	F 310 17 24 31 R F 7 14 21 28	111111111111111111111111111111111111111

#### 1 OFFICERS

#### The Consolidated University of North Carolina The State College of Agriculture and Engineering, Raleigh The University of North Carolina, Chapel Hill The Woman's College of the University of North Carolina, Greenshoro

#### **Board** of Trustees

Governor Robert Greeg Cherry, Chairman Ex Officio Arch T. Allen, Secretary Clyde A. Erwin, Stata More Device Internet France James Norrio d'Evalie Interfer Trustee O. Max Gardner, Life Trustee O. Max Gardner, Life Trustee Charco Morrison, Life Trustee Cameron Morrison, Life Trustee

#### Term Expiring April 1, 1947

Name	Address	County
Mrs. Katherine P. Arrington	Warrenton	Warren
H. D. Bateman	Wilson	Wilson
J. B. Fearing	Windsor	Bertie
Battle A. Hocutt	Clayton	Johnston
Ira T. Johnston	Jefferson	Ashe
John H. Kerr, Sr.	Warrenton	Warren
J. Heath Kluttz	Albemarle	Stanly
M. C. Lassiter	Snow Hill	Greene
W. L. Lumpkin	Louisburg	Franklin
G. L. Lyerly	Hickory	Catawba
H. B. Marrow	Smithfield	Johnston
L. P. McLendon	Greensboro	Guilford
William D. Merritt	Roxboro	Person
Walter Murphy	Salisbury	Rowan
" Haywood Parker	Asheville	Buncombe
Clarence Poe	Raleigh	Wake
J. T. Pritchett	Lenoir	Caldwell
Carl A. Rudisill	Cherryville	Gaston
George Stephens	Asheville	Buncombe
W. H. Sullivan	Greenshoro	Guilford
Fred I. Sutton	Kinston	Lenoir
H. P. Taylor	Wadesboro	Anson
John W. Umstead, Jr.	Chapel Hill	Orange
Lionel Weil	Goldsboro	Wayne
· Charles Whedbee	Hertford	Perquimans
12	1.1	

#### Term Expiring April 1, 1919

Emily Austin Annie Moore Cherry David Clark James H. Clark K. Clyde Council Josephus Daniels B. B. Everett Mrs. R. S. Ferguson James S. Ficklin James Alexander Grav R. L. Harris

\* Deccased.

Tarboro Enfield Charlotte Elizabethtown Wananish Raleigh Palmyra Tavlorsville Greenville Winston-Salem Roxboro

Edgecombe Mecklenburg Bladen Columbus Wake Halifax Alexander Pitt Forsyth Person

#### STATE COLLEGE CATALOG

Name W. E. Horner Hugh Horton Robert Eugene Little Dan K. Moore Thomas J. Pearsall J. Hawley Poole J. A. Pritchetti Claude W. Rankin Foy Roberso tone W. Frank Taylor Mrs. May L. Tomlinson F. E. Wallace Graham Woodard Address Sanford Williamston Wadesboro Sylva Rocky Mount West End Windsor Fayetteville Durham Stoneville Goldsboro High Point Kinston Wilson

#### Term Expiring April 1, 1951

Arch Turner Allen Alexander B. Andrews Edward Stephenson Askew Edward Stephenson Askew The Anter Astronometer Charles Albert Cannon Thurmond Chatham William Grimes Clark Muran Alexander Doughton Frank Wills Hancock, Jr. Charles Andrew Jonas Arthur Hill London Mrs. Gertruche Dills McKee Reid Atwater Maynard Raymond Maxwell Andrew Lee Monroe John J. Parkero Robert Wright Proctor Richard Johus Reynolds Benjamin K. Royal Raleigh Raleigh Oriental Rocky Mount Bladenboro Concord Winston-Salem Tarboro Gastonia Sparta Oxford Lincolnton Pittshoro Sanatorium Sylva Burlington New Bern Raleigh Lincolnton Charlotte Marion Winston-Salem Morehead City Hickory Danbury

Connty Lee Martin Anson Jackson Nash Bertie Cumberland Durham Rockingham Wayne Guilford Lenoir Wilson

Wake Wake Pamlico Nash Rladen Cabarrus Forsyth Edgecombe Gaston Alleghany Granville Lincoln Chatham Hoke Jackson Alamance Craven Wake Lincoln Mecklenburg McDowell Forsyth Carterot Catawha Stokes

#### Term Expiring April 1, 1953

Wade Barber Samuel M. Bloant Victor S. Bryant Gertrude Carraway John W. Clark Collier Cobb, Jr. George S. Cole Mrs. Laura Weil Cone John G. Dawson Joseph C. Eagles Samuel J. Ervin W. Roy Hampton John Srumt Hill Pittsboro Washington Durham New Bern Franklinville Chapel Hill Lexington Greensboro Kinston Wilson Morganton Plymouth Durham Chatham Beaufort Durham Craven Randolph Orange Davidson Guilford Lenoir Wilson Burke Washington Durham

G

Name	Address	County
Benjamin Kittrell Lassiter	Oxford	Granville
John Q. LeGrand	Wilmington	New Hanover
Henry A. Lineberger	Belmont	Gaston
Mrs. Frances N. Miller	Raleigh	Wake
Glenn C. Palmer	Waynesville	Haywood
Edwin Pate	Laurinburg	Scotland
James C. Pittman	Sanford	Lee
J. E. Ramsay	Salisbury	Rowan
Roy Rowe	Burgaw	Pender
J. Benton Stacy	Ruffin	Rockingham
Kenneth S. Tanner	Spindale	Rutherford
William B. Umstead	Durham	Durham

#### EXECUTIVE COMMITTEE OF THE BOARD

Governor Robert Gregg Cherry, Chairman Ex-Officio Arch T. Allen, Scorctary

Victor S. Bryant John W. Clark Mrs. Laura W. Cone Josephus Daniels O. Max Gardner John Sprunt Hill Edwin Pate John J. Parker Clarence Poe Richard J. Reynolds Mrs. M. L. Tomlinson J. W. Umstad, Jr.

#### ADMINISTRATIVE COUNCIL

The Consolidated University of North Carolina Frank Porter Graham, President William Donald Carmichael, Jr., Controller

The North (	Carolina	State	College,
	Raleig	h	
J. W. Harre	lson,		
Chancellor			
D. B. Ander	son,		
Professor	of Botan	13	
W. E. Shim	1,		
Professor	in Chai	ge of	Knitting
Section			
C. B. Shuler	iberger,		
Professor	of Acco	unting	
L. L. Vaugh	an,		
Professor	of Mech	anical	
Enginee	ring		

The Woman's College, Greenshoro W. C. Jackson, Chancellor Bernice Draper, Associate Professor of History Margaret M. Edwards, Professor of Home Economics Mereb Mossman, Associate Professor of Sociology Emily Watkins, Associate Professor of Mathematics

#### The University of North Carolina. Chapel Hill

R. B. House, Chancellor Herman Glenn Baity, Professor of Sanitary and Municipal Engineering E. W. Knight, Kenan Professor of Education William F. Prouty, Professor of Stratigraphic Geology W. S. Wells, Associate Professor of English

\* Deceased.

#### NORTH CAROLINA STATE COLLEGE

#### OFFICERS OF ADMINISTRATION

Frank Porter Graham, President of the Consolidated University William Donald Carmichael, Jr., Controller of the Consolidated University John William Harrelson, Chancellor Eugene Clyde Brooks, President Emeritus

#### Faculty Council

John William Harrelson, Chairman Chancellor

- Leonard D. Baver, B.S., M.S., Ph.D., Director, Agricultural Experiment Station and Dean of the School of Agriculture and Forestry,
   D. B. Anderson, B.A., M.A., Ph.D.,
- Professor of Botany.

B. F. Brown, B.S.,

- Dean of the Basic Division. E. Browne, A.B., M.A., Director, Division of Teacher Education. T.
- Malcolm E. Campbell, B.S., Dean of the School of Textiles. E. L. Cloyd, B.S., M.S.,
- Dean of Students.
- J.
- H. Lampe, B.S., M.S., Dr. Eng., Dean of the School of Engineering.

- W. L. Mayer, B.S., M.S., Director of Registration, and
- Purchasing Agent. Z. P. Metcalf, B.A., D.Sc., Associate Dean of the Graduate School.
- I. O. Schaub, B.S., D.Sc., Director of Agricultural Extension
- W. E. Shinn, B.S., M.S., Professor in Charge of Knitting Section.
- C. B. Shulenberger, A.B., A.M., Professor of Accounting.
- J. G. Vann, Assistant Controller. L. L. Vaughan, B.S., M.E., Professor of Mechanical Engineering

#### Other Administrative Officers

- Roy N. Anderson, A.B., M.C., Ph.D., Director of Student Relations.
- A. C. Campbell, M.D., Physician. Mrs. Reba D. Clevenger, B.L.S.,
- Acting Librarian. Henry Fitzhugh Dade, B.S., Assistant Dean of Students.
- F. H. Jeter, B.S., Director of Publicity.
- E. S. King, A.B., Secretary, Y.M.C.A. F. E. Miller, Director of Station F. E. Farms.
- W. F. Morris, B.E., Manager of Service Departments.
- E. W. Ruggles, B.E., M.S., Director, College Extension. M. L. Shepherd, B.S., M.A.,
- - Assistant Director College Extension
- Juanita Scott.
- Assistant Registrar.
- Baye Sumner,
- Assistant Purchasing Agent. H. W. Taylor, B.S., M.S.,
- Alumni Secretary.
- John Graves Vann.
- Assistant Controller.

#### Special Officers

- R. D. Beam, Director of Foundations. A. A. Riddle, Superintendent, W. I. Godwin. the Power Plant.
- Superintendent of the Laundry. L. L. Ivey, Manager, Students Supply Store.
- C. D. Kutschinski. Director of Music.

- Ross Shumaker, College Architect.

- Harry E. Stewart, Manager of the Boarding Department. L. L. Vaughan, College Engineer. T. T. Wellons.
  - Superintendent of Dormitories.

#### FACULTY

#### OFFICERS OF INSTRUCTION

- FRANK PORTER GRAHAM, M.A., LL.D., D.C.L., D.Litt., President of the University JOHN WILLIAM HARRELSON, Chancellor. B.E., M.E., N. C. State College; LL.D., Wake Forest College. EUGENE CLYDE BROOKS, President Emeritus and Research Professor of Education. A.B., LL.D., Trinity College; LL.D., University of North Carolina; Litt.D., Davidson College. MARTIN ABRAHAM ABRAHAMSEN, Professor of Agricultural Economics. B.E., River Falls State Teachers College: M.A., Ph.D., University of Wisconsin, WILLIAM ELTON ADAMS, Assistant Professor of Mechanical Engineering. B.S., Ohio University. DONALD BENTON ANDERSON, Professor of Botany. B.A., B.S., in Ed., M.A., Ph.D., Ohio State University. RICHARD LEE ANDERSON, Assistant Professor of Experimental Statistics and Agricultural Economics. A.B., DePaw University, M.S., Ph.D., Iowa State College. LINDSEY OTIS ARMSTRONG, Associate Professor of Education. B.S., M.S., N. C. State College. LEONARD JAMES ARRINGTON. Instructor in Economics. B.A., University of Idaho. WILLARD FARRINGTON BABCOCK, Assistant Professor of Civil Engineering. S.B., S.M., Massachusetts Institute of Technology. STANLEY THOMAS BALLENGER, Associate Professor of Modern Languages. A.B., M.A., University of North Carolina, LUTHER WESLEY BARNHARDT, Associate Professor of History and Political Science. B.A., Trinity College; M.A., University of Wisconsin, GRADY WILTON BARTLETT, Assistant Professor of Physics. B.S., M.S., N. C. State College. WILLIAM LUDWIG BAUMGARTEN, Assistant Professor of Architecture. A.A., Imperial Academy of Fine Arts of Vienna, Austria. LEONARD DAVID BAVER, Director, Agricultural Experiment Station; Dean, School of Agriculture. B.S., M.S., Ohio State University; Ph.D., University of Missouri. THOMAS NELSON BLUMER, Assistant Professor of Animal Industry. B.S., Pennsylvania State College. JOHN FRANCIS BOGDAN, Professor of Textiles and Applied Research Technologist. B.T.E., Lowell Textile Institute. EDWARD WILLIAM BOSHART, Professor of Education (Industrial Arts and Vocational Guidance). B.S., M.A., Columbia University. CAREY HOYT BOSTIAN, Professor of Zoology; Assistant Director of Instruction, School of Agriculture. A.B., Catawba College; M.S., Ph.D., University of Pittsburgh. DANIEL ELLSWORTH BRADY, Associate Professor of Animal Industry. B.S., Ph.D., University of Minnesota. CHARLES RAYMOND BRAMER, Associate Professor of Structural Engineering. B.S., E.M., Michigan College of Mining and Technology.
- CORNELIUS GODFREY BRENNECKE, Professor of Electrical Engineering. A.B., B.S., E.E., Columbia University; Ph.D., New York University.

- WILLIAM STALEY BRIDGES. Associate Professor of Mechanical Engineering. B.E., M.S., N. C. State College.
- HERMON BURKE BRIGGS, Professor of Engineering Drawing and Descriptive Geometry. R.E. N.C. State College.
- RICHARD BRIGHT, Assistant Professor of Chemical Engineering. B.S., M.S., State University of Iowa.
- BENJAMIN FRANKLIN BROWN, Dean of the Basic Division. B.S., Northwestern University.
- EDMOND JOSEPH BROWN, Assistant Professor of Physics. B.S., M.S., N. C. State College.
- ROBERT RODERICK BROWN, Professor of Electrical Engineering. B.S. in E.E., University of Texas; M.S. in E.E., Massachusetts Institute of Technology
- THEODORE CECIL BROWN, Associate Professor of Mechanical Engineering. B.S. in M.E., M.E., University of Kentucky; M.S., N. G. State College.
- THOMAS EVERETTE BROWNE, Director of the Division of Teacher Education. A.B., Wake Forest College: M.A., Columbia University.
- WILLIAM HAND BROWNE, JR., Professor of Electrical Engineering. A.B., P.A.E., B.E., Extra Ordinem, Johns Hopkins University.
- MURRAY FIFE BUELL, Assistant Professor of Botany. A.B., Cornell University: M.A., Ph.D., University of Minnesota.
- ROBERTS COZART BULLOCK, Associate Professor of Mathematics. A.B., M.A., University of North Carolina ; Ph.D., University of Chicago.
- LELAND BURKHART, Assistant Professor of Agronomy. B.S., Ohio State University; M.S., University of New Hampshire; Ph.D., University of Chicago.
- MALCOLM EUGENE CAMPBELL, Dean of the School of Textiles. B.S., Clemson College.
- WILLIAM LESLIE CAMPER, JR., Instructor in Military Science and Tuctics. Master Sergeant DEML, U. S. Arms.
- WILLIAM SUTTON CARLEY, Assistant Professor of Electrical Engineering. B.S., University of Kentucky.
- HUGH LYNN CAVENESS, Assistant Professor of Chemistry. A.B., Trinity College: M.A., Duke University.
- JOHN WESLEY CELL, Associate Professor of Mathematics, A.B., M.A., Ph.D., University of Illinois.
- JESSE WAYNE CHALFANT, Associate Professor of Forestry, B.S., Pennsylvania State College: M.F., Yale University.
- GEORGE WILLIAM CHARLES, Instructor in Physics. B.A., Ohio State University.
- EUGENE BOWEN CHASE, Assistant Professor of Military Science and Tactics. Major, Infantry-Reserve, AUS; Graduate, British Machine Gun School; Graduate, Third Corps School; Graduate, Infantry School, Company Officers Course.
- JOSEPH DEADRICK CLARK, Professor of English. B.A., Columbia University; M.A., Harvard University.
- JOHN MONTGOMERY CLARKSON, Professor of Mathematics and Experimental Statistics.
  - A.B., Wofford College: A.M., Duke University: Ph.D., Cornell University.
- WILLIAM LEANDER CLEVENGER, Professor of Dairy Manufacturing. B.S. in Agriculture, Ohio State University ; M.S., N. C. State College.
- JAMES KIRK COGGIN, Professor of Agricultural Education. B.S., N. C. State College: M.S., Cornell University.

- JOHN FRANCIS COIRO, Instructor in Military Science and Tactics. First Sergeant, DEML. U. S. Army.
- EMERSON R. COLLINS, Associate Professor of Agronomy. B.S., Pennsylvania State College; Ph.D., Jowa State College.
- WILLIAM EARLE COLWELL, Professor of Agronomy. B.S., University of Nebraska: M.S., University of Idaho: Ph.D., Cornell University.
- RALPH ERNEST COMSTOCK, Professor of Animal Industry and Experimental Statistics.
  R.S., Phys. University of Minneadu.
  - B.S., M.S., Ph.D., University of Minnesota.
- NORVAL WHITE CONNER. Professor of Fluid Mechanics. B.S., M.E., Virginia Polytechnic Institute: M.S., Iowa State College.
- LEON EMORY COOK, Professor of Agricultural Education. A.B., B.S. in Agriculture, M.S., Cornell University.
- HENRY CHARLES COOKE, Instructor in Mathematics. B.S., N. C. State College.
- RALPH LELAND COPE, Assistant Projessor of Mechanical Engineering. B.S. in M.E., B.S. in Ind. Educ., M. Ed., Pennsylvania State College.
- GERTRUDE MARY Cox. Professor of Experimental Statistics, and Director, Institute of Statistics. B.S. M.S., lowa State College.
- †GEORGE REDIN CULBERSON, Assistant Professor of Yarn Manufacturing. B.S., M.S., N. C. State College.
- RALPH WALDO CUMMINGS, Professor of Agronomy; Assistant Director, Agrioultural Experiment Station. B.S., N. C. State College; P.N.O., Ohio State University.
- PHILIP HARVEY DAVIS, Assistant Professor of English. A.B., A.M., Miami University.
- ROY STYRING DEARSTYNE, Professor of Poultry Science. B.S., University of Maryland; M.S., N. C. State College.
- JOHN BEWLEY DERIEUX, Professor of Theoretical Physics. B.S., M.S., University of Tennessee; Ph.D., University of Chicago.
- CHARLES GLENN DOAK, Assistant Professor of Physical Education.
- THOMAS CLARE DOODY, Professor of Chemical Engineering. B.S., M.S., Ph.D., University of California.
- JUSTUS CARLYLE DRAKE, Instructor in English. B.A., M.A., Wake Forest College.
- GEORGE HEYWARD DUNLAP, Technologist, School of Tertiles. B.S., Clemson College.
- PRESTON WILLIAM EDSALL, Associate Professor of History and Political Science.
  - B.S., New York University: A.M., Ph.D., Princeton University.
- <sup>†</sup>JOSEPH NEWTON FARLOW, Instructor in Engineering Mechanics. B.C.E., N. C. State College.
- CHARLES EDWARD FELTNER, Assistant Professor of Engineering Mechanics. B.S., Virginia Polytechnic Institute; S.M.C.E., University of North Carolina.
- HILBERT ADAM FISHER, Professor of Mathematics. M.S., N. G. State College; graduate. United States Naval Academy; graduate. United State Submarine School: LL.D. Lenoir Rhyne College.
- <sup>†</sup>GASTON GRAHAM FORNES, Assistant Professor of Mechanical Engineering. B.S., M.S., N. C. State College.
- GARNET WOLSEY FORSTER, Professor of Agricultural Economics. B.S., Cornell University; M.S., Ph.D., University of Wisconsin.

- JOHN ERWIN FOSTER, Professor of Animal Husbandry. B.S., N. C. State College; M.S., Kansas State College; Ph.D., Cornell University.
- ALVIN MARCUS FOUNTAIN, Associate Professor of English. B.E., M.S., N. C. State College: M.A., Columbia University : Ph.D., Peabody College.
- RAYMOND SPIVEY FOURAKER, Professor of Electrical Engineering. B.S., A. & M. College of Texas; M.S., University of Texas.
- BENTLEY BALL FULTON, Professor of Entomology. B.A., Ohio State University; M.S., Chicago University; Ph.D., Iowa State College.
- MONROE EVANS GARDNER, Professor of Horticulture. B.S., Virginia Polytechnic Institute.
- HERMAN CHRISTIAN GAUGER, Associate Professor of Poultry Science. B.S. Connecticut State College, M.S. N. C. State College.
- GEJRGE WALLACE GILES, Professor of Agricultural Engineering. B.S., University of Nebraska; M.S., University of Missouri,
- KARL BROWNING GLENN, Associate Professor of Electrical Engineering. B.E., M.S., N. C. State College.
- JAMES HENRY GRADY, Assistant Professor of Architecture. B. Arch., Obio State University.
- RICHARD ELLIOTT GREAVES, Assistant Professor of Poultry Science. B.S., Wake Forest College; B.S., N. C. State College.
- ARTHUR FREDERICK GREAVES-WALKER, Professor of Ceramic Engineering. Cer.E., Ohio State University : D.Sc., Alfred University.
- RALPH WALDO GREEN, Associate Professor of Marketing. B.S., Cornell University ; M.S., N. C. State College
- ROBERT EDWARD LEE GREENE, Associate Professor of Agricultural Economics B.S., M.S., North Carolina State College; Ph.D., Cornell University.
- DAVID WOLTER GREGORY, Instructor in Poultry Science. B.S., Kansas State College; M.S., N. C. State College.
- WALTON CARLYLE GREGORY, Assistant Professor of Agronomy. B.A., Lynchburg College, M.A., Ph.D., University of Virginia.
- ALBERT HARVEY GRIMSHAW, Professor of Textile Chemistry and Dueing. Graduate of the New Bedford Textile School ; B.S., M.S., N. C. State College.
- CLAUDE DELBERT GRINNELLS, Professor of Veterinary Science. B.S., M.S., University of Minnesota; D.V.M., Cornell University.
- ELLIOT BROWN GROVER, Professor of Yarn Manufacturing. B.S., Massachusetts Institute of Technology.
- FREDERICK MORGAN HAIG, Professor of Animal Husbandry and Dairying. B.S., University of Maryland: M.S., N. C. State College.
- MRS. RUTH BADGER HALL, Instructor in Modern Languages. A.B., Oberlin College: M.A., University of North Carolina.

‡CHARLES HORACE HAMILTON, Professor of Rural Sociology. B.A., Southern Methodist University; M.S., Texas A. & M. College; Ph.D., University of North Carolina.

- REINARD HARKEMA, Associate Professor of Zoology, A.B., Calvin College; Ph.D., Duke University.
- THOMAS PERRIN HARRISON, Dean Emeritus of the College; Editor of Official College Publications. B.S., Citadel ; Ph.D., Johns Hopkins University ; LL.D., Citadel.

THOMAS ROY HART, Professor of Weaving and Designing. B.S., T.E., M.S., N. C. State College.

LODWICK CHARLES HARTLEY, Professor of English. B.A., Furman University; M.A., Columbia University; Ph.D., Princeton University.

- ARTHUR COURTNEY HAYES. Assistant Professor of Textile Chemistry and Dyeing. Ph.B., Brown University; M.S., N. C. State College.
- CHARLES MCGEE HECK, Professor of Physics. A.B., Wake Forest College : M.A., Columbia University.
- DAVID ELDRIDGE HENDERSON, Assistant Professor of Industrial Engineering. U.S., University of North Carolina. WILLIAM NORWOOD HICKS, Professor of Ethics and Religion. B.E., M.S., N. C. State College; A.B., Dake University; M.A., Oberlin College.
- JAMES HAROLD HILTON, Professor of Animal Industry. B.S.A., Iowa State College: M.S., University of Wisconsin; D.Sc., Purdue University.
- JOHN THOMAS HILTON, Professor of Yarn Manufacturing. Diploma Bradford Durfee Textile School : B.S., M.S., N. C. State College.
- THOMAS IRA HINES, Assistant Professor of Physical Education. B.S., N. C. State College; M.A., University of North Carolina.
- LAWRENCE EARLE HINKLE, Professor of Modern Languages. B.A., University of Colorado; N.A., Columbia University; D.S.es L., Dijon University.
- ELMER GEORGE HOEFER, Professor of Mechanical Engineering. B.S., M.E., University of Wisconsin.
- JULIUS VALENTINE HOFMANN, Director of the Division of Forestry. B.S.F., M.F., Ph.D., University of Minnesota
- ROBERT HOOKE, Assistant Professor of Mathematics. A.B., A.M., University of North Carolina; A.M., Ph.D., Princeton University.
- JOHN ISAAC HOPKINS, Assistant Professor of Physics. B.S., A.M., Ph.D., Duke University.
- EARL HENRY HOSTETLER, Professor of Animal Husbandry. B.S. in Agr., Kansas State Agricultural College: M.Agr. M.S., N. C. State College.
- WILLIAM DOYLE HULL, II, Instructor in English. B.A., Furman University; M.A., Ph.D., University of Virginia.
- THOMAS EDWARD HYDE, Instructor in Mechanical Engineering.
- HERMAN BROOKS JAMES, Associate Professor of Agricultural Economics. B.S., M.S., N. C. State College.
- JAMES HERBERT JENSEN, Professor of Plant Pathology. B.S., A.M., University of Nebraska: Ph.D., University of Wisconsin.
- THEODORE SEDGWICK JOHNSON, Professor of Sanitary Engineering. B.S., M.S., Denison University: C.E., Ohio State University.
- WALTER EDWARD JORDAN, Associate Professor of Chemistry. B.S., M.A., Wake Forest College; M.S., N. C. State College.
- LEROY MONROE KEEVER, Associate Professor of Electrical Engineering. B.E., M.S., N. C. State College.
- HENDERSON GRADY KINCHELOE, Assistant Professor of English. A.B., University of Richmond; A.M., Harvard University.
- WILLIAM WURTH KRIECEL, Associate Professor of Ceramic Engineering. E.S. in Civil and Ceramic Engineering, University of Washington; M.S., Montana School of Mines; Dr.Ing., Technische Hochschule, Hanover, Germany.
- †ARTHUR NEWMAN KRUGER, Instructor in English. A.B., University of Alabama; Ph.D., Louisiana State University.
- WALTER MICHAEL KULASH, Assistant Professor of Zoology. B.S., M.S., Ph.D., Massachusetts State College.
- ARTHUR IRISH LADU, Professor of English.

A.B., Syracuse University ; M.A., Ph.D., University of North Carolina.

† On leave. † On military leave.

- CLAUDE MILTON LAMBE, Assistant Professor of Civil Engineering. B.E., N. C. State College.
- JOHN HAROLD LAMPE, Dean of the School of Engineering. B.S., M.S., Dr. Eng., Johns Hopkins University.
- FORREST WESLEY LANCASTER, Associate Professor of Physics. B.S. in Ch.E., Purdue University.
- †BRYON ELMER LAUER, Professor of Chemical Engineering. B.S., Oregon State College: M.S., Ph.D., University of Minnesota.
- MARC CARL LEAGER, Professor of Statistics and Accounting. B.S., M.S., University of Minnesota; Ph.D., Columbia University.
- JOHN EMERY LEAR, Professor of Electrical Engineering. B.S., Virginia Polytechnic Institute; E.E., Texas A. & M. College.
- WILLIAM DANIEL LEE, Associate Professor of Agronomy. B.S., N. C. State College.
- <sup>†</sup>CHARLES ROMEO LEFORT, Assistant Dean of Students. B.S., N. C. State College.
- SAMUEL GEORGE LEHMAN, Professor of Plant Pathology. B.S., Ohio University; M.S., N. C. State College; Ph.D., Washington University.
- JOHN ANTHONY LEIPOLD, Instructor in Military Science and Tactics. Master Sergeant, DEML, U. S. Army.
- PAUL BONAR LEONARD, Assistant Professor of Mechanical Engineering. B.S., Ohio State University.
- JACK LEVINE, Associate Professor of Mathematics, A.B., University of California at Los Angeles; Ph.D., Princeton University.
- ‡JAMES EADS LEVINGS, Assistant Professor of Engineering Mechanics. A.B., M.S., Harvard College.
- JOHN GARY LEWIS, Associate Professor of Knitting. B.S., M.S., N. C. State College.
- RICHARD HENRY LOEPPERT, Assistant Professor of Chemistry. B.S., Northwestern University ; Ph.D., University of Minnesota.
- WALTER LOWEN, Instructor in Mechanical Engineering, B.M.E., N. C. State College.
- †ROY LEE LOVVORN, Professor of Agronomy. B.S., Alabama Polytechnic Institute: M.S., University of Missouri; Ph.D., University of Wisconsin.
- HENRY LAWRENCE LUCAS, JR., Associate Professor, Institute of Statistics. B.S., University of California ; Ph.D., Cornell University.
- JOHN ROBERT LUDINGTON, Professor of Industrial Arts Education. B.S., Ball State Teachers College: M.A., Ph.D., Ohio State University.
- JAMES FULTON LUTZ, Professor of Agronomy. B.S., N. C. State College; M.A., Ph.D., University of Missouri.
- †FRANK HALLAM LYELL, Assistant Professor of English. A.B., University of Virginia: M.A., Columbia University: Ph.D., Princeton University.
- JOSEPH THOMAS LYNN, Assistant Professor of Physics. A.B., Vanderbilt University : M.S., Ohio State University.
- CARROLL LAMB MANN, Professor of Civil Engineering. B.S., C.E., N. C. State College.
- ROGER POWELL MARSHALL, Professor of English. B.A., Wake Forest College: M.A., Columbia University: M.S., N. C. State College.
- SELZ CABOT MAYO, Associate Professor of Rural Sociology. A.B., Atlantic Christian College; M.S., N. C. State College; Ph.D., University of North Carolina.

† On military leave. ‡ On leave.

#### FACULTY

- FREDERICK HAROLD MCCUTCHEON, Professor of Zoologoy. B.S., M.S., North Dakota State College; Ph.D., Duke University.
- MALCOLM COOK MCMILLAN, Instructor in History and Political Science. A.B., M.A., University of Alabama.
- DOUGLASS NEWMAN McMILLIN, Professor of Military Science and Tactics. Colonel, Infantry, U. S. Army: Graduate, Infantry School, Company Commander's Course.
- WILLIAM MCGEHEE, Professor of Psychology. B.A., University of the South; M.A., Ph.D., Peabody College.
- JEFFERSON SULLIVAN MEARES, Associate Professor of Physics. B.S., University of South Carolina; M.S., N. C. State College.
- WALTER GUY MENDENHALL, SR., Instructor in Mechanical Engineering. B.S., N. C. State College.
- ZENO PAYNE METCALF, Professor of Zoology, and Associate Dean of the Graduate School.
  - B.A., Ohio State University ; D.Sc., Harvard University.
- GORDON KENNEDY MIDDLETON, Professor of Agronomy. B.S., N. C. State College; M.S., Ph.D., Cornell University.
- EDWIN LAWRENCE MILLER, JR., Assistant Professor of Geology. B.S., E.M., Missouri School of Mines and Metallurgy.
- JOHN FLETCHER MILLER, Professor of Physical Education and Athletics. B.Pd., Central Missouri Teachers' College: B.P.E., Springfield College of Physical Education.
- WILLIAM DYKSTRA MILLER, Associate Professor of Forestry. B.A., Reed College; M.F., Ph.D., Yale University.
- ADOLPHUS MITCHELL, Associate Professor of Engineering Mechanics. B.S., M.S., University of North Carolina.
- THEODORE BERTIS MITCHELL, Professor of Zoology and Entomology. B.S., Massachusetts State College; M.S., N. C. State College; D.S., Harvard University.
- REUBEN O. MOEN, Professor of Business Administration. B.A., M.A., Ph.D., University of Iowa.
- DANNIE JOSEPH MOFFIE, Assistant Professor of Psychology. B.S., M.S., Ph.D., Pennsylvania State College.
- ROBERT JAMES MONROE, Instructor in Experimental Statistics. B.S., Iowa State College.
- PERRY EARL MOOSE, Assistant Professor of Mechanical Engineering. B.S., N. C. State College: M.S. in C.E., Purdue University.
- JOHN WESLEY MORGAN, Instructor in Chemistry. A.B., A.M., Duke University.
- WILLIAM EDWIN MOSER, Instructor in Textiles. B.S., N. C. State College.
- CAREY GARDNER MUMFORD, Professor of Mathematics. B.A., Wake Forest College; A.M., Ph.D., Duke University.
- †HOWARD M. NAHIKIAN, Assistant Professor of Mathematics. A.B., M.A., Ph.D., University of North Carolina.
- THOMAS LEWIS NASH, Instructor in Mechanical Engineering. Graduate, United States Naval Academy.
- ‡WILLIAM MCCORMICK NEALE, Instructor in Mechanical Engineering. B.E., M.E., N. C. State College.
- THOMAS NELSON, Dean Emeritus of the School of Textiles. D.Sc., N. C. State College.

- JOHN PAUL NICKELL, Instructor in English. A.B., Morchead (Ky), State Teachers College; A.M., University of North Carolina.
- ‡RAY LEONARD OVERCASH, Instructor in Chemical Engineering. B.Ch.E., N. C. State College: M.S., Michigan State College.
- EDWIN HUGH PAGET, Associate Professor of English. B.L., Northwestern; M.A., University of Pittsburgh.
- ROBERT LEE PALMER, Instructor in Military Science and Tactics. Master Sergeant, DEML, U. S. Army.
- HUBERT VERN PARK, Associate Professor of Mathematics. A.B., Lenoir Rhyne College; M.A., Ph.D., University of North Carolina.
- †JOHN MASON PARKER, III, Assistant Professor of Geology. A.B., A.M., Ph.D., Curnell University.
- \*LESLIE RENDALL PARKINSON, Associate Professor of Aeronautical Engineering. B.S., Guggenheim School of Aeronautics, New York University.

- JAMES WELCH PATTON, Professor of History and Political Science. A.B., Vanderbilt University; M.A., Ph.D., University of North Carolina.
- JEHU DEWITT PAULSON, Professor of Architecture. B.F.A., Yale University.
- ROBERT JAMES PEARSALL, Assistant Professor of Electrical Engineering. B.E., N. C. State College.
- FREDERICK THOMAS PEIRCE, Director of Textile Research. B.S., D.S., University of Sydney Australia)
- WALTER JOHN PETERSON, Professor of Animal Nutrition. B.S., M.S., Michigan State College: Ph.D., University of Iowa.
- JAMES RODNEY PILAND, Assistant Professor of Agronomy. B.S., Wake Forest College: M.S., N. C. State College.
- JOSHUA PLUMMER PILLSBURY, Professor of Landscape Architecture. B.S., Pennsylvania State College.
- JOSEPH ALEXANDER PORTER, JR., Assistant Professor of Weaving and Designing. B.S., N. C. State College.
- GEORGE NEAL PRESTRIDGE, Instructor in Military Science and Tactics. Master Sergeant, DEML, U. S. Army.
- \*EDMUND WESLEY PRICE, JR., Instructor in Civil Engineering. B.C.E., N. C. State College.
- GLENN ORVICE RANDALL, Associate Professor of Horticulture. B.S., University of Arkansas; M.S., Iowa State College.
- EDGAR EUGENE RANDOLPH, Professor of Chemical Engineering. A.B., A.M., Ph.D., University of North Carolina.
- ROBERT FRANKLIN RAUTENSTRAUCH, Associate Professor of Aeronautical Engineering. B.S., Princeton University; M.S., New York University.
- MARL ELLIS RAY, Instructor in Civil Engineering. B.S., N. C. State College.
- WILLIS ALTON REID, Associate Professor of Chemistry. B.S., Wake Forest College; Ph.D., Wisconsin University.
- ROBERT BARTON RICE, Professor of Mechanical Engineering. B.S., Tufts College; A.M., Columbia University.

<sup>†</sup> On leave. † On military leave. \* Resigned.

#### FACULTY

- JACKSON ASHCRAFT RIGNEY, Professor of Experimental Statistics. mental-Statistics R.S. New Mexico State College : M.S., Iowa State College.
- HAROLD FRANK ROBINSON, Assistant Professor of Experimental Statistics. E.S., M.S., N. C. State College.
- ROBERT HENRY RUFFNER, Professor of Animal Husbandry and Dairying. E.S., University of Maryland; M.S., N. C. State College.
- JAMES HARRY RYAN, Instructor in Chemisrty. A.B., Tusculum College; M.S., Massachusetts State College.
- GEORGE HOWARD SATTERFIELD, Professor of Biochemistry. A.B., A.M., Duke University: B.S., N. C. State College.
- IRA OBED SCHAUB, Director of Agricultural Extension. B.S., N. C. State College: D.Sc., Clemson College.
- \*ROBERT SCHMIDT, Associate Professor of Horticulture. B.Sc., Rutgers University.
- EDWARD MARTIN SCHOENBORN, JR., Professor of Chemical Engineering. B.Ch.E., M.S., Ph.D., Ohio State University.
- †HERBERT FREDERICK SCHOOF, Instructor in Zoology and Entomology. B.S., M.S., N. C. State College ; Ph.D., University of Illinois.
- WAYLAND PRITCHARD SEAGRAVES, Assistant Professor of Mathematics. B.S., M.S., N. C. State College.
- LOUIS WALTER SEEGERS, Assistant Professor of History. A.B., Muhlenberg College; A.M., University of Pennsylvania.
- JOHN FRANK SEELY, Asssitant Professor of Chemical Engineering. B.S., M.S., N. C. State College.
- WALTER EUGENE SELKINGHAUS, Associate Professor of Mechanical Engineering. B.S., Newark College of Engineering ; M.M.E., N. C. State College.
- †JAMES ATKINS SHACKFORD, Instructor in English. B.A., Emory and Henry College; M.A., Peabody College.
- ALFRED BERNARD ROWLAND SHELLEY, Assistant Professor of English. B.S., Tufts College; A.M., Harvard University.
- WILLIAM EDWARD SHINN, Professor in Charge of Knitting Section. B.S., M.S., N. C. State College.
- MERLE FRANKLIN SHOWALTER, Associate Professor of Chemistry. A.B., Indiana University; M.S., Purdue University.
- CLARENCE BONNER SHULENBERGER, Professor of Accounting. A.B., Rosnoke College; A.M., Columbia University.
- ROSS EDWARD SHUMAKER. Professor of Architecture. B.Arch., Ohio State University ; Registered Architect.
- IVAN VAUGHAN DETWEILER SHUNK, Professor of Botany. A.B., A.M., University of West Virginia; Ph.D., Rutgers University
- GEORGE KELLOGG SLOCUM, Associate Professor of Forestry. B.S., M.S., N. C. State College.
- BENJAMIN WARFIELD SMITH, Associate Professor of Agronomy. B.A., M.A., University of Virginia; Ph.D., University of Wisconsin.
- CLYDE FUHRIMAN SMITH, Associate Professor of Entomology. B.S., M.S., Utah State Agricultural College; Ph.D., Ohio State University.
- GEORGE WALLACE SMITH, Professor of Engineering Mechanics. B.S.E.E., University of North Carolina; M.S.E. in C.E., D.Sc., University of Michigan

† On leave. † On military leave.

- JOHN WARREN SMITH, Professor of Industrial Education, B.S., Miami University, Oxford, Ohio: M.S., Columbia University.
- \*RAYMOND FRANKLIN STAINBACK, Assistant Professor of Physics. S.B., M.S., University of North Carolina.
- ‡Ross OLIVER STEVENS, Professor of Zoology. B.S., M.S., University of Michigan.
- ROBERT EDWARD STIEMKE, Associate Professor of Civil Engineering. E.S. in C.E., M.S. in C.E., University of Wisconsin.
- EDWARD HOYLE STINSON, Instructor in Mechanical Engineering, B.S., N. C. State College.
- \$ROBERT LEGRANDE STONE, Associate Professor of Ceramic Engineering. B.S. in Cer.E., Missouri School of Mines and Metallurgy; M.S., N. C. State College.
- CHARLES FREDERICK STROBEL, Assistant Professor of Mathematics. A.B., A.M., University of Buffalo; Ph.D., University of Illinois.
- ARCHIE DAVID STUART, Associate Professor of Agronomy. B.S., M.S., N. C. State College.
- JASPER LEONIDAS STUCKEY, Professor of Geology. A.B., A.M., University of North Carolina; Ph.D., Cornell University.
- PAUL PORTER SUTTON, Assistant Professor of Chemistry. Ph.D., Johns Hopkins University.
- HORACE CARTER THOMAS, Instructor in Military Science and Tactics. Master Sergeant, DEML, U. S. Army.
- +ROBERT WESLEY TRUITT, Instructor in Aeronautical Engineering. A.B., Elon College.
- WILLIAM GARDNER VAN NOTE, Professor of Metallurgy and Assistant Director of the Engineering Experiment Station. Ch.E., Renselaer Polytechnic Institute; M.S., University of Vermont; Ph.D., Pennsyl-vania State College.
- LILLIAN LEE VAUGHAN, Professor of Mechanical Engineering. B.S., N. C. State College ; M.E., Columbia University.
- HERMAN HUSBAND VESTAL, Assistant Professor of Military Science and Tactics.

Major, Infantry-Reserve; B.S., N. C. State College; Graduate, Infantry School, Com-pany Officers Course.

\*EDMUND MEREDITH WALLER, Assistant Professor of Physical Education, and Assistant Coach. A.B., Vanderbilt University : M.A., Peabody College.

- \*ROBERT SULLIVAN WARREN, Assistant Professor of Physical Education and ERT SULLIVAN WARREN, Assistant Professor of Physical Education and Head Coach of Basketball.
  D.O., American School of Osteopathy; B.S., N. C. State College; M.A., University of North Carolina.
- GEORGE CARSON WATSON, Instructor in Mathematics. A.B., Randolph Macon College; M.A., University of Virginia.

- DAVID STATHEM WEAVER, Professor of Agricultural Engineering. B.S., Ohio State University; M.S., N. C. State College.
- BERTRAM WHITTIER WELLS, Professor of Botany. A.B., M.A., Ohio State University ; Ph.D., University of Chicago.
- FRED BARNETT WHEELER, Professor of Practical Mechanics and Superintendent of Shops. B.S., M.E., N. C. State College.

RAYMOND CYRUS WHITE, Assistant Professor of Chemistry. B.S., Davis Elkins College: M.S., Ph.D., West Virginia University.

† On military leave. \* Resigned.

#### FACULTY

- †LARRY ALSTON WHITFORD, Assistant Professor of Botany. B.S., M.S., N. C. State College; Ph.D., Ohio State University.
- CHARLES BURGESS WILLIAMS, Professor Emeritus of Agronomy. B.S., M.S., N. C. State College.
- CHARLES WILEY WILLIAMS, Instructor in Mathematics. A.B., Harvard University; M.A., University of Maryland.

†FRED CARTER WILLIAMS, Assistant Professor of Architecture. B.S., N. C. State College; B.S., University of Illinois; Registered Architect.

- HARVEY PAGE WILLIAMS, Professor of Mathematics. B.A., William and Mary College: M.A., Duke University.
- LEON FRANKLIN WILLIAMS, Professor of Organic Chemistry. A.B., A.M., Trinity College; Ph.D., Johns Hopkins University.
- NORWOOD WADE WILLIAMS, Assistant Professor of Poultry Science. B.S., M.S., N. C. State College.
- ARTHUR JOHN WILSON, Professor of Analytical Chemistry. B.S., M.S., N. C. State College: Ph.D., Cornell University.
- THOMAS LESLIE WILSON, Assistant Professor of English. A.B., Catawba College: A.M., Wofford College.
- Merle Wesley Wing, Instructor in Zoology. B.S., University of Maine.
- EDWIN WEEMS WINKLER, Assistant Professor of Electrical Engineering. S.B., Montana State College: M.S., University of North Carolina.
- SANFORD RICHARD WINSTON, Professor of Sociology. A.B., Western Reserve University ; Ph.D., University of Minnesota.
- \*LOWELL SHERIDAN WINTON, Associate Professor of Mathematics. B.S., Grove City College; M.A., Oberlin College; Ph.D., Duke University.
- JACOB WOLFOWITZ, Associate Professor of Esperimental Statistics. B.S., College of the City of New York; M.A., Columbia University; Ph.D., New York, University.
- THOMAS WILMONT WOOD, Associate Projessor of Industry and Personnel Management.

B.S., A.M., University of Alabama ; Ph.D., University of North Carolina.

- LENTHALL WYMAN, Professor of Forestry. A.B., M.F., Harvard University.
- WILLARD KENDALL WYNN, Assistant Professor of English. A.B., Wofford College: M.A., Emory University; M.A., Columbia University.
- ROBERT BAKER WYNNE, Instructor in English.
- NELSON PAUL YEARDLEY, Instructor in Mathematics. A.B., M.S., Louisiana State University: M.A., Lehigh University.
- HYMAN JOSEPH ZIMMERMAN, Instructor in Mathematics. B.A., Brooklyn College; M.S., Ph.D., University of Chicago.

† On military leave. tOn leave.

#### GENERAL INFORMATION

#### THE COLLEGE

Establishment. The North Carolina State College of Agriculture and Engineering is one of the Land-Grant College established under the provisions of the Morrill Act, passed by the Congress of the United States, June 2, 1862. The furst assist on of the College was that of 1880-1880. Prior to that date, the funds received by the State under the Land-Grant Act had been used by the University of North Carolina, at Chapel Hill.

The name, The North Carolina College of Agriculture and Mechanic Arts, used in the establishment of the College, was changed by the General Assembly the Legislature of the State-in 1917 to its present form.

In its session of 1931, the General Assembly passed an Act, of which the following is the first section: "That the University of North Carolina, the North Carolina State College of Agriculture and Engineering, and the North Carolina College for Women are hereby consolidated and merged into "The University of North Carolina."

This Act placed the three institutions under one Board of Trustees and one President, the separate affairs of each institution being in charge of its own Administrative Dean. The effect of the Act, by correcting unnecessary duplication and focalizing the work of each of its members, has tended to create a strong, unified State University.

Location. State College Campus of one hundred twenty-five acres, lies within the limits of Raleigh, a mile and a quarter west of the State Capitol, on United States Highway, Route 1. Adjoining the Campus westward, occupying four hundred forty-five additional acres, are the College poultry yards, and the Central State Experiment Farms. A mile still farther westward, the College has acquired a tract of thirteen hundred acres, which is maintained as livestock farms by the Department of Animal Husbandry and Dairying. The part of this tract-about 500 acres—not adapted for these farms is being used by the Department of Forestry for demonstrations and development.

Organization .- The organization of State College has as its objectives Campus Teaching, Extension Teaching, and Research.

Campus Teaching occupies the School of Agriculture and Forestry, the School of Engineering, the Division of Teacher Education, the Textile School, the Graduate Division, the Basic Division, and the Summer Session. The Schools and the Basic Division are organized for teaching by Departments. The details of the organization, the equipment, and the work of each School and Department are given under the various heavings in the later pages of this Catalog. The work of the Summer Session, is set forth in a special issue of STATE COLLEGE RECORD published each year in December, a copy of which is sent on request.

The Department of Military Training, including as the Reserve Officers Training Corps students of all classes in all Schools, is placed immediately under the College Administration. Extension Teaching is directed under the Division of College Extension. The work is closely coördinated with the work in the regular Departments of the College. In certain short courses, most of them in Agriculture and in Engineering, Extension overlaps with Campus Teaching. The whole State is covered in the activities of the Agricultural Extension Service.

Research is conducted, by individuals or by Departments, very generally at State College. Specially organized work is done through the Agricultural Experiment Station, the Engineering Experiment Station, and the Textile Research Department.

The Campus—The Campus of State College presents an agreeably rolling terrain with adequate space west and south for expansion. Located on the eastern edge of the Piedmont Region of the State, within twenty-five miles of the Coastal Plain, opportunity is afforded for a pleasing variety of trees and shrubs in the landscaping. Fortunately, in the early years of the College a long-range plan for growth was made. This plan is now being intelligently followed.

Under the sections of the Catalog devoted to Schools and their Departments and to Divisions, are placed descriptions of buildings, laboratories, and facilities of each of these.

General Service Buildings. Holladay Hall, named for Colonel Alexander Quarles Holladay, first President of the College, 1889-1889, contains the general administrative offices of the College, and the offices and classrooms of the Military Department.

The D. H. Hill Library, named for Doctor Daniel Harvey Hill, President of the College, 1908-1916, vas dedicated in 1926. It contains now over 62,000 volumes, exclusive of Government documents, and pamphlets.

The Y. M. C. A. building, the erection of which was made possible by a donation from the Rockefeller Foundation, serves the religious and social life of the College.

The Dining Hall, an H-shaped building, with kitchens, storage rooms, pantries, refrigerators, and other mechanical devices in the center and basement, has at each side, front and rear, a spacious dining hall. The service is on the cafeteria plan.

The Frank Thompson Gymnasium, named in honor of Frank Martin Thompson, distinguished athlete, graduate of State College, Class of 1910, killed in service during World War J. is thoroughly equipped and modern in all its appointments.

The Infirmary, recently enlarged and renovated, is a model of a small, special hospital.

Pullen Hall, named in honor of R. Stanhope Pullen, donor of first sixty acres of the College land, has classrooms on the first and basement floors. on the second floor, the College auditorium.

The Power Plant, recently erected, centrally located, furnishes heat, electric power, and hot water to all buildings on the Campus using these services. Eleven Collage Dormitories now in use accommodate approximately 1400 students. Other students will room, as at present, in homes in the vicinity of the Campus and in fraternity houses. Full information in regard to dormitories is sent by the Registrar to applicants accepted for admission to the College, or by the Superintement of Dormitories.

#### INFORMATION FOR APPLICANTS

#### I. Admission

 The first step toward admission to State College is to get from the Registrar, who is to be addressed at State College Station, Raleigh, a certificate blank. After the blank has been filled out and signed by the principal or the superintendent of the high school or other preparatory school, the certificate is sent to the Registrar for his decision on admission, notice of which will be given promptly.

The certificate must contain a statement from the school last attended of the good moral character of the applicant.

- 2. Undergraduate students may be admitted as regular or special.
  - A regular student is one who is registered in a four-year curriculum.
  - (2) Women may be admitted as regular students provided they register in one of the regular curricula.
  - (3) A special student is a person of mature age already engaged in some vocation in which instruction is desired. Such person may, upon presenting a satisfactory record of education and upon recommendation of the Dean of the School concerned, be admitted without the usual entrance requirements. Special students are not elligible for a degree, nor does work done

as a special student have value for credit toward a degree. A special student cannot represent the College in any intercollegiate contest nor become a member of a fraternity.

- 3. Requirements for admission of regular students.
  - (1) Sixteen years is the minimum age for admission.
  - (2) Graduation from a State accredited high school, or an approved preparatory school, and fifteen units of credit, specified and elective as indicated below. are required for admission to the freshman class of four-year courses.
  - (3) Applicants graduated by nonaccredited four-year high schools may be admitted by passing successfully an entrance examination such as that prepared by the Examination Committee of the North Carolina College Conference.
  - (4) In exceptional instances a person of mature age may be admitted by the Dean of a School on the basis of his ability to carry the regular work of a curriculum in that School.

(5) Subjects and units of credit (a unit is allowed for a subject pursued for a year, five periods a week, each period being at least forty minutes, and successfully passed in a high school accredited by the North Carolina State Department of Public Instruction or other preparatory school accredited by competent authority).

		υ	Ini	of Credit	
English: Grammar, Composition, Literature					4
History: United States or equivalent			11		1
Algebra					
Plane Geometry				8	1
Solid Geometry			14	1	.5
Science	e,	1.4.4		2	1

The remainder of the required fifteen units will be accepted from the academic record presented except that not more than a total of one unit will be accepted for activity courses such as physical education, music, band, and military science.

(7) Students admitted from other countries who do not have a satisfactory command of the English language will be required to attend a non-credit English course until they acquire a mastery of English. This course will include vocabulary training in the student's major field of study.

4. Advanced standing is allowed on work done in approved colleges upon presentation of a certificate or transcript, duly signed and sealed, to the Director of Registration. The transcript is evaluated in the Registration Office to determine the maximum amount of credit and is then sent to the Dean of the school concerned for a detailed evaluation of credits which can be used in the curriculum selected.

Each applicant for admission to N. C. State College as a transfer from another college or a university must send with her or this application for admission a remittance of five dollars, to be known as the application fee. This remittance must be drawn in favor of N. C. State College, Raleigh, and should be in the form of a check or money order. No transcript of record sent in support of an application for admission will be examined and evaluated until the remittance is received. If the record received is not satisfactory for the applicant's admission, the remittance will be returned; if the record is satisfactory and the application is approved, the remittance will be deposited with the Cashier and will be applied as a credit at the time of the application's first registration. If the record is satisfactory and the application is approved and the applicant fails to matriculate at N. C. State College, the deposit is forfield by the applicant fails to matriculate at N. C.

<sup>\*</sup>Solid Geometry is required only in the School of Engineering and in Aericultural Engineering. A special course is offered in college for amplication who do not present this credit for entrance. No college credit is allowed for the course. 1,A student not offering for credit History of the United Status is required to take the

<sup>&</sup>lt;sup>†</sup> A student not offering for credit History of the United States is required to take the subject in his College course.

Because of the scholastic requirements imposed upon resident students, advanced standing credit cannot be allowed for courses passed at other institutions with the lowest passing letter grade, or corresponding numerical grades. At least one year in residence is required for a degree.

#### **II.** Expenses

#### Undergraduate

 The total College expenses of a student resident of North Carolina need not for the regular "College year exceed \$850.00, for a nonresident of this State, \$820.00. These amounts include the cost of room and hoard, heat and lights, tuition, fees and deposits, books, drawing instruments, laundry, and necessary incidentals. They do not include clothing, pocket money, or other incidentals.

 Nonresidents of North Carolina pay an additional tuition charge. The College Administration has defined a nonresident student as a person who comes into North Carolina from another state for the purpose of attending college.

In order to draw a clear line between resident and nonresident students, the Administration has ruled that all students whose parents have not been domielded in North Carolina for more than six months immediately preceding the day of their first enrollment in the institution shall be termed nonresident students, with the following exceptions:

- Students twenty-one years of age at the time of their first matriculation who have resided in North Carolina for more than one year preceding the day of their first enrollment.
- (2) Children of regular employees of the Federal Government stationed in the State of North Carolina.
- (3) Children of regular employees of the Federal Government who are employed outside of the State, but who through law are permitted to retain their North Carolina citizenship.

Students cannot claim a change in their resident status after matriculating. Students furnishing incomplete or incorrect information in order to obtain the special State-resident status shall be liable for dishonorable dismissal.

3. Applications for credit must be made to the Business Office of the College prior to registration day. Applications made later, if granted, will require a special fee of \$2 and possibly also the fee for late registration.

4. For each failure to meet deferred payments as scheduled, a fee of \$5 is charged.

5. Tuition and fees for residents of North Carolina as regular undergraduates or as special students scheduled for twelve or more credit hours are as follows:

		Fall Quarter		Winter Quarter			
Tuition	\$30	)	\$30		\$30		
College Fees	21	5	25		25		
Student Activities	2.52	1	3		. 2		
Athletic Fee	8	8	. 5				
Students Fees	5	2	2		2		
General Deposit	. 20	)					

Special Student Fees include subscription to student publications of the school in which registered.

Note .- Tuition and Fees are subject to change by the Board of Trustees without advance notice.

6. The general deposit, in case of first year men, will be charged with cost of necessary expendable Military Supplies, such as shoes, books, etc. The balance of this deposit, in the case of all students, is refundable at the end of the year, after covering loss of, or excessive breakage of College property, or other indebtedness to the College.

 Nonresidents of North Carolina registered in Forestry or Textiles will pay an additional \$38.00 Tuition per quarter. Nonresident students registered in other curricula will pay an additional \$55.00 Tuition per quarter.

8. Expenses include also the following:

 
 Fail Quarter
 Winter Quarter
 Spring Quarter

 Room Rent
 \$18.00 to \$30.00
 \$18.00 to \$30.00
 \$18.00 to \$30.00

 Books and Supplies
 20.00 to \$35.00
 \$.00
 \$18.00 to \$30.00
 \$18.00 to \$30.00

 Drawing Equipment for those taking
 17.50 to \$55.00
 \$55.00
 \$15.00
 \$15.00

 College fees include those for registration, for hospital and medical attention, for library and lectures, for laboratories and classrooms, and for physical education.

10. Student-activities fees include those for student government, student publications, and general student activities.

11. Freshmen, unless living at home with their parents, are required to room in specified College dormitories. Students are not permitted to live in fraternity chapter houses during their freshman year.

12. Reservation of a room and the first payment of rent must be made before August 15 to obtain the most desirable room available. A reservation may be canceled and the payment refunded upon notice before September 1, not later. Information about rooms may be had by writing Superintendent of Dormitories. 13. Dormitory rooms have necessary furniture, but each student must bring his own blankets, bed linen, and towels.

14. Board at the College Cafeteria may be paid in cash for each meal, or in tickets sold at the Cafeteria in books of \$5.00 value for the convenience of students.

15. Applicants who desire information regarding part-time employment should address their inquiries to the Self-Help Secretary, College Y.M.C.A.

16. A refund of the amount paid the College, less the registration fee and a reasonable charge for lodging and services, is made to a student withdrawing within ten days from the date of registration; on withdrawal later, no refund will be made except of the general deposit.

#### Graduate and Special Students

 Graduate students in residence will pay a \$2.00 registration fee for each registration, \$3.00 per credit hour for all courses scheduled, and \$10.00 for the diploma.

 Special students will pay a \$2.00 registration fee for each registration and \$3.00 (\$5.00 for non-residents) per credit hour for all courses scheduled totaling less than twelve hours. Those scheduling 12 hours or more will pay regular fees. Special students do not receive academic credit.

3. The candidate for a professional degree will pay \$10.00 when he registers and \$15.00 for his diploma.

#### **III.** Registration

 Upon his arrival on the campus each candidate of the freshman class is given a schedule of the evercises of the first week, known as Freshman Week.

 The Certificate of Admission approved beforehand by the Registrar for the School and the Department in which the applicant wishes to register must be ready for presentation.

3. The dates indicated in the College Calendar for the registration of freshmen, of those applying for advanced credit, and of sophomores, juniors, seniors, and graduate students. must be strictly observed.

4. For registration after the scheduled date, an extra fee of \$2 is required for the first day and \$1 for each additional day until a maximum of \$10 is reached.

#### Special Note to Freshmen and Transfer Students

Because of the testing program given during freshman week to all new students (except those with forty-five or more term credits of advanced standing), it is essential that all new students report on time. Late admissions cause a great deal of extra labor and expense. Therefore, beginning with the fall term registration in September, 1945, all new students (except transfer students with forty-five or more term: credits of advanced standing) will be charged a \$2 fee for each test missed during freshman week. This charge is made because of the extra time which must be given to late individuals. The regular late fee regulations will apply to transfer students having forty-five or more term credits of advanced standing, who do not begin their registration on the date indicated. New students should plan to arrive on the campus on the day preceding the registration date in order to be available at 8:00 a.m. on registration day.

5. Directions in detail for registration are furnished each student on entering the registration room-the Gymnasium.

6. Vaccination against smallpox is required at the time of registration unless the applicant furnishes a doctor's certificate indicating he has been successfully vaccinated within two years preceding his registration.

 Inceulation against typhoid fever, though not compulsory, is urgently suggested for those entering the College. Free inoculation is offered by the College to all students.

8. All new students will be given the Tuberculin Skin Test unless they present a statement from their family physician indicating that such a test has been taken during the past year.

9. Admission to classes is permitted only after complete registration certified on the official card of the Registrar. All instructors will enforce this rule.

10. Students may drop and add courses during a specified period at the beginning of each term by filing in the Office of Registration a roster change slip signed by their Dean, Adviser, and the instructors concerned. There is a charge of fifty cents for such changes made after registration day. Credit is not allowed for changes unless made in this manner.

11. Students may change from one curriculum to another by filing in the Office of Registration a curriculum change card signed by the Dean or Deans concerned. Such changes are effective at the beginning of the following term.

#### IV. Grades and Honor Points

- 1. Grading System:
  - A-Excellent, 90-100.
  - B-Good, 80-89.
  - C-Passing, 70-79.
  - D-Passing (without credit points), 60-69.
  - F-Failure, below 60. (Required courses failed must be repcated.)
  - Abs.-Absent from examination. (Equivalent to failure unless excused.

Inc.-Incomplete.

- 2. Honor or quality points are determined by the grade:
  - A-3 points for each credit hour.
  - B-2 points for each credit hour.
  - C-1 point for each credit hour.
  - D-No points.

- 3. Mid-term reports for students who are failing any subject enable advisers and deams so to adjust the work of these students that they make, if possible, passing grades by the end of the term.
- 4. Seniors who fail a course within three terms (summer school counts as one term) of their graduation, may, if they have failed only one course, apply to the Office of Registration for permission to remove the failure by taking a re-examination on that course.
  - a. If, however, a senior fails more than one course during one term and removes all but one of these deficiencies by repeating the course or courses and if he has had no other re-examination that year, he may apply at the end of his last term in residence for permission to take a re-examination to remove that failure.
  - b. Permission to take any re-examination must be obtained from the Office of Registration, and a fee of \$3.00 must be paid to the Business Office for each re-examination.

#### V. Scholarship Rules

- a. For the period comprising the first three terms in residence, a student will be dropped from the rolls of the college at the end of any term in which he fails to pass at least six hours of work. Furthermore, he will be dropped at the end of this three-term period if the fails to pass a total of at least thirty hours.
  - b. For the periods comprising the fourth, fifth, and sixth terms in residence, a student will be dropped at the end of any term in which he fails to pass at least eight hours. Furthermore, he will be dropped at the end of this three-term period if he fails to pass a total of at least thirty-fow hours.
  - c. For the remaining periods comprising three terms each, a student will be dropped at the end of any term in which he fails to pass at least ten hours. Furthermore, he will be dropped at the end of any three-term period in which he fails to pass a total of at least forty hours.
- a. The summer sessions will not be considered as a part of any of the above periods. However, hours passed in a summer session may be included in the total of hours for the preceding period only.
  - b. Transfer students who have attended college for fewer than three terms (or equivalent) will be regarded as entering the first term for purposes of these rules; those who have attended college for three terms or more will be regarded as entering the fourth term.
  - c. Students who have been dropped for poor scholarship may not reenter for the fall term of any year.
  - d. Veterans are excused from the operations of these rules for their first term in residence after being discharged. The rules shall apply thereafter, and the work of that term may be included in the total of hours earned for the first three-term period or re-entering.
- 3. The re-entrance, after the interval of at least one term, of a student who has failed, or the entrance, after the lapse of at least one term, of a student who has failed at another college, shall be determined by the Dean or Director of Instruction of his school upon the basis of maximum scholastic advantage to the student.
- 4. "C" Average Rule. Before allowing students to enter the third or fourth year, they shall have earned net credit points equal to or greater than the term credits earned. In case of repeated courses, the repeated grade only shall be considered. This rule is applied before the fail term registration only, thus giving students ample time to earn the required points. Any student may attend the summer session at this institution to make up any shortage in points, but may not earn such points through correspondence courses or attendance at other institutions.
- 5. Honors in Scholarship:
  - a. Honors in scholarship for the year are awarded those students who earn twice as many credit points as credit hours during the first two terms.
  - b. High honors in scholarship for the year are awarded those students who earn two and one-half times as many credit points as credit hours during the first two terms.
  - c. Honors in scholarship at graduation are awarded those students who have earned during their entire residence at this institution twice as many credit points as credit hours.
  - d. High honors in scholarship at graduation are awarded those students who have earned during their entire residence at this institution two and one-half times as many credit points as credit hours.
  - e. Public announcement of honors and high honors for the year is made on Scholarship Day; of graduation with honors or high honors at Commencement. Graduation with honors or high honors is also published in the College Catalog and engrossed upon diplomas.
  - f. Dean's List. Any junior or senior having a cumulative average of "B" or hetter shall be exempt from the college rule which places a student on probation for excessive absences, and his name shall be placed on a preferred list. Once placed on such preferred list a student must maintain an average of "B" or better during each term he remains in college thereafter, or his name shall be removed from such preferred list and not entered thereon again.
  - g. Class Attendance Regulations. A student is expected to attend every meeting of each class. Any student who is absent from class three (3) times without a satisfactory reason will lose one (1) quality point. A student who is absent ten (10) times in any term without a satisfactory reason will be placed on probation.

Copies of attendance regulations in detail are available to all students in the Office of Dean of Students.

## VI. Classification of Students

 For the convenience of the college administration and in keeping with custom, regular students are classified as Freshmen, Sophomores, Juniors, Seniors, and Graduates. This classification is made only at the opening of the fall term, or when a student enters for the first time. The following system of classification is used:

Freshman—Less than 45 term credits. Sophomore 45 credits through 104 credits. Junior—105 credits. Senior—160 or more credits. Graduate A student who has already received a baccalaureate degree from a recognized college.

This system permits students to skip classifications and graduate as soon as scholastic requirements have been satisfied.

2. Students are promoted from the Basic Division to technical schools when they have earned 105 or more credits, including credit for all freshman requirements, and have a "C" average. Students who have earned as many as 140 credits without completing all freshman requirements are promoted to technical schools but must complete the remaining freshman courses without credit toward graduation. Transfer students are allowed at least four terms in which to make up freshman deficiencies and still receive credit toward graduation.

## VII. Degrees

Since in conferring a degree and awarding a diploma, the College recognizes a student's character as well as his scholarship, the College reserves the right to withhold the degree and diploma for reasons other than unsatisfactory scholarship.

No student may earn more than one baccalaureate degree at any one commencement. In order to be eligible for a second Bachelor's degree, a student must complete a minimum of 36 term credits above the requirements for the first degree. There are, however, no additional residence requirements.

Undergraduate students who transfer from some other institution must spend one year in residence at this institution before being eligible for a degree.

An undergraduate student while not in residence may earn towards a degree not more than fifty term credits by correspondence and not more than sixty by correspondence and extension. Not more than six credit hours may be carred towards graduation after a student's last residence at this institution. Correspondence courses cannot be taken by a resident atudent unless they are a part of his official schedule approved by his dean.

#### The college confers the following degrees:

 The college confers a Bachelor's degree in the student's major field upon the undergraduate student who successfully completes in regular order any of the prescribed curricula.

 Upon the student who has previously obtained the Bachelor's degree and who successfully completes in regular order at least one year of prescribed graduate work in residence, the College confers a Master's degree in that student's major field.

3. The degree of Doctor of Philosophy in certain specified departments is offered in cooperation with the University at Chapel Hill under supervision of the Graduate School of the Consolidated University of North Carolina.

4. A professional degree in the school concerned may be conferred upon a graduate of State College, after five years of professional practice and significant accomplishment, upon presentation of an acceptable thesis.

 The honorary degree. Doctor of Science, may be conferred upon candidates recommended by the various schools when approved by the General Faculty and the Board of Trustees.

6. A certificate of Meritorious Service in Agriculture may be awarded at Commencement to a bona-fide farmer who has rendered notable service in the advancement of agriculture in his community.

## VIII. Financial Aids and Scholarships

1. The Self-Help Secretary of the College Y. M. C. A. (see page 44) will assist those desiring employment to help pay expenses.

2. A Student Loan Fund, first established by the State College Alumni Association, amounting now to \$34,000, renders assistance to needy students of talent and high character. The Fund includes the Finley Loan Fund of \$1,000 (see below), the Masonic Loan Fund, \$4,500, the Frank M. Harper Loan Fund. \$200, and the Escheats Loan Fund of \$15,000.

At present, loans, restricted largely to juniors and seniors, are made at 6 percent on good security. Since the fund is comparatively small, new loans are usually made only as old ones are repaid.

The Finley Loan Fund is a memorial to William Wilson Finley by the Southern Railway Company, of which Mr. Finley was, at the time of his death, president. It is designated for needy students in Agriculture.

 The John Gray Blount Scholarships were endowed by Colonel W. B. Rodman, of Norfolk, Virginia, in memory of his great-grandfather. The maximum value of each of the two scholarships is \$195.

4. The Champion Paper and Fibre Company provides a fund for a Fellowship to encourage graduate study and research in Chemical Engineering.

5. The Syd Alexander Scholarship was endowed by Mrs. Mary R. Alexander of Charlotte, North Carolina, in memory of her husband, the late Sydenham B. Alexander, alumnus and trustee of State College. The returns from the endowment \$5,000 are awarded to a student, a native and resident of Mecklenburg County, North Carolina, who is pursuing a course in the School of Textlies of State College.

6. The Barrett Company, Distributors of Arcadian American Nitrate of Soda, offers to 4-H Club members the following one-year scholarships:

- To the member with the most distinguished record with a Corn-Club project.
- (2) To the member with the most distinguished record in Cotton-Club work.
- (3) To the member with the best Tobacco-Club record.
- (4) To the member with the best record in Horticulture.

7. The Burgue Award in Horticulture—An annual award of \$100, established in 1945 by Mr. David Burgue, President, W. Atlee Burgue Company, to financially assist and recognize outstanding students in Holticulture. The award will be based upon "scholarship, interest in research and practical experience" of the student, Students majoring in Vegetable Gardening and Floriculture will be given preference.

7. The North Carolina Cottonseed-Crushers Association offers to 4-H Club members the following one-year scholarships:

- (1) To the member making the best record in the Baby-Beef contest.
- (2) To the member making the best record in a dairy project.
- (3) To the member making the best Pig-Club record.

8. (1) The Chilean Nitrate Educational Bureau offers a four-year scholarship to the 4-H Club member in North Carolina making the best record for three or more years in 4-H Club work.

(2) The Chilean Nitrate Educational Bureau also offers a hundred scholarships of \$5 each: one to the most distinguished Club boy from each of the hundred counties of North Carolina attending the 4-H Summer Short Course at State College.

10. The Luther W. Cartwright, Jr., Memorial Scholarship. Memorializing the late Luther W. Cartwright, Jr., who gave his Hife in the service of his country, his father, Lieutenant Commander Luther W. Cartwright, has established a trust fund at the North Carolina State College of Agriculture and Engineering to provide for the annual award of a scholarship to be awarded to a senior in the school of engineering.

11. The Abraham and Charles Erlanger Textile Scholarships. Memorialting the late Abraham and Charles Erlanger, members of their family have established a trust fund at North Carolina State College of Agriculture and Engineering to provide for the annual award of a four-year scholarship in textiles. Any son or daughter of an employee of the Erlanger Mills, Inc., in Lexington, N. C., the North Carolina Finishing Company in Salisbury, N. C., the North Carolina Fabrics Company in Salisbury, N. C., and the Alexander Manufacturing Company in Forest City, N. C., on graduation from high school is eligible to compete for the Erlanger Scholarship.

12. The Pieters Memorial Graduate Scholarship commemorates the life and work of Dr. Adrian J. Pieters, long a leader in agriculture and a pioneer in the development of lespedeza. It was initiated by his wife, Mary Burr Pieters, to carry forward through graduate study his work with lespedeza and other acid-loterant legumes. The annual stipped is \$200.

13. The L. Reade Powers Scholarship Fund. Established by his brother, Dr. F. P. Powers, for the aid of needy students, primarily orphan boys or girls. This is in the nature of a loan fund to needy boys or girls.

14. Sperry Gyroscope Scholarships. The Sperry Gyroscope Company. Inc, has granted the College \$1,250 per school year for four years, beginning in September, 1945, for two scholarships each school year, or one fellowship each school year. A committee composed of the Dean of Engi neering, the Dean of Students, and the Head of the Deartment of Aero nutrical Engineering will select the persons to receive the awards. The selections will be made from students having junior class, or senior class, or graduate standing.

15. Graduate Fellowships are offered each year by State College, during the current year, thirty-three teaching, twenty-four research fellowships. As the number of these scholarships is limited, application should be made early to the Head of the Department concerned.

16. As need arises, assistants in various Departments are selected from upperclass or graduate students.

# STUDENT ACTIVITIES

#### Student Government

Student Government, in accordance with an agreement between the students and the Board of Trustees of the College, undertakes "to handle all matters of student conduct, honor, and general student interest, and to promote in Campus life self-control, personal responsibility, and loyalty to the College and the student body."

The Student Council, the legislative-executive body for Student Government, is composed of one senior, one junior, and one sophomore from each of the Schools-Agriculture and Forestry, Engineering, and Textile, and the Division of Teacher Education and one member chosen at large from the freshman class at the beginning of the second term.

For guidance in its operation, the Constitution and By-Laws for Student Government has been adopted.

## Student Publications

The Publications Board is composed of the editors and business managers of all student publications, the president and the past president of the junior class, the president of the Student Council, and five faculty members. The Board secks to promote the interests of the College and of the publications, to insure coöperation among the publications, and to hold the loyal support of the faculty, the students, and the public.

The Technician, the student newspaper, is delivered to each student's mail box every: Friday morning of the regular College session. The charge for the paper is included in the student's publications fee.

The Agromeck is the official annual published at the end of each scholastic year of the College. A copy of The Agromeck is also paid for by each student in his publications fee.

The Agriculturist, a monthly magazine in its field, was begun by the activities of the Alpha Zeta fraternity and the "Ag" Club. All students of the School of Agriculture and Forestry are concerned in this enterprise.

The Southern Engineer, the organ of the School of Engineering, is managed by the Board of Directors of the Southern Engineer. They plan to issue four numbers during the regular College session.

Pi-ne-tum is the annual of the Division of Forestry. Its contents constitute a record of persons, especially the graduating class, and of events of the year interesting to students of the Division and their friends.

The Textile Forum is published quarterly by the students in the Textile School.

#### **Clubs** and Societies

All clubs and societies endeavor to bring together students (some clubs include members of the faculty), with the same interests or professional objective, in order to cultivate close personal relations and fellowship. Their chief purpose is to incultate high professional consciounces and *esprit de corps*. With a view toward the accomplishment of these ends, they afford to members an opportunity to hear and to participate in discussions of professional problems, to prepare and to present papers on current technical topics.

The Agricultural Club, besides the usual activities, sponsors an annual dance.

The Forestry Club, having the usual program through the year, publishes its own annual, *Pi-ne-tum* (described under "Student Publications," above).

La Société des Beaux Arts includes students in Architectural Engineering and those in Landscape Architecture.

The Agricultural Engineering Club is a student branch of the national organization, The American Society of Agricultural Engineers, and brings together students of this department to discuss all phases of their specialty.

The Agricultural Education Society devotes its attention to matters of interest to students who are preparing to become teachers of agriculture. Student Chapters in Engineering at State College represent the following national organizations:

The American Ceramic Society

The American Institute of Chemical Engineers

The American Institute of Electrical Engineers

The American Institute of Mining and Metallurgical Engineers

The American Society of Civil Engineers

The American Society of Mechanical Engineers

The Associated General Contractors of America

The Institute of Aeronautical Sciences

The National Society for the Advancement of Management

Theta Tau, Rho Chapter (National Professional Engineering Fraternity).

The Engineers' Council, composed of three students and a professor from each Department of the School of Engineering, publishes quarterly The Southern Engineer and sponsors the Engineers' Fair and Exposition.

The Tompkins Textile Society endeavors to keep abreast of whatever affects the textile industry, state, national, or foreign.

The Pan American Club cultivates friendship among students of all nationalities and has regular addresses and discussions of international events and relationships.

The Monogram Club has as its purpose to develop the highest order of sportsmanship in all athletics.

## Honor Fraternities and Societies

Honor Fraternities and Societies strive to encourage and reward high attainment in scholarship and character, and to instill lofty professional ideals, with leadership in contribution to existing knowledge and in service as prime objectives. The following national fraternities and societies have chapters or other organizations at State College:

Alpha Zeta: Agricultural Eta Kappa Nu: Electrical Engineering Gamma Sigma Epsilon: Chemical Keramos: Ceramic Engineering Lambda Gamma Delta: Agricultural Judging Mu Beta Pai: Musical Phi Eta Sigma: Freshman, Scholarship Phi Kappa Phi: Scholarship Phi Kappa Phi: Scholarship Phi Kapa Delta: Public Speaking Pi Kappa Delta: Public Speaking Pi Tau Sigma: Mechanical Engineering Sigma Pi Alpha: Languege Tau Beta Pi: Engineering Blue Key: Scholarshin, Leadershin, Student Activities Xi Sigma Pi: Forestry, Honorary,

The following are organizations peculiar to State College:

The Golden Chain: Senior Citizenship The Order of St. Patrick: Senior Engineering: Collegiate and Personal Distinction The Order of 30 and 3: Sophomore Leadership The Pine Burr Society: Scholarship and Extracurricular Activity Sigma Tau Sigma: Textile, Scholarship

## Social Fraternities

Following are the national Greek-Letter Fraternities having chapters at State College. Each chapter occupies a chapter house in the vicinity of the campus.

Alpha Gamma Rho*	Phi Kappa Tau*
Alpha Kappa Pi*	Pi Kappa Alpha
Alpha Lambda Tau	Pi Kappa Phi
Delta Sigma Phi	Sigma Alpha Mu
Kappa Alpha*	Sigma Nu
Kappa Sigma	Sigma Phi Epsilon
Lambda Chi Alpha	Sigma Pi
	Sigma Chi

The Interfraternity Council, composed of two representatives from each chapter, has as its purposes to advance the interests of North Carolina State College: to promote the general interests and welfare of the associated fraternities as a body; and to insure cooperation between them in their relations with the faculty, the student body, and the public in general.

## MEDALS AND PRIZES\*\*

1. The Alpha Zeta Cup is awarded to the sophomore in Agriculture who during his freshman year made the highest scholastic average.

2. The General Alumni Association of the College presents annually a trophy to the member of the graduating class who during his College course has most distinguished himself in athletics.

3. The American Institute of Chemical Engineers presents annually its award to the sophomore who during his freshman year made the highest scholastic record.

4. The Associated General Contractors of America Prize is awarded each year by the Carolina Branch of this organization to the member of the graduating class in Construction Engineering who during his sophomore, junior, and senior years has made the highest scholastic record.

Inactive for the duration.
 \* Several of the above medals and prizes have been discontinued temporarily due to war conditions but it is expected that they will be resumed after the war is over.

5. The Elder P. D. Gold Citizenship Medal, Jounded by the late C. W. Gold, Jr. of in memory of his father, and continued by his son, C. W. Gold, Jr. of Greensboro, North Carolina, is awarded annually to the member of the graduating class who during his sophomore, junior, and senior years has most distinguished himself in Student Citizenship. The qualities determining the award—scholarship, student leadership, athletics, and public speaking

are to be attested by the College Registrar, the Student Council, the Faculty Athletic Committee, and a committee composed of the Dean of Administration and Dean of Students.

6. The Moland-Drysdale Corporation Scholarship Cup, presented by Mir. George N. Moland, of Hendersonville, North Carolina, President of the Corporation, is awarded annually to the freshman in Ceramic Engineering who, during the two terms preceding Scholarship Day, has the highest scholastic record together with interest shown in the activities of the Department.

7. The J. C. Steele Scholarship Cup, presented by J. C. Steele and Sons, of Statesville, North Carolina, to commemorate the establishment by Mr. Steele of the first plant for the manufacture in the South of ceramic machinery, is awarded annually to the student of the three upper classes in the Department of Ceramic Engineering who has made during the three terms preceding Scholarship Day the highest scholastic record. In making the award, personality and interest in the activities of the Department are considered.

8. The Sigma Tau Sigma Cup is awarded annually to the senior in Textiles who has the highest scholastic record.

9. The Textile Colorist Medal is awarded annually to the senior who presents the best thesis on some subject in Textile Chemistry and Dyeing.

10. The National Association of Textile Manufacturers Medal is awarded annually to a senior in the State College Textile School. The award is based upon conditions outlined by the National Association.

11. Phi Kappa Phi, Honarary Scholarship Society, awards each year a gold medal to the senior who as a junior, a silver medal to the junior who as a sophomore, and a bronze medal to the sophomore who as a freshman, made respectively, the highest scholastic record.

12. The Mu Beta Psi Cup is awarded annually to the senior having rendered the most service to the State College musical organizations during his college career.

## PHYSICAL EDUCATION AND ATHLETICS

#### Professor J. F. Miller, Head

Assistant Professor C. G. Doak, Physical Education and Intramurals. Assistant Professor T. I. Hines, Physical Education and Swimming Coach. J. L. VonGlahn, Business Manager Athletics. BuJolh Pate. Director Athletic Publicity. W. B. Feathers, Head Coach Football and Baseball. Starr Wood, Assist. Football Coach. I. M. Rich, Assist. Football Coach and Track Coach. E. M. Johnson, Custodian Gymmasium and Athletic Equipment. Helen G. Croom, Secretary. Geraldine S. Wirgins. Secretary. Physical Education.

Aims. In general, the Department aims are: (a) to promote a higher standard of physical fitness through "big muscle" activities; (b) to develop habits, knowledge, appreciation, and skills in desirable sports, and athletic and gynnastic procedures; (c) to develop habits of safe recreative activities to continue after graduation.

Organization—The Department of Physical Education and Athletics is in the Basic Division of the College. The program of service has three sections: Physical Education, offered in various curricula, for which college credit is given; Intramural Activities, for every interested student in the College; Intercollegiate Athletics, representative of the College.

Control. All activities of the Department are controlled by the College. Physical Education and Intramural Activities are under the appervision of the Dean of the Basic Division. Intercollegiate Athletic Activities are under the supervision of the Athletic Council. The Head of the Department seeks balance and coördination in the work of the three sections. He delegates the work of the staff and sees that policies of the Department are carried out by them. To the Business Manager of Athletics is delegated the responbility for business, financial, and all other details connected with intercollegiate contests. The members of the staff are expected to give reasonable and capable assistance in any work of the Department insofar as it does not interfere with their main specialization. They are responsible to the Head of the Department for carrying out their dutis.

Buildings and Fields.—The Department of Physical Education and Athletics is quartered in the Frank Thompson Gymnasium. An attractive feature of the gymnasium is a white-tiled swimning pool and natatorium, with modern filter and chlorinating systems. The new Field House, located at the south end of Riddick Stadium, is the headquarters of the football squad. Offices of the football coaching staff are located in this building. Riddick Stadium, with new concrete bleachers, seats 15,000 spectators. Preshman Field, adjacent to the Gymnasium, is used for freshman football, intramural games, physical-training classes, and varsity baseball. The we quarter-mile track, with its 220-yard straightways is located south of the Freshman Field. It has concrete stands seating about 3,000 spectators. "Red Diamond" and "1911 Parade Field" are available for intramural contests. The College has ten excellent clay tennis courts, with some additional courts contemplated.

Activities.—The College requires all students to enroll in some type of physical activity for two years, or six full terms. The classes meet twice a week, one term credit being given for each term's work. All students are required to take a physical and a medical examination at registration and

#### MUSIC

a physical fitness test. Those who are subnormal in any way are placed on the recall list. Students may receive free medical advice at any time. All freshmen are required to take the course in Health Education which meets once a week for one term. Instruction in personal hygiene is given by members of the Physical Education Staff. A swimming requirement is also made for all freshmen. This requirement must be met before graduation.

The required physical training courses are so standardized that they are presented, instruction given, and examination required of each student on the same basis as all other college courses.

All students are required to take classification activities during their first term. At the close of the fall term an examination is given which, together with a physical fitness test and the student's medical examination, determines the future activities of the student. The better students will be permitted to elect controlled sports throughout the remainder of their physical education requirements. The normal group will remain in the fundamental activity program until such time as they qualify to enter the elective sports activity program. A restrictive group composed of those students who have physical defects of a permanent nature will be given selected activities. In general, the physical training activities fall into one of three groups: (a) Those developing condition and physical skills. (b) Those occupying recreative or leisure time, (c) Those of a corrective nature.

Intercollegiate Athletics. North Carolina State College is a member of the Southern Conference, and subscribes to its rules of eligibility for all intercollegiate contests. The program consists of the organization and training of representative varisity and freshman teams in the following sports: football, baseball, track, cross-country, wrestling, boxing, swimming, tennis, golf, and rifle competition.

Intramural Athletics—Activities are fostered and promoted in many lines of athletic sports for the student body. Meets, fournaments, and leagues are assonably organized in twelve separate sports. Participation in these activities is purely voluntary; it does not receive College credit. Sports used in this program are correlated with these used in the required class work in Physical Education. Instruction in the sports is given in the class work, and opportunity for competition is provided in the intramural program. Cups, shields, and trophies are awarded winners in these competitions.

# MUSIC

#### Christian D. Kutschinski, Director

Students with previous musical experience are encouraged to continue their musical activities in campus musical organizations for which they can qualify. Qualified musicians may enroll in the R.O.T.C. Band for their required military drill.

The 80-piece R. O. T. C. Band and 50-piece Drum-and-Bugle Corps furnish martial music for all military parades by the R. O. T. C. Regiment. Their R. O. T. C. drill periods are devoted to both military and musical instruction. The 90 piece Red-Coat Band plays and marches at football games, and at other campus and civic affairs. Its membership comprises select R. O. T. C. and non-R. O. T. C. bandsmen, who rehearse three hours a week independently of the R. O. T. C. Band.

At the conclusion of the football season the personnel is reduced to a 72piece symphonic or concert band.

The band is also subdivided into smaller units which alternate in furnishing music at pep meetings, basketball games, and on other such occasions.

The Concert Band, composed of 72 of the most proficient musicians on the campus, concentrates on the study and performance of the finest in concert music. Its activities have greatly increased the cultural growth of those participating, and have done much toward increasing appreciation of music on the campus and in the community. in addition to providing wholesome entertainment.

The Drum-and-Bugle Corps, besides functioning as a separate unit, is also combined with the band on certain occasions, giving State College a marching musical unit of 140 men in red-and-white uniforms. The band uniforms were contributed by students and faculty and interested citizens of Ralcych through the efforts of The American Legion and the Junior Chamber of Commerce.

 $Credit_Juniors$  and seniors in the band, who are not enrolled in the R. O. T. C., may obtain three term credits per year for Band when approved by the Director.

The Concert Orchestra is augmented by a number of the best musicians in Raleigh to round out a symphonic instrumentation. Besides preparing concert programs, the orchestra is divided into smaller units to provide music of a lighter nature for numerous College functions.

The Men's Glee Club reheats: three times a week, and alternates with the orchestra and bands in giving concerts throughout the year. It has proved to be a very popular extracurricular activity, and the group is in domand for concerts out of town and at eivie functions, in addition to those on the campus.

A Male Quartet and small Chamber Music ensembles are encouraged.

## COLLEGE PUBLICATIONS

The State College and Record is the official publication of State College and is issued from time to time, giving results of special studies and of research by members of the college faculty. The March issue is the annual Cartaloo with announcements for the following year. Announcements as to College Extension courses also are included in *The Record* series as is found necessary.

Technical and popular bulletins are issued by the Agricultural Experiment Station as research projects are completed or as they have progressed far enough to be of definite value. *Research and Fayming* also is a quarterly publication of the Experiment Station. Both the bulletins of the Station and the quarterly publication will be sent free to citizens of the State on request.

General publications, many of them interpreting the scientific findings of the Experiment Station or reiving results of Extension demonstration, are compiled by members of the Agricultural Extension Staff and are printed as circulars, folders and pamphlets. Usually they are brief, written in simple style and designed for popular use. The Extension Fraum Neure, published monthly, is the official house organ of the Extension Struce. All of these publications also are available free to citizens of the State on request.

The College publishes the results of experimental and research projects by its Engineering Experiment Station and by the Textile and Engineering Schools. Information about thse publications may be obtained from the Director of the Engineering Experiment Station.

## HEALTH OF STUDENTS

The authorities of the College strive to protect the health of students in very way. Unless the college medical examination ialank is completed by the family physician, each student is ziven a thorough physical examination when he enters the College. If remedial defects are discovered, such as defective tonsils or eyes, he is advised to have these defects corrected. If the defect is such that it may be corrected by exercise, the student is placed in a special class under the supervision of the Director in the Physical Education Department of the College.

The infirmary, maintained by the College, has accommodations for 76 patients. There is a staff of eight: the College Physician, a Supervising Nurse, a Night Supervisor. four general duty nurses, and one full-time Laboratory and X ray Technician.

A modernly equipped First-Aid Department. and a Laboratory and X-Ray Department are valuable features of the Infirmary.

The College Physician visits the Infirmary regularly once daily and more often when necessary. The Infirmary is never closed. A graduate nurse is on duty day and night. Students have free access to the Infirmary at all times.

Parents or guardians will be notified immediately by the Dean of Students in case of accident or serious illness of their sons, and no surgical operation will be performed, except in cases of extrcme emergency, without full consent of parents.

The medical fee provides for students' infirmary service, general medical treatment, and the services of nurses. It does not provide for surgical operations, outside hospital care, or the services of dentists or any other specialist.

# THE GENERAL ALUMNI ASSOCIATION

#### H. W. Taylor, Alumni Secretary

Purpose. The purposes of this organization are: to promote the growth, progress, and general welfare of State College; to foster among its former

students a sentiment of regard for one another and continuing attachment to their Alma Mater; and, to interest prospective students in attending State College.

Membership.—Student Associate membership is available to every student for the nominal sum of \$2.00, which covers membership for 12 months from date of payment and also includes subscription to State College News.

Active membership is available to all former students, regardless of length of stay at the college. The annual dues for active members is \$3.00, which covers membership for 12 months from date of payment and also includes subscription to State College News.

Associate membership includes those members of the College Faculty, Staff, Extension Service, Teachers of Agriculture in high schools, Experiment Station workers, and others who are elected to such membership by the Association. The annual dues are §2.00 and include subscription to State College News.

Honorary members include such distinguished persons as are duly elected to honorary membership at the commencement meeting of the association.

Meetings .-- The Association meets annually on Alumni Day in connection with commencement exercises.

Reunions,--Class reunions are held each year in connection with the annual meeting of the Association. They are scheduled so that each class has a reunion the first year, and subsequently, every five years after graduation.

Elections.-Officers of the association are elected by the active members between April 1 and May 15 each year. Ballots are printed in State College News.

State College Clubs-Local clubs are organized in most of the counties in North Carolina and in a number of cities in other states, such as New York, Chicago, Pittsburgh, Washington, Norfolk, Newport News, Charleston, Richmond, and Atlanta. Most of them hold quarterly meetings and student associate members are invited to attend.

State College News.—State College News is published every month in the year by the General Alumni Association and is sent to all dues paying members. The purpose of this magazine is to keep Association members in touch with the college and with each other. It carries news about former and present students and about the college, and is well illustrated with pictures.

The Alumni Office. Records of both graduates and nongraduates are kept by the Alumni Office. The master file includes information on all former students; other files are arranged geographically and by classes. Biographical files are also kept.

Serving as a medium of communication between alumni and the College, the Alumni Offices, located on the second floor of Holladay Hall, are official headquarters for alumni when they visit the campus.

#### LIBRARY

## THE D. H. HILL LIBRARY

- Harlan Craig Brown, Librarian, on military leave of absence. A.B., B.S. in L.S., University of Minnesota; A.M. in L.S., University of Michigan.
- Mrs. Reba Davis Clevenger, Acting Librarian. B.L.S., University of Illinois.
- Mrs. Elizabeth Valentine Crawford, Periodicals Librarian. B.S., N. C. State College; A.B. in L.S., University of North Carolina.

Mrs. Katherine Alston Edsall, Circulation Librarian. A.B., Randolph-Macon Woman's College; A.M., Columbia University; B.S., in L.S., Catholic University of America.

Miss Rachel Penn Lane, Librarian-Abstracter in charge of Textile Department Library of School of Textiles. A.B., University of North Carolina.

Robert Mitchell Lightfoot, Jr. On military leave of absence. B.S., N. C. State College; M.S., University of Virginia; B.S. in L.S., Syracuse University.

Miss Foy Lineberry, Catalog Librarian. A.B., Meredith College; B.S. in L.S., University of North Carolina.

Miss Mary Elizabeth Poole, Reference and Document Librarian. A.B., Duke University; B.S. in L.S., University of North Carolina.

Miss Anne Leach Turner, Order Librarian. A.B., University of North Carolina; B.S. in L.S., Columbia University.

The D. H. Hill Library building was erected in 1926, and named in honor of a former president of North Carolina State College. It houses the main part of the book collection and provides a reading room for study and a recreational reading room where books of general interest are readily available.

This is a reference and circulating library open to all the college personnel. There is no limit to the number of books that may be borrowed at one time. Its resources are available, through interlibrary loan, to individuals and to other educational institutions of the city and state.

The library comprises over 75,000 volumes of books and journals, 9,000 volumes of bound federal, state and foreign documents, and a large number of unbound items. More than 900 periodicals and inewspapers are received currently. The library's holdings are particularly well developed in the special fields of science and technology, which are covered in the curriculum and which are followed in the research programs of the graduate school and the Agricultural Experiment Station and the Engineering Experiment Station. In addition, the library offers recreational and general informational reading.

An Architecture Department Library, located in Daniels Hall, was established in 1941. The nucleus was a gift from the personal library of

#### STATE COLLEGE CATALOG

Professor Shumaker and the collection now consists of more than 2400 volumes of books, journals, bibliographical materials and reference aids.

In 1945, there was established a department library in the School of Textilles. It contains over 1100 bound volumes of books and journals and a large collection of pamphet material. It serves not only the student body but also the research staff, as it is well equipped with abstracting and bibliographical tools.

#### YOUNG MEN'S CHRISTIAN ASSOCIATION

### Board of Directors

M. E. GARDNER, Chairman

W. G. VAN NOTE, Vice-Chairman

E. L. Cloyd David A. Worth L. L. Vaughan John A. Park T. C. Brown J. M. Clarkson F. B. Wheeler A. D. Stuart B. F. Brown Ralph W. Cummings W. N. Hicks Thomas Nelson

#### Employed Staff

EDWARD S. KING, General Secretary MRS. L. W. BISHOP, Office Secretary

### Student Organization

## The Student Cabinet

The cabinet is composed of the four officers of the association, President, Vice-President, Secretary, and Treasurer and the chairmen of all standing committees. The officers are elected annually by ballot. The committee chairmen are appointed by the President. The cabinet is in charge of the program of the association. The President and Treasurer are ex-officio members of the Board of Directors.

The objective of the Young Men's Christian Association is to help contribute whatever is lacking in the total educational situation to make the principles and the spirit of the Christian religion effective in personal life and in all social relations.

The Y. M. C. A. Building is the social and religious center of the campus. On the basement floor are a recreation room, a guest room, and the Student Supply Store. There is a spacious lobby, an auditorium, a reception room, the self-help office, and the service office on the first floor. The second floor provides space for the Faculty Club. a Conference Room. a committee room, the Y. M. C. A. Cabinet Room, and the office of the General Sceretary.

The student-employment service is directed by the Assistant Secretary of the Association.

#### MILITARY TRAINING

Student and faculty organizations of all kinds use the facilities of the building for meetings and social gatherings, entertainments and lectures.

The Y. M. C. A. program, directed by the Student Cabinet, includes, with other features not mentioned, work for new students; organizing a Fresh man Cabinet; planning socials with the students from nearby women's colleges; bringing to the campus eminent men to speak on such topics as men and-women relations, and present-day international, racial, and economic questions; conducting an annual religious-emphasis were kunder the leader ship of Christian ministers or laymen who understand student life; sending delegates to State, regional, and National Christian Student Conferences.

## MILITARY TRAINING

The Military Department: The Reserve Officers Training Corps The Reserve Officers Training Corps, the official designation of the military organization at State College, conducts the work in two courses of two years each.

The Basic Course."-The Basic Course is a required course for all physically fit freshmen and sophomores.

The Advanced Course.—The Advanced Course is elective for juniors and seniors who have successfully completed the Basic Course. Satisfactory completion of the Advanced Course leads to a commission us a Second Lieutenant in the Officers Reserve Corps.

For detailed description of courses, see the courses listed under Military Science and Tactics.

#### Uniforms and Equipment

Army Officers. The Federal Government details officers of the Army as Instructors in the R. O. T. C. The senior instructor is designated by the War Department as Professor of Military Science and Tactics. Regular Army and or Reserve officers conduct classroom instruction and super vise the instruction of the corps on the drill fields.

Uniforms.—Uniforms for Basic Course students, and all instructional equipment are provided by the Federal Government. These are loaned to the Institution, which is accountable to the Federal Government for their proper care and use.

Financial Aid. Members of the Advanced Course are paid commutation of rations by the Federal Government. Each member is issued an officer type uniform.

Military Band. A Military Band is supervised by Military Staff and trained by the Director of Music of the College. Instruments are provided by

All veterans in service as 1 ong as six menths are excused form this  $e \in CC$ . Such men are eligible to complete for the advanced course if they is desire

the Federal Government. Membership is open to all student musicians who can qualify. Time is given for instruction in concert music in addition to military-band music.

Credit. Credit is allowed for work at other institutions having an R. O. T. C. Unit established in accordance with the provisions of the National Defense Act and Army Regulations. Record of a student's prior training in R. O. T. C. is obtained by the Military Department from the institution concerned.

Educational Value. The mission of the R. O. T. C. is to qualify the student as a leader whether in peace or in war, to help prepare him to discharge his duties as a citizen and to awaken him to an appreciation of the obligations of citizenship. Primarily, it is an agency for the production of Reserve Officers for those arms which hare restricted as to their sources of production, and it should produce for those arms the number of Reserve Officers required in the initial periods of general mobilization.

Students who complete the course, according to their own statements, secure personal benefits which are valuable to them in their occupations. They are better citizens because they have had inculcated an understanding of the responsibilities of citizenship. They realize more fully that the benefits their own generation enjoys were secured by sacrifices made by their predeessors. They learn the necessity for discipline, the responsibility of an individual to the group as a whole, and the methods by which discipline is developed and enforced. Finally, they learn the principles of leadership and have an opportunity to exercise this art to a greater extent than that which is available to them in any other phase of their scholastic instruction.

# III. SCHOOLS, DIVISIONS AND DEPARTMENTS

#### THE BASIC DIVISION

## Benjamin Franklin Brown, Dean

Organization-Upon recommendation by President Graham, the Basic Division of the College was created by action of the Board of Trustees at its annual meeting on June 11, 1935. After considerable preliminary preparation, the organization of the Division became effective July 1, 1937, the first students being registered in the Division in September, 1938. For the first year it seemed advisable to include only the incoming freshmen. Beginning with the College year 1939-40, all freshmen and sophomores in the College are registered in the Basic Division.

Within its administration, the Basic Division includes the Departments of Economics, English, Ethics and Religion, History and Political Science, Modern Languages, Physical Education, and Sociology. The Heads of the Departments, or representatives from them, constituting the Administrative Board of the Division, together with the members of the several Departments are as follows:

#### Economics

Professor C. B. Shulenberger, Administrative Board Representative Professors B. F. Brown, R. O. Moen, M. C. Leager: Associate Professors R. W. Green, T. W. Wood: Instructors L. J. Arrington.

†R. L. McMillan

#### English

Professor Lodwick C. Hartley, Head of the Department Professors J. D. Clark, Roger P. Marshall, T. P. Harrison, A. I. Ladu; Associate Professors A. M. Fountain, E. H. Paget; Assistant Professors P. H. Davis, H. G. Kincheloe, \*\*F. H. Lyell, A. B. R. Shelley, T. L. Wilson, R. B. Wynne, W. K. Wynn; Instructors J. C. Drake, \*\*A. N. Kruger, J. P. Nickell, J. A. Shackford.

## Ethics and Religion

Professor W. N. Hicks, Head of the Department

# History and Political Science

Professor James W. Patton, Head of the Department Associate Professors, L. W. Barnhardt, Preston W. Edsall Assistant Professor L. Walter Seegers

## Modern Languages

Professor L. E. Hinkle, Head of the Department Associate Professor S. T. Ballenger; Instructors †I. O. Garodnick, Mrs. Ruth B. Hall

† On leave. • On leave with United States Navy. •• On leave with United States Army.

## STATE COLLEGE CATALOG

#### Physical Education and Athletics

Professor J. F. Miller, Head of the Department Assistant Professors C. G. Doak, T. I. Hines For names of Physical Education staff and athletic coaches see page 37.

## Sociology

# Professor Sanford R. Winston, Head of the Department

## Student Personnel

#### Professor R. N. Anderson, Director

Guidance. The Student Personnel Program is to aid students in orientating themselves to their new College environment. Much of this is accomplished during Freshman Week. The purposes of this orientation week are: to make the new student feel welcome to the institution; to acquaint the student with the objectives. rules and regulations, and the campus and living accommodations of the College; to take the placement tests in Mathematics and in English and the Psychological examinations; to establish definite relations between students and counselors for later guidance; to perform the details of admission.

Each Freshman is assigned to a Counselor who will aid the student in solving his academic, personal, social and vocational problems.

Also, each Freshman is assigned to a Technical Adviser in the curriculum in which he is registered, to assist him in planning for his professional career.

The Department of Psychology operates a Psychological Service Center which provides an individual testing and counseling service for special problems in academic, personal, social and vocational areas to assist the Counselors and the Technical Advisers in the guidance of students. Tests of aptitudes, educational achievement, interests and personality are administered for individual diagnosis.

#### The Faculty of the Division

The faculty is composed of the staff members of the Departments named above and, in addition, the teachers of freshmen and sophomores from the Departments of Botany, Chemistry, Geology, Mathematics, Physics, Psychology, and Zoölogy.

Purposes.—Broadly speaking, the purposes of the Basic Division are (a) to provide the best possible preliminary training during the first two years of the student's college career so that he can during the last two years successfully purue his professional education in agriculture and forestry, engineering, textiles, or vocational education; and (b) to provide effective guidance during the first two years, so that those students with well-chosen and fixed purposes can be well-advised in their educational careers, and also that those students who have made an unsatisfactory choice of curriculum or who have become uncertain of their careers, may receive helpful guidance and advice in finding themselves.

More specifically it is the function of the Basic Division:

First, to provide "two years of basic courses in the humanities, natural and exact sciences, and the social sciences as the foundation of the schools of agriculture and forestry, textiles, and engineering;"<sup>1</sup>

Second, "to provide in the curricula of the upper years of each technological school for a minimum of the more general cultural courses in the humanities, natural sciences, and social sciences."<sup>2</sup>

Promotion.—A student is promoted from the Basic Division upon earning with an average grade of at least C not fewer than 105 credits, including all of the work prescribed in his freshman year.

Those promoted may procure Certificates of Promotion upon application to the Dean of the Basic Division.

Student Loads. It is the policy of the Basic Division and the purpose of its scholarship rules to encourage students to take such a number of credit hours each term as they can carry well, depending upon previous preparation, ability, self-help duties, health, etc. With few exceptions, each student starts the first term of his first year with a normal average load; those who do exceptionally well are encouraged to make as good progress as possible by adding hours up to their capacity, while those whose records indicate lack of ability from any cause are urged to reduce their loads to a point where they can do work of a creditable quality. Judgment as to the load that a student should take in any term is based upon previous demonstration of scholarship.

#### PROGRAMS OF STUDY

Programs of Study.--The Basic Division grants no degrees. It provides two years of fundamental training in preparation for the special training of the last two years in the other divisions of the College:

> The School of Agriculture and Forestry The School of Engineering The Division of Teacher Education The School of Textiles

Its programs of study are as follows:

\* Ibid.

President Graham's Report to the Board of Trustees, June 11, 1935, page 11.

#### STATE COLLEGE CATALOG

## AGRICULTURE AND FORESTRY

# A. General Curriculum in Agriculture

### +Majors in:

Any department except Agricultural Engineering, Chemistry, Experimental Statistics and Forestry.

New York Concerning Co	Terms	and	Credi	ta
Courses	F	w		S
Composition, Eng. 101, 102, 103	3	3		3
Alg., Trig., and Phys. Geol., Math. 111, 112, Geol. 120	4	4		4
U. S. Hist., and Am. Govt., Hist. 121, 122, Pol. Sc. 211	3	3		3
Gen. Bot., or Gen. Zool., Bot. 101, 102 or Zool. 101, 102	0	4		4
Gen, Field Crops or Int. to An. Ind., F.C. 101 or A.I. 101	4	0		0
Int. to An. Ind., or Gen. Field Crops, A.I. 101 or F.C. 101	0	4		0
Gen. Hort, or Gen. Poult., Hort, 101 or Poul, 101	0	0		4
Int. to Ag. Ag. 101	1	0		0
Int. to Ag., Ag. 101 †Mil. Sc. I, Mil. 101, 102, 103	2	2		2
Physical Education and Hyg. P.E. 101, 102, 103	1	1		1
Gen. and Org. Chem., Chem. 201, 202, 203 Gen. Zool., Gen. Bot., Physics, Zool. 101, 102, or Bot. 101, 102	5	5		5*
and Phys. 115	4	- 4		5*
Gen. Poul. or Gen. Hort. Paul. 101 or Hort. 101	4	0		0
Rur. Soc., or Ag. Econ., Rur. Soc. 201, Ag. Econ. 202	3	0		0
Ag. Econ. or Rur. Soc., Ag. Econ. 202, Rur. Soc. 201	0	3		0
Pub. Snk. Eng. 231	õ	õ		3
Pub. Spk., Eng. 231 Farm Equip., or Soils, Ag. Eng. 202 or Soils 202	0 4	or	5	0
Soils or Farm Equip., Soils 202 or Ag. Eng. 202	0	0	4 07	5*
†Mil. Sc. II, Mil. 201, 202, 203		2	50,050	2
Physical Education, P.E. 201, 202, 203	ī	ī		1

10 atterretite in one or two of the following destruments: Bounnaine, Fibles and Berg, Birn, Bittory on Political Steine, Madern Largurage, Pytcholary, and Scollary, et al. States at the end of the fifth term. Students anticipating the desire to take a full year of Organic Chemistry, or a full year of Physics, may omit gitter or both takes full year of Organic Chemistry, or a full year of Physics, may omit gitter or both target the state of the state of

#### B. Specialized Curriculum in Agriculture

#### Majors in:

Agricultural Engineering, Agricultural Chemistry, Experimental Statistics (or any other department in the School of Agriculture).

2	Terms	and	Credits
Courses	F	w	S
Composition, Eng. 101, 102, 103	3	3	3
†Gen. Chem., Chem. 101, 102, 103	4	4	4
†Gen. Chem., Chem. 101, 102, 103 Alg., Trig. Anal., Math. 101, 102, 103 **U. S. Hist., and Am. Govt., Hist. 121, 122, Pol. Sc. 211 or		6	6
Eng. Dr. II and Des. Geom., M. E. 105, 106, 107	3	3	3
Int. to Ag. Ag. 101	1	ō	Ó
*Mil. Sc. II. Mil. 101, 102, 103	2	2	2
*Mil. Sc. II, Mil. 101, 102, 103 Physical Education and Hyg. P.E. 201, 202, 203	1	1	1
Phys. for Eng. Phys. 201, 202, 203 or Chemistry elective	4	4	4
Gen. Zool. 101, 102, and Geol. 102	-4	4	4
Gen. Zool. 101, 102, and Geol. 102 Pub. Spk., Eng. 231, and Elective English	3	3	3
t t Electives	7	7	7
*Mil. Sc. II. Mil. 201, 202, 203	2	2	2
Physical Education, P.E. 201, 202, 203	1	ĩ	ī

• On six credits in one or two of the following densitrenate; Economics, Ethios and Reiton, Ristory and Poiltial Science, Modern Languege, Pyrcholary, and Sciology. \* These three terms of History must be taken itser if comited at this time. Chem. 501, 202, 202, not nitropic taking more than one yace: Chem.Stry will take Chem. 501, 202, 202, not not relevant gargiculture must be taken among elective of the transmission of the comparison o

# THE BASIC DIVISION

### Major in Dairy Manufacturing

Courses	Terms F	and Cred W	its S
Comparison, Exp. 101, 102, 103 Alar, Trigs, and Phys. Geol. Math. 111, 112, Geol. 120 U. S. Hat, and Am. Govt. Hint, 121, 122, 701, Sc. 110 Geol. 104, 104, 104, 104, 104, 104, 104, 104,	0 4 0 1	3 4 3 4 0 4 0 2 1	3434004021
Pub. Spic. and elective English. 231 . 262 . 263 Gen. and Grz. Committyr. Chem. 201, 262 . 43 . 454 Gen. Bd. Jr. 201, 262 . 43 . 454 . 154 . 154 . 154 . 155 . 1	53 44	3 5 3 0 0 3 2 1	355 40021

• Or six credits in one or two of the following departments: Economics, Ethics and Religion, History and Political Science, Modern Languages, Psychology, and Sociology.

### Major in Forestry

Courses	Terms F	and W	Credita S
Composition, Eng. 101, 102, 103 Alg. Trig. Meth. of Fin. Math. 111, 112, 113 Gen. and Syst. Botany, Bot. 101, 102 203 Drawing, C.S. 101, 102, 103 El. Porestry, Gen. Zool., For. 101, Zool. 101, 102 Int. to Payoh, Am. Gott, Psych. 200, Pol. Sc. 211	3	3	3
Alg., Trig., Math. of Fin., Math. 111, 112, 113	4	4	4
Gen. and Syst. Botany, Bot. 101, 102 203	1	1	1
El. Forestry, Gen. Zool., For. 101, Zool, 101, 102	3	- 4	4
El. Forestry, Gen. Zool., For. 101, Zool. 101, 102 Int. to Psych., Am. Govt., Psych. 200, Pol. Sc. 211 	3	0	3
*Mil. Sc. I, Mil. 101, 102, 103 Physical Education and Hyg., P.E. 101, 102, 103	2	2	2
The second	1	- 11	
Physics, Gen. Econ. Phys. 115, Econ. 201, 202 Dendrology, Bot. 211, 213 Gen. and Org. Chem., Chem. 201, 202, 203	5	3	3
Dendrology, Bot. 211, 213	3	0	3
Gen. and Org. Chem., Chem. 201, 202, 203 Wood Tech., Phy. Geol., English, For, 201, Geol. 120, Elec. Eng.	0	2	+9
Wood Teen, Fny, Geol, English, For. 201, Geol. 120, Elec. Eng. Theo. Surv., C.E. 221, 222	0	3	13
Field Surv., Top. Dr., C.E. 225, 224	0	1	1
Field Surv., Top. Dr., C.E. 225, 224 *Mil. Sc. II, Mil. 201, 202, 203 Physical Education, P.E. 201, 202, 203	2	2	2
Physical Education, P.E. 201, 202, 203 Surv. and Maping, Dendrol., Mensur., Silviculture, Forest Prot.,	1	- 1	
Imp., and Inf., C.E. s300, For. 214, 274, 204, 244	Summe	r	

Op siz credits in one or two of the following departments. Homomies, Ethies and Relizion, History and Political Science, Modern Languages, Psychology, and Sciology, 15 Rudents who have been certified by the department of English as proficient in English may sublitude a modern language.

# STATE COLLEGE CATALOG

### Major in Landscape Architecture

	Terr	ns and Cr	edits
Courses	F	W	S
Composition, Eng. 101, 102, 103 .	3	3	3
Algebra, Trigonometry, Analytics, Math. 101, 102, 103	6	G.	6
General Botany, Systematic Botany, Bot. 101, 102, 203	4	4	3
Engineering Drawing II, Descriptive Geometry, M. E. 105, 106, 107	- S	6	
Arboriculture, L. A. 101, 102, 103	1	1	- i
Drawing, C. E. 101, 102, 103	- i	- 1	- 1
Military Science I, Mil. 101, 102, 104 or Human Rel., Soc. 101, 2, 3			÷
Physical Education and Hygiene, P. E. 101, 102, 103	1	1	ĩ
Business English, Public Speaking, Eng. 211, 231	3	0	
Physical Geology, Plant Physiology, Geol. 120, Bot. 221	6		ž.
Introduction to Psychology, Introduction to Economics, Psych. 200,			
Econ. 205	3	3	0
Introduction to Architecture, Elements of Architecture, Arch. 201,			
202, 203	3	3	3
Pencil Sketching, Arch. 100	3	0	ú
Theory of Landscape Design, L. A. 212, 213	0	3	3
Theoretical Surveying, C. E. 221, 222	3	3	0
Field Surveying, C. E. 225, 227	1	0	1
Plant Materials; Woody Plants, L. A. 201, 202, 203	2	2	2
Military Science II Mil. 201, 202, 203, or World Hist., Hist, 104	2	2	2
Physical Education, P. E. 201, 202, 203	1	1	1
Surveying, C. E. s310, 3 credits	Sumn	ner	

# Major in Wildlife Conservation and Management

Composition, Eq. 101, 102, 103 General Incrastic Chemistry, Chem. 101, 122, 103 General Incrastic Chemistry, Math. 101, 122, and Pol. Sc. 211 (1. S. Hinz, and Am. Gury, Math. 101, 122, and Pol. Sc. 211 General and Bernomic Zoology, Phys. Geology, Co. 101, 102, Geol. 120 Elementary Wildle Management, Zool, 117 Physical Education and Myrgiene, P. E. 101, 102, 105	3 4 0 1 4 1 2 1	344 40 21	84434021
Public Speaking, Eng. 231 Ornithology, Zool. 251, 252, 253 General Botany, Systematic Botany, Bot. 101, 102, 203 General Field Crops, Introduction to Organic Chemistry,	324	0 2 4	0 2 2
F. C. 201, Chem. 203	0	4	5
Gen. Econ., 201, 202	÷.		0
Physics for Agricultural Students, Phys. 115	0	0	Б
Theoretical Surveying, C. E. 221, 222	3	3	0
Field Surveying, C. E. 225	1	0	0
Comparative Anatomy, Zool. 223	0	0	5
Military Science, Mil. 201, 202, 203	2	2	2
Physical Education, P. E. 201, 202, 203	1	1	1

\* Or six credits in one or two of the following departments: Economics, Ethics and Religion, History and Political Science, Modern Languages, Psychology, Sociology.

## ENGINEERING

# Major in Aeronautical Engineering

	Terms	and Credi	18
Courses	F	w	s
Composition, Eng. 101, 102, 103 General Inorganic Chemistry, Chem. 101, 102, 103 Algebra, Trigonometry, Analyties, Math. 101, 102, 103 Eugineering Drawing Jill Description of Some Physical Education and Hygienes P. E. 101, 102, 103 Surveying, C. E. 2000, 3 credita	3 4 6 3 2 1 Summer	346321	3463011
(Burness English, Public Speaking, Eng. 211, 231, and elective English Okalulas I, H. H. Math. 201, 202, 203 Physics for Engineers, Phys. 801, 202, 203 Shopwork, M. E. 124, 125, 125 NegWineering Mechanics, E. M. 311, 312 Physical Education, P. E. 301, 202, 203	344911 21	1.44031031-	0.4-0.010.01-1

### Major in Architectural Engineering

Composition. Eng. 101, 102, 103 General Inorganic Chemistry, Chem. 101, 102, 103	3.4	4	34
Algebra, Trigonometry, Analytics, Math. 101, 102, 103	6	6	6
Engineering Drawing II, Descriptive Geometry, M. E. 105, 106, 107	3	3	3
Engineering Drawing II, Descriptive Geometry, M. L. 100, 100, 101			2
"Military Science I, Mil. 101, 102, 103	100	19 C	- 2
Physical Education and Hygiene, P. E. 161, 102, 103	- U. La construction	1	- 1
Surveying, C. E. s200, 3 credits	Summer		
Business English, Public Speaking, Eng. 211, 271, and electric English		::	3
Calculus I. II, III, Math. 201, 202, 303	4	1	- 4
Carculus I, II, III, Math. Bot, Bot, Bob	- CP (1)	- Ar	- 12
Physics for Engineers, Phys. 201, 202, 203	120	- The second sec	- 61
Penail Sketching, Arch. 100	- A		
Elements of Architecture I. II. III. Arch. 201, 202, 203	- B	3	- 3
Shades and Shadows, Arch. 205	2	0	0
	- F	0	0
Perspective Drawing, Arch. 206	2	ě.	- 2
Engineering Mechanics, E. M. 311, 312	10	- 3	- 0
Military Science II, Mil. 201, 202, 203	3	5	2
Physical Education. P. E. 201, 202, 203	1	1	1

• Or six credits in one or two of the following departments: Economics, Ethics and Religion, History and Political Science, Modern Languages, Psychology, Sociology.

. Students who have been certified by the Department of English as monoficient in English may substitute Modern Language for the courses listed.

# STATE COLLEGE CATALOG

# Major in Architecture

	Tern	and Cre	edita
Courses	F	w	S
Composition. Eng. 101, 102, 103 Algebra. Trigonometry, Analytics, Math. 101, 102, 103 French or Modern Language, M. L. 101, 102, 201 or equivalent	3	3	8
Algebra, Trigonometry, Analytics, Math. 101, 102, 103	6	5	6
French or Modern Language, M. L. 101, 102, 201 or equivalent	3	3	3
		1	1
World History, Hist. 111, 112, 113	2	2	2
Architectural or Mechanical Drawing, Arch. 107 or M. E. 105, 106	3	3	8
World History, Hist. 111, 112, 113 Architectural of Mechanical Drawing, Arch. 107 or M. E. 105, 106 Descriptive Geometry, M. E. 107 *Military Science I, Mil. 101, 102, 103 Physical Education and Hystigne E. 101, 102, 103	0	0	3
<ul> <li>Military Science I, Mil. 101, 102, 103</li> </ul>	2	2	2
Physical Education and Hygiene, P. E. 101, 102, 103	a. –	1	1
Surveying, C. E. s200, 3 credits	Summ	er	
Calculus I, II, III. Math. 201, 202, 303 Background for Modern Thought or Elective	4	1	
Background for Modern Thought or Elective	3	3	3
Physics for Engineers, Phys. 201, 202	- a	4	0
History of Sculpture, Arch, 325	0	0	2
Working Drawings, Arch. 305	õ	ō	2
Shades and Shadows, Arch. 205	2	0	0
Perspective Drawing, Arch. 206	1	0	0
Physics for Engineers, Phys. 201 525 History of Sculpture, Arch. 325 Bades and Stadows, Arch. 305 Engineering Machanos, Arch. 205 Engineering Mechanics, E. M. 301, 302 Engineering Mechanics, E. M. 301, 302	0	3	8
Elements of Architecture, Arch. 201, 202, 203	3	3	3
	2	2	2
Physical Education, P. E. 201, 202, 203	1	1	1

# Major in Ceramic Engineering

Composition, Eng. 101, 102, 103	8	2	8
General Inorganic Chemistry, Chem. 101, 102, 103		- T	- ū
Algebra, Trigonometry, Analytics, Math. 101, 102, 103	2	- 24	- 2
Algeora, Trigonometry, Analytics, math. 101, 102, 103	0	0	0
Engineering Drawing II. Descriptive Geometry, M. E. 105, 106, 107	3	3	3
*Military Science I, Mil. 101, 102, 103	2	2	- 2
Physical Education and Hygiene, P. E. 101, 102, 103	1	1	1
Surveying, C. E. s200, 3 credits	Summer		
<sup>†</sup> Business English, Public Speaking, Eng. 211, 231, and elective English Qualitative and Quantitative Analysis, Mineralogy, Chem. 211, 212,	х	3	я
Geol. 230	4	4	8
Calculus I, II, III, Math. 201, 202, 303		- R	- X
			- 2
Physics for Engineers, Phys. 201, 202, 203	4	- 4	- 4
Engineering Geology, Ceramic Materials, Ceramic and Mining Processes,			
Geol. 220, Cer. E. 202, 203	3	8	3
Geol. 220, Cer. E. 202, 203 *Military Science II, Mil. 201, 202, 203	9	•	
Physical Education, P. E. 201, 202, 203		- T-	
Physical Education, P. E. 201, 202, 203		A	

• Or six credits in one or two of the following departments: Economics. Ethics and Religion, History and Political Science, Modern Languages, Psychology, Sociology.

<sup>†</sup> Students who have been certified by the Department of English as proficient in English may substitute Modern Language for the courses listed.

# Major in Chemical Engineering

	Terr	ms and Cre	dits
Courses	F	w	S
Compasition. Eng. 101, 102, 108 General Inorganic Chemistry, Chem. 101, 102, 103 Algebra, Trigonometry, Analytics, Math. 101, 102, 103 Engineering Drawing II, Descriptive Geometry, M. E. 105, 106, 107 "Millary Science I, Mill. 101, 102, 103 Physical Education and Hygiene, P. E. 101, 102, 103	4	346321	346 321
[Buijness English, Public Seeking, Eng. 211, 321, and elective English Gamilative and Convictive Analysis, Son. 211, 127, 213 Service and Convictive Analysis, Son. 211, 127, 213 Introduction to Chemical Englishering, Chem. E. 201, 202, 203 Introduction to Chemical Englishering, Chem. E. 201, 202, 203 Millary Science II, Mil. 201, 202, 203 Millary Science II, Mil. 201, 202, 203	4441	3444411211	84442021

# Major in Civil Engineering

Composition, Eng. 101, 102, 103 General Increants Chemistry, Chem. 101, 102, 103 Algebra, Trigonometry, Analytic, Math. 101, 102, 103 Engineering Drawing II. Descriptive Generaty, M. E. 105, 106, 107 "Military Science I, Mil. 101, 102, 103 Physical Education and Hygiene, P. E. 101, 102, 103	346321	3 4 5 3 2 1	346321
**Dasimas English, Public Spasking, Eng. 211, 231, and elective English Octobuto II, III Math. 201, 202, 303 Physics for Engineers, Phys. 201, 204, 201 Theoretical Surveying, C. E. 232, 233 Field Surveying, C. E. 232, 237 Field Surveying, C. E. 232, 237 Mapping, C. E. 232, 237 Mapping, C. E. 232, 237 Mapping, C. E. 231, Mall. 201, 202, 303 Physical Education, P. E. 201, 309, 305 Surveying, C. E. 231, 347 editor.	44331	344330121	344331021

\* Or six credits in one or two of the following departments: Economics, Ethics and Religion, History and Political Science, Modern Languages, Psychology, Sociology.

; Students who have been certified by the Department of English as | roficient in English may substitute for the courses listed Elementary German, M. L. 103, 104, 203 or equivalent.

\*\* Students who have been certified by the Department of English as proficient in English may substitute for the courses listed Elementary French, M. L. 101, 102, 201 or equivalent.

## STATE COLLEGE CATALOG

### Major in Electrical Engineering

		and Cro	edits
Courses	F	w	S
Composition, Eng. 101, 102, 103	3	3	3
General Inorganic Chemistry, Chem. 101, 102, 103	×.	4	
Algebra, Trigonometry, Analytics, Math. 101, 102, 103	è.	2	è.
Algebra, Trigonometry, Analytica, Math. 101, 102, 103			
Engineering Drawing II, Descriptive Geometry, M. E. 105, 106, 107		3	- 3
*Military Science I, Mil. 101, 102, 103	2	2	2
Physical Education and Hygienc, P. E. 101, 102, 103	1	1.1	1
Surveying, C. E. s200, 3 credita	Summ	ier	
Business English, Public Speaking, Eng. 211, 231, and elective English			
Calculus I, II, III, Math. 201, 202, 303			
Calculus I, II, III, Math. 201, 202, 000			
Physics for Engineers, Phys. 201, 202, 203	4		
General Economics, Econ. 201, 202, 203	3	- 3	3
Electrical Engineering Fundamentals, Forge and Welding, E. E. 201,			
202, M. E. 128	2		
202, M. E. 129	- 2	2	32
Military Science II, Mil. 201, 202, 203	24	2	2
Physical Education, P. E. 201, 202, 203	1	1	1

# Major in General Engineering

Composition, Eng. 101, 102, 103	3	3 3
General Inorganic Chemistry, Chem, 101, 102, 103	4	4 4
Algebra, Trigonometry, Analytics, Math. 101, 102, 103	6	6 6
Engineering Drawing II, Descriptive Geometry, M. E. 105, 106, 107	2	
Engineering Drawing II, Descriptive Geometry, M. E. 105, 106, 101	9	a 0
'Military Science I, Mil. 101, 102, 103	2	2 2
Physical Education and Hygienc, P. E. 101, 102, 103	1	1 1
Surveying, C. E. s200, 3 credits	Summer	
7 Business English, Public Speaking, Eng. 211, 231, and elective English	3	a a
Calculus I. II. III. Math. 201, 202, 303	2 A	4 4
Physics for Engineers, Phys. 201, 202, 203	2	2 2
	2	2 2
tElectives	6	6 6
'Military Science II, Mil. 201, 202, 203	2	2 2
Physical Education, P. E. 201, 202, 203	1	1 1

• Or six credits in one or two of the following departments: Economies, Ethics and Religion, History and Political Science, Modern Languages, Psychology, Sociology.

i Students who have been certified by the Department of English as proficient in English may substitute Modern Language for the courses listed.

‡ Free electives, except that not more than 39 term credits may be chosen from the technical or special technical courses in the School of Engineering.

### Major in Geological Engineering

		ms and Cr	edits
Courses	F	w	S
Composition, Eng. 101, 102, 103	3		3
General Inorganic Chemistry, Chem. 101, 102, 103	1	4	
Algebra, Trigonometry, Analytics, Math. 101, 102, 103	16	6	6
Engineering Drawing II, Descriptive Geometry, M. E. 105, 106, 107	*	1.0	
*Military Science J. Mil. 101, 102, 103		- *	
Physical Education and Hygiene, P. E. 101, 102, 105	1	- T	ĩ.
Business English. Public Speaking, Eng. 211, 231, and elective English. Qualitative and Quantitative Analysis, Geomorphology, Chem. 211, 212.	÷.	4	
Geol. 223	10	¥.	3
Calculus I. II. III. Math. 201, 202, 303	4	- 14	4
Physics for Engineers, Phys. 201, 202, 203	4	4	
Engineering and Historical Geology, Mineralogy, Geol. 220, 222, 230	3	3	3
Military Science II, Mil. 201, 202, 203		.2	
Physical Education, P. E. 201, 202, 205	1	1	- ¥

# Major in Industrial Engineering

Composition, Eng. 101, 102, 103	2	12	3
General Inorganic Chemistry, Chem. 101, 102, 103	4		
Algebra, Trigonometry, Analytics, Math. 101, 102, 103	6	6	6
Engineering Drawing II, Descriptive Geometry, M. E. 105, 106, 107	5	3	3
<ul> <li>Military Science I, Mil. 101, 102, 103</li> </ul>	2	2	
Physical Education and Hygiene, P. E. 101, 102, 1	1	1	1
Business English, Public Speaking, Eng. 211, 231, and elective English	100		
Calculus I, II, III, Math. 201, 202, 303	- Gall	4	- 2
Physics for Engineers, Phys. 201, 202, 203	4	- A	- 2
General Economics, Econ, 201, 202, 203	3	3	3
Shopwork, M. E. 124, 125, 126	2	- 12	2
Industrial Organization, I. E. 101, 102, 103		3	- 9
Military Science II, Mil. 201, 202, 203	-9		- ÷
Physical Education, P. E. 201, 202, 203	1	ī	

\* Or six credits in one or two of the following departments becomics, Ethics and Religion, History and Political Science, Modern Languages, Psychology, Sociology.

a Students who have been certified by the Department of English as proficient in English may substitute Modern Language for the courses listed.

.

#### STATE COLLEGE CATALOG

# Major in Industrial Engineering

### (Furniture Option)

Courses	Terms F	and W	Credits S
Composition, Eng. 101, 102, 103 General Inorganic Chemistry, Chem. 101, 102, 103	3	3	3
Algebra Trigonometry Analytics Math 101 102 103	6	6	6
Algebra, Trigonometry, Analytics, Math. 101, 102, 103 Engineering Drawing II, Descriptive Geometry, M. E. 105, 106, 107	3	3	3
*Military Science I, Mil. 101, 102, 103 Physical Education and Hygiene, P. E. 101, 102, 103	2	2	2
Physical Education and Hygiene, P. E. 101, 102, 103	1	1	1
TBusiness English, Public Speaking, Eng. 211, 231, and elective English	3	3	3
Calculus I. II. III. Math. 201, 202, 303	4	- 4	4
Physics for Engineers, Phys. 201, 202, 203	4	4	4
General Economics, Econ. 201, 202, 203	3	3	3
Shopwork, M. E. 124, 125 .126 Industrial Organization, I. E. 101, 102, 103	2	2	2
Industrial Organization, J. E. 101, 102, 103	3	3	3
*Military Science II, Mil. 201, 202, 203	2	2	2
Physical Education, P. E. 201, 202, 203	1	1	1

• Or six credits in one or two of the following departments: Economics, Ethica and Religion, History and Political Science, Modern Languages, Psychology, and Sociology.

† Students who have been certified by the Department of English as proficient in English may substitute Modern Language for the courses listed.

#### Major in Mechanical Engineering

		ms and Cr	edita
Courses	F	w	8
Composition. Eng. 101, 102, 103 General Inorganic Chemistry. Chem. 101, 102, 103 Algebra. Trigonometry, Analytics, Math. 101, 102, 103 Engineering Drawing L1 Descriptions Generatives M. E. 105, 106, 107 Physical Education and Hygiene. P. E. 101, 102, 103 Surveying, C. e. 2000, S creatia	463	3 4 6 3 2 1 ner	346321
(Business English, Public Speaking, Eng. 211, 231, and elective English Gatelust I, II, Mathello, 202, 208 (1997) (2000) (2000) (2000) (2000) (2000) (2000) Methanical Drawing, Mc, E. 211, 212, 223 Showwork, Mc, E. 184, 135, 135 (2000) (2000) (2000) (2000) (2000) (2000) (2000) (2000) Methanical Drawing, Mc, E. 211, 212, 223 (2000) (20	44220	3 4 2 2 3 2 1	344223911

 Or six credits in one or two of the following departments: Economics, Ethics and Religion, History and Political Science, Modern Languages, Psychology, Sociology.

† Students who have been certified by the Department of English as proficient in English may substitute Modern Language for the courses listed.

# TEACHER EDUCATION

## For Teachers of Vocational Agriculture

Courses	Terms F	and W	Credit	s
Composition, Eng. 101, 102, 103	3	3		
Alg., Trig., and Phys. Geol., Math. 111, 112, Geol. 120	4	- 4		- 4
U. S. Hist., and Am. Govt., Hist. 121, 122, Pol. Sc. 211	5	3		3
Gen. Bot., or Gen. Zool., Bot. 101, 102, or Zool. 101, 102	0	4		- A -
Gen. Field Crops or Int. to An. Ind., F. C. 101 or A. I. 101	4	.0		0
Int. to An. Ind., or Gen. Field Crops. A. I. 101 or F. C. 101	0	4		ñ.
Gen. Hort. or Gen. Poult., Hort. 101 or Poul. 101	0	0		4
Int. to Ag., Ag. 101	1	0		0
*Mil. Sc. I. Mil. 101, 102, 103	2	2		2
Physical Education and Hyg., P. E. 101, 102, 103	ĩ	ĩ		ĩ
English, elective	0	- 31		3
Gen. and Org. Chem., Chem. 201, 202, 203	5	5		5
Gen. Zool., or Gen. Bot., Zool. 101, 102 or Gen. Bot. 101, 102	1	1		17
Gen. Poul. or Gen. Hort. and Physics, Poul. 101 or Hort. 101, Phys. 115 Rur, Soc., or Ag. Econ, or Eng. elec., Rur, Soc. 201, Ag. Ec.	1	- Ř		3
	5.	- 0		÷.
Ag. Econ. or Rur. Soc., Ag. Econ. 202 or Rur. Soc. 201	0	3		0
Ag. Eng. or Soils, Ag. Eng. 202 or Soils 202	0	1 or	5	ō.
Soils or Ag. Eng., Soils 202 or Ag. Eng. 202	1	0	d or	- 5
*Mil. Sc. II, Mil. 201, 202, 203	2		1.00	2
Physical Education, P. E. 201, 202, 203	1	1		Ĩ.

# For Teachers of Industrial Arts and Teachers of Industrial Education

		ms and Cre	dits
Courses	F	w	s
Composition. Eng. 101, 102, 103 General Inorganic Chemistry, Chem. 102, 103 Algebra, Trigonometry, Mathematics of Finance, Math. 111, 112, 113 Industrial Arz Drawierz, Ed. 1, A. 103a, b., c. Millary Science I, Mil, 101, 102, 105 Physical Education and Hygiene, F. E. 141, 102, 105	83	34433321	0 <del>4</del> 40001-
Business English, Public Speaking, English Elective, Eng. 211, 231 Physics for Textile Statests, Phys. 111, 112, 117 Economics History, Hist., 101, 105 Industrial Area Designs, Ed. (I, A), 265 Laterstatory, Troblemin, Br. 101, 102, 201, 102, 102, 102, 102, 102,	1 3 3	3 - 3 3 0 3 1 1	3 4 3 0 3 8 7 1

• Or six credits in one or two of the following departments: Economics, Ethics and Religion, History and Political Science, Modern Languages, Psychology, and Sociology.

## TEXTILES

Majors in Textile Manufacturing, Textile Chemistry and Dyeing, Yarn Manufacturing, Tetxile Management, Weaving and Designing, Knitting.

	Terms and Credit		dits
Courses	F	w	S
Composition, Eng. 101, 102, 103	3	3	3
Algebra, Trigonometry, Mathematics of Finance, Math. 111, 112, 113	4	4	4
Physics for Textile Students, Phys. 111, 112, 113	4	4	4
Departing for Tombile Students Physics of July 12, 112, 113 Shopwork, M. E. 121, 122, 123 Engineering Drawing J. M. E. 101, 102, 103 Textile Principles Laboratory, Text. 101, 102, 103 Yarn Calculations. Cloth Calculations, Text. 101, 102, 102 or Military Science I, World Huist or Hum, Rel., Mil, 101, 102, 102 or	1	1	1
Engineering Drawing I. M. E. 101, 102, 103	2	2	2
Textile Principles Laboratory, Tex, 101, 102, 103	1	1	1
Yarn Calculations, Cloth Calculations, Tex, 105, 131	Ĩ	0	2
Military Science 1. World Hist, or Hum, Rel. Mil. 101, 102, 105 or			
	-	2	2
Physical Education and Hygiene, P. E. 101, 102, 103	1	1	- î -
A STATE OF			- C
General Inorganic ('hemistry Chem 101 102 103	4		
General Inorganic Chemistry, Chem. 101, 102, 103 Economic History, Hist. 101, 102, 103	3	3	
English or Mod. Language	ő	3	ä
	3	0	3
Knitting Laboratory Tey 207 208 209	- T	1	- î
Knitting I, Tex. 211		0	- ô
Power Westing Tey 234	ñ	2	ň
Knitting Laboratory, Tex. 207, 208, 209 Knitting I, Tex. 211 Power Weaving, Tex. 234 Power Weaving, Laboratory, Tex. 231, 232	- ĩ	1	õ
Fower Weaving Laboratory, 1ex. 235, 232 Fabrie, Strue., and Anal., Tex. 235, 236 Yarn Manufacturing, Tex. 206 Yarn Manufacturing Laboratory, Tex. 201, 202	÷.	â	ő
Vas Monufacturing Tax 205	õ	0	ě
Varn Manufacturing, Lakestory Ter 201 202	1	1	ő
Millions Giana II Mil 901 909 909	â	-	ä
Military Science II, Mil. 201, 202, 203 Physical Education, P. E. 201, 202, 203		ĩ	
Thysical Education, 1. F. 201, 202, 203			

• Or six credits in one or two of the following departments: Economics, Ethics and Religion, History and Political Science, Modern Languages, Psychology, Sociology.

## THE SCHOOL OF AGRICULTURE AND FORESTRY

Leonard David Baver, Dean and Director of Instruction and Director of the Agricultural Experiment Station

## Carey H. Bostian, Assistant Director of Instruction

Organization. The School of Agriculture and Forestry is organized in three divisions-Resident Instruction, Agricultural Extension and the Agricultural Experiment Station-to carry on the functions of instruction, extension and research. These divisions are organized as departments as follows: (a) Agricultural Economics, including Farm Marketing and Farm Management: (b) Agricultural Engineering, including Farm Structures and Farm Machinery: (c) Agronomy, including Field Crops, Soils, and Plant Breeding; (d) Animal Industry, including Animal Husbandry, Animal Nu trition, Dairy Production, and Dairy Manufacturing; (e) Botany, including Bacteriology, Plant Physiology, and Plant Diseases; (f) Chemistry; (g) Experimental-Statistics: (h) Forestry, including Silviculture, Utilization, and Management: (i) Horticulture, including Pomology, Small-Fruit Culture, Floriculture, Truck Farming, and Landscape Architecture; (i) Poultry Science, including Poultry Diseases, Poultry Breeding, Poultry Feeding, and Poultry Management; (k) Rural Sociology; (l) Zoology, including Genetics, Entomology, Animal Physiology, and Wild Life Management.

Purpose.—The purpose of the School of Agriculture and Forestry is threefold: (1) To obtain through scientific research, experimentation, and demonstration accurate and reliable information relating to soils, plants, and animals, and to obtain from every available source reliable statistical, technical, and scientific data relating to every phase of agriculture that might be of advantage to the State; (2) to provide instruction in the College for young men who desire to enter the field of general agriculture, or wish to become professionals in agricultural education or specialists in any field of science related to agriculture; (3) to disseminate reliable information through publications and through extension agents, and by a wise use of this information to give instruction to agricultural workers in the scientific, experimental, and practical progress in the various lines of agriculture.

All effective instruction in agriculture is based on research and investigation; and the curricula are so organized that not only the subject matter for classroom instruction and extension work may be drawn from research, experimentation, and demonstration, but also that the students themselves shall have the opportunity to work under the direction of research especialists.

Admission; Advanced Standing. Regulations for admission and for ad vanced standing are stated under Information for Applicants. (See pages 22 26.)

Curricula.—The curricula of the School of Agriculture and Forestry are designed to meet both the practical and technical needs of the student. Moreover, the curricula provide for a broadened education by requiring certain courses and making it possible to elect others in language, literature, social sciences and the humanities.

The following curricula are offered:

# A. GENERAL CURRICULUM IN AGRICULTURE

This curriculum is designed to give the student a broad training in the field of agriculture and at the same time permit him to major in the field of a particular interest. The student choosing this curriculum may elect to major in any Department of the School of Agriculture and Forestry, except Agricultural Chemistry, Agricultural Engineering, Experimental Statistics, and Forestry.

Students taking this curriculum can find professional opportunities in agricultural extension work, on the staffs of State and Federal agricultural agencies, and as farmers, farm managers, inspectors of agricultural commodities, and specialists in agricultural industries and services.

The detailed requirements for the first two years and a summary of the requirements for the upper two years are shown below. A minimum of 233 term credits and 233 honor points is required for graduation. The term credits should be distributed as follows: A maximum of 50 hours, exclusive of the first two years, in the major department; a minimum of 18 in Language, 48 in natural and physical sciences, 24 in Social Science, 12 in Military Science or alternative and 6 in Physical Education.

## A. GENERAL CURRICULUM IN AGRICULTURE

### (For majors† in any department of the School of Agriculture except Agricultural Engineering, Chemistry, Experimental Statistics, and Forestry.)

## Freshman Year

	Terms	and	Credits
COURSES	F	W	S
Composition, Eng. 101, 102, 103	3	3	3
Algebra and Trigonometry, Math. 111, 112	4	4	0
History of the U. S. and Am. Govt. and Pol. Science, Hist. 121, 122, 211	3	3	3
Physical Geology, Geol. 120	0	0	- 4
General Botany, Bot. 101, 102 or Gen. and Economic Zoology, 101, 102	0	4	4
General Field Crops, F. C. 101 or Intro. to Animal Indus., A. I. 101	1	0	0
Intro. to Animal Industry, 101 or Gen. Field Crops, F. C. 101	0	4	0
Gen. Horticulture, Hort. 101 or Gen. Poultry, Poul. 101	0	0	
Intro. to Agriculture, Agric, 101	1	0	0
*Military Science I, Mil. 101, 102, 103	2	2	2
Fundamental Activities and Hygiene, P. E. 101, 102, 103	1	1	1
	18	21	21

#### Sophomore Year

COURSES	Terms F	and W	Credits S
General Inorganic and Organic Chemistry. Chem. 201, 202, 203 General and Economic Zool., Zool. 101, 102 or General Botany.	5	5	†5
Bot. 101, 102	.1	- 4	. 0
Physics for Agric, Students, Physics 115	0	6	+5
General Poultry, Poul. 101 or General Horticulture. Hort. 101		D	0
Public Speaking, English 231	6	0	3
Rural Sociology, Rural Soc. 201 or Agric. Economics, Agr. Econ. 202	3	0	0
Agric, Economics, Agric, Econ. 202 or Rural Sociology, Rural Soc. 201	0	122	õ
Farm Equipment, Agr. Eng. 202 or Soils. Soils 202	0	4 or	5 0
Soils, Soils 202 or Farm Emipment, Agr. Eng. 202	õ	0	14 or 5
*Military Science II, Mil. 201, 202, 203	2	0	9
Sports Activities, P. E. 201, 202, 203	1	ĩ	5
Sports Activities, F. E. 201, 202, 203			
	19	19 20	or 21

• Or six credits in one or two of the following departments: Economics, Ethics and Religion, History and Political Science, Modern Languages, Psychology, and Sociology.

† Majors will be chosen at the end of the fifth term. Students anticipating the desire t take a full year of Organic Chemistry or a full year of Physics may omit either or both of these fix-chour courses and schedule courses from the upper two years. Solie or Agricultural Engineering may be postponed to the upper two years if the major selected makes some other course more sensential at this point.

#### Junior and Senior Years

COURSES		Credit Hour
Elective in Social Science or Humanities General Economics, Econ. 201, 202		3.
Elective English Principles of Forestry, Forestry 111		- 3
Major field . Agricultural Electives		30-50
*Restricted Electives Free Electives		. 18
(A minimum of 233 credits	is required for graduati	on.)

\* Military Science, Social Sciences, Humanities, Natural and Physical Sciences.

## B. SPECIALIZED CURRICULUM IN AGRICULTURE

This curriculum is designed for the students who desire to major in Agricultural Chemistry, Agricultural Engineering or Experimental Statistics, those students who want highly specialized work in any of the other Departments, and those students who are looking forward towards graduate study in preparation for research and teaching positions. A maximum of science and a minimum of general agriculture are provided to achieve this specialization. The student choosing this curriculum may elect to major in any Department of the School of Agriculture are proversty.

The detailed requirements for the first two years and a summary of the requirements for the upper two years are shown below. A minimum of 240 term credits and 240 honor points is required for graduation. The term credits should be distributed as follows: A maximum of 50 hours, exclusive of the first two years, in the major Department; a minimum of 27 in Language (except for Agricultural Engineering where the minimum will be 18), 74 in matural and physical sciences, 27 in Social Sciences, 18 in technical agriculture, 12 in Military Science or alternative, and 6 in Physical Education.

## B. SPECIALIZED CURRICULUM IN AGRICULTURE

#### Majors in Agricultural Engineering, Agricultural Chemistry, Experimental Statistics, or any other department in the School of Agriculture.

### Freshman Year

-	Term	s and Cre	dits
COURSES	F	W	S
Composition, English, 101, 102 103		*	3
General Inorganic Chemistry, Chem, 101, 102, 103	1	14	- 4
<ul> <li>Algebra, Trigonometry, Analytics, Math. 101, 102, 103</li> <li>[History of the U. S. and Am. Govt and Pol. Science, Hist. 121, 122, 211 or Engineering Drawing II, Descriptive Geometry, M. E.</li> </ul>	6	6	6
105, 106, 107	3	3	- 23
Introduction to Agriculture, Agric, 101	1	0	0
Militars Science I, Mil, 101, 102, 103		-9	
Fundamental Activities and Hygiene, P. E. 101, 102, 103	171		3 0 2 1
Fundamental Artivities and Hygiene, T. E. 101, 192, 195		· · ·	
	20	1.9	19
Sophomore Year			
(co-toportoria) - 100.710	Terms and Credits		
	F	w	S
Physics for Engineers, Phys. 201, 202, 203 or Elective Chemistry	140	4	- 4
Gen. Botany, Bot. 101, 102 or Gen. and Econ. Zool., Zool. 101, 102	4		0
Elective English and Public Speaking, English 231	23	÷	28
	. 0	ñ	
Electives (see footnote following Junior and Senior years		- ÷	
'Military Science II, Mil. 201, 202, 203		6	40.9
Particulary Science 11, Mil. 201, 202, 203	÷.	÷.	
Sports Activities, P. E. 201, 202, 203	4	1	1
	21	21	21

s Students who do not anticipate taking more than one year of Chemistry will take Chem. 201, 202, 203.

1 These three terms of History must be taken later if omitted at this time.

" Or six hours in one or two of the following departments: Economics, Ethics and Religion, History and Political Science, Modern Languages, Psychology, and Sociology.

## Junior and Senior Years<sup>+</sup>

			Credit Hours
Major Department Natural Science (other than major) Foreign Language General Economics, Econ. 201, 202 Electives in Social Science Free Electives			6
			116-119

'A minimum of 18 hours of technical agriculture must be taken among electives of second, third, and fourth years. In Agricultural Rogineering free electives may be substituted for the foreign language. A minimum of 240 credits is required for graduation.

64
## C. CURRICULUM IN DAIRY MANUFACTURING (See Pages 72, 73.)

# D. CURRICULUM IN FORESTRY (See Page 77.)

## E. CURRICULUM IN LANDSCAPE ARCHITECTURE (See Pages 80, 81.)

# F. CURRICULUM IN WILDLIFE CONSERVATION AND MANAGEMENT

(See Pages 85, 86.)

Degrees.—The degrees of Bachelor of Science in Agriculture and Bachelor of Science in Forestry are conferred upon the satisfactory completion of one of the curricula in this School.

The degree of Master of Science in Agriculture is offered for the satisfactory completion of one year of graduate study in residence. Candidates for this degree are enrolled as students in the Graduate School.

The professional degree of Master of Agriculture may be conferred upon graduates of State College after five years of service in agriculture, and upon the acceptance of a satisfactory thesis.

Short Courses.—These courses vary in length from a few days to eight weeks. They are designed for young people who desire some training in the principles of agriculture, but who find. It impossible to take the regular college course, and for mature individuals who wish to become familiar with the most recent agricultural practices. It is the aim of these courses to make better farmers to help them produce better fruit, vegetables, livestock, and poultry, and to obtain greater satisfaction and profit from the time, energy, and money expended.

In these courses students will receive instruction from the best professors and will use all the facilities of the School of Agriculture. Most of the courses will be given during the winter months, and a bulletin will be issued each fall announcing the courses which will be offered during the following months. This bulletin and other information about the short courses may be secured by writing to the Director of Short Courses, College Extension Division, State College Station, Raleigh, N. C.

## AGRICULTURAL ECONOMICS

#### Professor G. W. Forster, Head of Department Professors Martin A. Abrahamsen, C. Horace Hamilton, H. Brooks James, Marc C. Leager; Associate Professors Richard L. Anderson, R. E. L. Greene; Research Assistant Professor W. Henry Pierce: Instructor, Margaret K. Floming

The Department of Agricultural Economics is concerned with all of the economic problems of the farmer, such as organization and management of the farm, farm mechanization, marketing and the processing of farm products, farm credit, landlord tenant relations, and public policies affecting arciculture. To perform its various functions the Department is divided into two divisions farm organization and management, and farm marketing and farm finance. Each of these divisions is under the divection of a division chief, or leader, who supervises work in research. teaching, and extension.

Facilities.—The Department is located on the second floor of Patterson Hall. It is well equipped with ealculating machines and other facilities used in preparing material for farmers' use. Charts on every phase of agricultural economics are available for use of students and for other purposes. A large number of maps of actual farms are used as a basis for studying and for illustrating the principles and practices of farm management. The results of research in marketing, agricultural finance, taxation, insurance, and soil conservation practices have made a large volume of statistical information constantly available for undergraduate and graduate students. Maintain base for reference is an up to date file of bulletins and documents covering all phases of agricultural economics.

Specialization.—Students in Agricultural Economics may specialize in Farm Business Administrion, Marketing and Finance, or any other phase of farm economics, depending upon the need and desire of the student. A student may undertake specialization at the end of the sophomore year but his course of study must have the approval of the Head of the Department. Those who intend to pursue work in Agricultural Economics should, during their freshman and sophomore years, give special attention to courses in economics, accounting, statistics, and mathematics. Students may major in either the General Curriculum in Agriculture (see page 64).

Opportunities.—There is a wide range of opportunities for students in Agricultural Economics. Graduates of the Department are engaged in college teaching, research and extension work, commerce, finance, business, and diplomatic service. Specific information as to opportunities and salaries will be supplied on request.

#### AGRICULTURAL ENGINEERING

## Professor David S. Weaver, Head of the Department

### Professor G. Wallace Giles

## Associate Professor Norman C. Teeter

Purpose.—This curriculum has been arranged to give its graduates fundamental training in engineering, basic training in the agricultural sciences, and a specialized study in courses involving the application of engineering knowledge to agricultural problems.

Breadth of Training—Because of the great variety of work required of agricultural engineers, a number of subjects peculiar to other curricule are included, so that the student receives a considerable breadth of training. Engineering principles applied to agriculture have played an important part in the advancement and development of agricultural practices. Agricultural engineering as a profession, although of comparatively recent development, is rapidly becoming recognized as one of the more important of the engineering professions, since it is identified with the most important of industries agriculture. This course is especially suited to the student for a profession, at business, or a career in farming, and enables him to capitalize on his farm experience.

Divisions.—Subdivided on the basis of engineering technique. Agricultural Engineering embraces three general fields: (1) Fower and Machinery, including Rural Electrification; (2) Rural Structures, which includes materials and methods of construction sanitation and building equipment; (3) Land Improvement, which includes Irrigation, Drainage, Soil-Erosion Control, and other forms of mechanical improvement of agricultural lands.

Occupations Open to Graduates—Teaching, experiment station and extension-service positions with colleges and the Government; engineers in land reclamation, drainage, or irrigation enterprises; designing, advertising, sales and production work with manufacturers of farm machinery, equipment, and building mtaerials; rural electrification work; editorial work with publishers; apprisal; and and gricultural-engineering consultant service.

Equipment—The offices, classrooms, and shops used in Agricultural Engineering are in the Agricultural Engineerine Building. The laboratories have the latest labor-asying farm equipment for seedbed preparation, planting, cultivating, harvesting, and crop preparation. These machines are furnished by the leading farm-machinery manufacturers, and are replaced from time to time as improvements are developed. Special effort is made to have on hand all types of equipment for use in the best practices in the production of farm crops.

The Farm Buildings Laboratory is equipped with drawing tables, supply cabinets, and models of various types of farm-buildings construction. Laboratory Equipment for Land Improvement consists of sets of surveying instruments, drafting tables, calculating equipment and field machines for this type of work.

Practice.—Field areas in crops, vineyards, orchards and pastures are available for practice in the use of farm equipment, and in drainage and crosion control.

A Bulletin Library of Agricultural Engineering is maintained for student reference.

### CURRICULUM IN AGRICULTURAL ENGINEERING

The curriculum for Freshman and Sophomore Years in Agricultural Engineering is shown under "Curriculum B" given on page 64 of this catalog.

## Junior and Senior Curricula

Prior to registration for the Junior Year, the student must select one of the following four Options into which the work of the Junior and Senior Years has been divided: Rural Structures, Land Improvements, Power and Machinery, and General.

The Following Courses Are Required Of All Students Majoring in This Department Regardless of the Option:

### Junior Year

COURSES												C	redi
General Economics, Economics 201.													6
Agricultural Economics, Ag. Econ	omie	8	202										3
Terracing and Drainage, Ag. Eng													
Farm Shop, Ag. Engineering 331,	332												6
General Field Crops, Field Crops	101	100						φ.					3
General Horticulture, Horticulture	101												3
Farm Buildings, Ag. Engineering	322												3

#### Senior Year

COURSES															Cre	dit
Rural Electrification, Ag. Engineering Special Problems in Agricultural Engine Senior Seminar, Ag. Engineering 491, 4	92.	4	93												. 1	3
Farm Management I, Ag. Economics 303	3			127		 				÷		11			20.5	3
Technical Writing I, English 321 Rural Sociology, Rural Sociology 201						1	*	2	Č,		 1	1	*	1	•	3 3

A list of the other courses necessary to complete the curriculum so as to fulfill the requirements shown on page 64 may be obtained by writing the Head of the Department of Agricultural Engineering and specifying the Option in which the student is interested. A minimum of 240 credits is required for graduation.

#### AGRONOMY

#### Professor R. W. Cummings, Head of the Department

## Professor Emeritus C. B. Williams

The teaching in this department is divided into two sections: Field Crops Section and Soils Section. Its objective is to provide a well-rounded practical as well as technical training for students in field crops, plant breeding, soils, fortilizers and other closely related subjects.

The combined facilities of the Consolidated University and of the Experiment Station provide excellent opportunities for advanced training leading to M.S. and Ph.D. degrees in Agronomy.

The advanced courses offered fulfill the needs of graduate work in all phases of Agronomy.

#### FIELD CROPS SECTION

#### Professor G. K. Middleton, Head of Section

## Professors R. L. Lovvorn, J. A. Rigney; Associate Professor B. W. Smith;

## Assistant Professor W. C. Gregory

Field crops are of importance in North Carolina as a major source of farm income, as feed for livestock, and for use in soil conservation and soil improvement practices. Soil and climatic variations are such that a wide diversity of crops is grown, making this an ideal state in which to study crop production.

Opportunities in plant improvement are also recognized and the curriculum is set up to give instruction in both crop production and plant breeding. The curriculum is flexible, making it possible for students to elect sufficient courses in other departments for a general training in agriculture or for specialization in preparation for graduate work in Agronomy.

The more general training will equip students for work with the Agricultural Extension Service or with one of the several agencies administered by the United States Department of Agriculture; or as better farmers. Students interested in preparing themselves for one of these fields of endeavor should take the General Curriculum in Agriculture given on page 62 during the first two years.

Advanced training is provided for those who desire to go into the more technical phases of erop production or plant breeding, such as teaching or research in State or Federal institutions. Students who know before entering college that they plan to take this advanced training should follow the Specialized Curriculum in Agriculture given on page 64.

### Junior and Senior Curricula

## Sce pages 62 or 64 for Freshman and Sophomore curricula\*

The following courses will be required of students in either the General or Specialized Curriculum:

COURSES	Credit	
Southern Field Crops. F. C. 303 Plant Breeding, F. C. 102 Pastures and Forage Crops, F. C. 403 Soil Fertility and Fertilizers, Soils 301	5 3 	
Soil Classification, Soils 302 Genetics, Zool, 411		
Plant Physiology, Bot. 221 Diseases of Field Crops. Bot. 301		

Additional courses must be selected from a list approved by the department to satisfy the requirements listed on pages 62 and 64 for the curriculum in General or Specialized Agriculture, respectively.

## SOILS SECTION

#### Professor J. F. Lutz, Head of Section

## Professor R. W. Cummings; Associate Professors E. R. Collins, W. D. Lee;

### Assistant Professor J. R. Piland

The soil is a natural body composed of mineral and organic matter, air, water, and living micro-organisms. The reactions of and changes in these components extend into the fields of chemistry, geology, physics and biology, which sciences are fundamentals to soils. No state in the Union offers better opportunities for soil and fertilizer studies than North Carolina for within her borders are soils derived from a large variety of parent materials and developed under climatic conditions varying from a subtropical climate in the southeastern part of the state to the cooler climates of the mountains. This state has been one of the few which has steadily pushed forward her soil-survey work so that now countip soil-survey reports and maps are available for practically all the counties of the entire state.

The importance of soils in North Carolina agriculture is evidenced by the fact (1) that more fertilizer is used in North Carolina than in any other state in the Union and (2) that North Carolina ranks third among the states in cash income derived from farm crops.

The curriculum in Solls is made flexible, through a sufficient number of optional courses, to enable the student to prepare for (1) general agricultural work such as farmers, county agents, soil conservationists, and similar work, or (2) technical soils work such as teaching or research in State or Federal institutions. Those interested in the more technical phases should take the Specialized Curriculum in Agriculture given on page 64.

Students interested in graduate study or technical work in Field Crops should take the Specialized Curriculum in Agriculture.

## Junior and Senior Curricula

#### See pages 62 or 64 for Freshman and Sophomore Curricula\*

The following courses will be required of students in either the General or Specialized Curriculum:

COURSES				Cred
Soils 301, Soil Fertility and Fertilizers Soils 312, Soil Classification				. 5
Soils 312, Soil Classification				3
F. C. 303, Southern Field Crops F. C. 403, Pastures and Forage Crops				 · · · · 5
Bot. 221, Plant Physiology	10.1003	1. 10	0.03313	 5
Zool. 411, Genetics				 · · · · b

Additional courses must be selected, from a list approved by the Department, to satisfy the requirements listed on pages 62 and 64 for the curriculum in General or Technical Agriculture, respectively.

## ANIMAL INDUSTRY

#### Professor J. H. Hilton, Head of the Department

Professors R. H. Ruffner, E. H. Hosteller, W. J. Peterson, W. L. Clevenger, J. E. Foster, D. E. Brady, F. M. Haig, C. D. Grinnells; Research Associate Professors W. M. Roberts, H. A. Stewart; Assistant Professors T. N. Blumer, J. C. Pierce, Jr.; Research Assistant Professor J. P. Ammernan, Jr.; Instructor M. L. Shumaker.

The curriculum in Animal Industry is designed to train students in various phases of animal husbandry and dairying. The department is housed in Polk Hall, a three story building, which was designed to meet the needs of college teaching, research, and extension work in animal production and dairy manufacturing.

In the basement of Polk Hall are two wings, one of which is devoted to Dairy Mannfacturing, and the other to Farm Masta and Food Processing. The dairy laboratories have recently been remodeled and equipped with the most modern machinery available for teaching and research in the processing and distribution of market milk, ice cream, butter, cheese and other dairy products.

The Farm Meats and Food Processing laboratories have just been remodeled and expanded, making them among the most modern and up-todate of any in the country.

The upper floors of the building contain offices, classrooms, library and laboratories, in dairy bacteriology, dairy chemistry, animal uttrition, animal breeding and meats. Extension specialists in swine, dairy, beef cattle, and sheep have offices in this building.

In addition, the Department of Animal Industry maintains three livestock farms located a few miles from the college.

Students interested in graduate study or technical work in Soils should take the Specialized Curriculum in Agriculture listed on page 64.

The dairy farm contains 600 acres. Two fre-proof, completely equipped dairy barns house 140 registered Jerseys, Guernseys, and Holsteins. A herd of registered Ayrshiree is maintained in the College Experiment Station Dairy nearby. The animal husbandry farm, adjoining the dairy farm, contains 1100 acres. Here, registered and commercial herds of swine, sheep, horses, and beef cattle are maintained for research and teaching.

Studnts wishing to specialize in Animal Industry may do so after completing either Curriculum A or Curriculum B in the Basic Division. Two curricula are offered in the department—one in Animal Industry, other in Dairy Manufacturing. Students specializing in Animal Industry after completing Curriculum A in the Basic Division will be required to take not less than 36 hours of course work in the Animal Industry curriculum. These include: Types and Market Classes of Livestock; Judging and Selection (dairy cattle); Judging and Selection (general livestock); Animal Nutrition I and II; Livestock Production I, II, and III; Animal Breeding; and Livestock Practicums.

Students completing Curriculum B and wishing to specialize in some phase of Animal Science will elect courses in the Department of Animal Industry under the supervision of a faculty committee. Since this curriculum is very flexible, it makes it possible for students to specialize in preparation for graduate work in Animal Breeding, Nutrition, and other animal sciences.

Students wishing to specialize in Dairy Manufacturing will be required to take the courses listed in the special curriculum designed for Dairy Manufacturing, which is shown below.

#### C. CURRICULUM IN DAIRY MANUFACTURING

## Freshman Year

Same as General Curriculum in Agriculture (See page 62).

#### Sophomore Year

	Terms	and	Credits
COURSES	F	W	S
Elective English and Public Speaking, Eng. 231	0	3	3
General Inorganic and Organic Chemistry C.hem. 201, 202, 203	5	5	5
General Economics, Econ. 201, 202	3	3	0
General Botany, Bot. 101 or General Zoologov, Zool. 101	4	0	0
General Bacteriology, Bot. 312	0	0	4
General Poultry, Poul. 101 or General Horticulture, Hort. 101	4	0	0
Physics for Agric, Students, Physics 115	0	õ	5
Agricultural Drawing, Agr. Eng. 222	0	3	0
*Military Science II, Mil. 201, 202, 203	-2	2	2
Sports Activities, P. E. 201, 202, 203	1	1	ī
	19	17	20

\* Or six credits in one or two of the following departments: Economics, Ethics and Religion, History and Political Science, Modern Languages, Psychology, and Sociology.

#### Junior and Senior Years

lective in Social Sc	ience	or	Hum	ani	ties						. 3
lective in Social So Inglish Elective Injor Department		100									
lajor Department										100	. 30-50
gricultural Elective Restricted Electives	25										10-30
Restricted Electives	1.4										. 18
ree Electives											. 17
Other Required Co	urses										. 16

 \* Military Science, Social Science, Humanities, Natural and Physical Sciences.
\* Accounting, Marketing, Animal Nutrition I, Livestock Production III, and Diseases of Farm Animals.

A minimum of 233 credits is required for graduation.

## BOTANY

#### Professor B. W. Wells, Head of the Department

Professors D. B. Anderson, J. H. Jensen, S. G. Lehman, I. V. Shunk; Research Associate Professors C. N. Clayton, D. E. Ellis; Assistant Professors M. F. Buell, L. A. Whitford.

#### Equipment and Facilities

Location .- The Department of Botany occupies the second floor of Winston Hall.

Laboratories.—The laboratories are all equipped with projection lanterns. A well-organized herbarium supports the work in systematic botany and dendrology.

Greenhouses .-- Ample greenhouse facilities are available for work in physiology and pathology.

Purpose.-The Department emphasizes those phases of plant science which are foundational for the work in Agriculture and Forestry.

Curricula.—In this department students may major in either the General Curriculum in Agriculture (see page 62) or the Specialized Curriculum in Agriculture (see page 64).

### CHEMISTRY

Professor A. J. Wilson, Head of the Department Professors L. F. Williams, G. H. Satterfield

Associate Professors W. E. Jordan, M. F. Showalter, W. A. Reid

Assistant Professors H. L. Caveness, P. P. Sutton, R. H. Loeppert, R. C. White Instructors R. E. Gee, W. P. Ingram, J. W. Morgan, J. H. Ryan, J. W. Marek

Curriculum.—The Department of Chemistry does not offer a Bachelor of Science degree in Chemistry. However, a student may register in the School of Agriculture with a major in Agricultural Chemistry. This curriculum affords extended courses of chemical training which will fit a graduate for positions such as those in State Experiment Stations, and in State and Federal laboratories for the inspection and control of fertilizers, feeds, foods, and other commodities, and as chemist in industrial plants.

Students planning to major in Agricultural Chemistry will select the Specialized Corriculum in Arriculture (see page 64). During the sophomore year Mathematics 201, 202, and 203 will be taken as part of the electives and Chemistry 211, 212, and 213 will be taken instead of Physics. During the Junior and Senior Years courses taken must include Physics for Engineers, Physics 201, 202, and 203, and Organic and Physical Chemistry. A minimum of 240 credits is required for graduation.

#### EXPERIMENTAL-STATISTICS

Professor Gertrude M. Cox, Head of the Department

Professors W. G. Cochran, J. A. Rigney; Associate Professors R. L. Anderson, J. M. Clarkson, H. L. Lucas, Paul Peach, J. Wolfowitz; Assistant Professors R. J. Monroe, H. F. Robinson; Instructors Margaret Fleming, Sarah Porter.

The extension of the use of statistics to more and more diverse fields of application has steadily increased since the first World War. Industry is placing increasing reliance on statistical methods to control the quality of goods in the process of manufacture and to determine the acceptability of roods already produced. Statistical procedures are becoming basic tools for making weather forecasts, crop and livestock estimates, business trend predictions, opinion polls and the like. Furthermore, all fields of research are fast realizing the importance of statistical aids in planning, analyzing and interpreting the results of investigations.

Organization—The Department of Experimental-Statistics is a part of the Institute of Statistics. It provides instruction, consultation and computational service for all other departments of all schools in the college. The Agricultural Experiment Station receives assistance in designing experiments, analyzing, and interpreting results. Governmental agencies and other institutions use the facilities of the Department. The range and quantity of data handled furnish an excellent background for training students in the use of statistical procedures in such fields as the plant, animal and social sciences and industrial engineering.

Laboratory.—A laboratory equipped with the best facilities available is maintained. Calculating machines, comptometers and International Business Machines are used constantly. Students have an opportunity to get actual experience in the use of these machines and to learn the types of data for which each is best wited.

Curriculum.—The curriculum in Experimental-Statistics is based on the Specialized Curriculum in Agriculture as shown on page 64 and provides for options in Plant Science, Animal Science, Agricultural Economics, and Rural Sociology.

#### FORESTRY

# Professor J. V. Hofmann, Director of the Division Professor L. Wyman Associate Professors W. D. Miller, G. K. Slocum, J. W. Chalfant Research Associate Professor C. M. Kaufman

Areas for Field Work.—Some of the field work of the Department of Forestry is now carried on at the Camp Polk Prison Farm, near the State Fair Grounds, which has 300 acres of timber land.

The George Watts Hill Demonstration Forest, near Durham, is a tract of 1,400 acres. It contains stands of short leaf and loblolly pine, oaks, gum, tuilp, dogwood, and all of these species in different associations. A rolling terrain, it serves admirably for the study of forest problems in the Piedmont Section.

The Hofmann Forest.—A large tract of land in Jones and Onslow Counties, in the southeastern part of the State, consists of more than 80,000 acres and has the various types of timber found in this region. The large areas of virgin timber make a very complete laboratory for studying forest development and succession.

Total Areas.—In all, the Forestry Department has available about 82,000 acres on which to do field work, demonstration, and research. These areas include the various types found in North Carolina except those of the Mountain Region.

The Arboretum area of seventy acres near Raleigh is being developed to contain all of the tree species and associated shrubs that grow in this climatic condition. It contains swamp and upland which adapts it for this use. More than a hundred species have been planted in this area.

The Wood Technology Laboratory contains a representative collection of the more common woods and will be gradually extended.

The Timber-Testing Laboratory contains the machines for its work.

Greenhouse space is available for special problems in forest research.

Purposes of the Curriculum. The aims of the curriculum in Forestry are: (1) to train young men for work in the technical and applied fields of forestry on public or private forest land; (2) to give special training in fields of research; (3) to advance the knowledge of the entire profession.

Forestry as a Profession.—The profession of forestry is comparatively young in North Carolina. It began some forty years ago and has made remarkable progress during its first four decades of existence. The next decade promises more advancement and achievement than all the past, as the foundation has been laid; the building of the superstructure will depend upon the expertness of the buildiers are included the United States Forest Service; State Forest Departments in a large number of States; corporations and lumber companies; individual land owners; last but by no means least, the farm woodlands.

Occupations. Students completing the Forestry course may look to the following fields of employment: United States Forest Service, the State Service, including not only North Carolina but especially the Southern States, and other State organizations; the lumber companies, corporations, and individuals. The forestry program in the State of North Carolina is very materially strengthened by the presence of the National Forests and the Applachain Forest Experiment Station. These will be of direct aid in the study of forest-research problems, management problems and the organization and work of the National Forest Service.

Forest Management aims to make a forest property a permanent producing unit. All forestry is now being built on this basis.

Forest Utilization requires special courses dealing with the value and various uses of the products of the forest. During the third term of the senior year, field studies of woodworking industries, logging operations, paper and pulp mills, and problems in forest management take up most of the time.

Silviculture deals with the problems of producing a forest, such as selection of species, methods of reproduction, cutting systems. The work is becoming increasingly important as our virgin timber supply is depleted.

Research in Forestry is being recognized as important by all agencies in the fields of forestry. Men trained in research methods are needed in the Government Experiment Stations. State Experiment Stations, and private lalocatories.

Graduation .- A minimum of 240 term credits with at least 240 honor points are required for graduation in Forestry.

The spring term of the junior year will be given on the Hofmann Forest, and will include timber measurement, timber cruising, and utilization.

Summer Instruction in Forestry.—The regular summer instruction in forestry for sophomores is given during the ten weeks immediately following the Commencement.

The expenses for the entire period are as follows:

Registration fee	\$ 5.00
For each credit scheduled	3.00
Room and board (estimated)	50.00
Bus fee	22.00
Camp fee	. 5.00

The courses listed below for summer camp are required and carry the regular college credit as indicated. The work is carried on entirely in the field and the class is responsible for its own program of camp routine. The students furnish their own board and any facilities other than the beds and housing. The registration in these courses is restricted to regularly enrolled students, unless a student is admitted as a special student under the same conditions that a special student would be allowed to take work in the regular courses.

# D CURRICULUM IN FORESTRY

#### Freshman Year

	Terms	and	Credits
COURSES	1	w	2
Composition, Eng. 101, 102, 103	.0	- 3	3
Algebra, Trigonometry, Math. of Finance, Math. 111, 112, 113	1	-4	4
General and Systematic Botany, Bot. 101, 102, 103	1	1	10
Drawing, C. E. 101, 102, 103	1	- 1	1
Elementary Forestry, For, 101	- S	- 61	0
Introduction to Psychology, Psychol, 200		0	1
American Government and Political Science, Hist, 211	11	0	
General and Economic Zoology, Zool, 101, 102	6	1	1
*Military Science I. Mil. 101, 102, 103	2	- 38	12
Fundamental Activities and Hygiene, P. E. 101, 102, 103	Ť.		ī
	31	p.,	21
Sophomore Year			
	Terms	and	Creslits
COURSES	1	W	8
General Economics, Econ. 201, 202	- CO	- 21	2
Physics for Agric. Students, Physics 115			
Dendrology, Bot. 211, 213	1	- 01	3
General Inorganic and Organic Chemistry, Chem. 201, 2-2, 203	5	1.2	5
Wood Technology, For, 201 and Physical Geology, Geol. 120		1	15
Theoretical Surveying, C. E. 221, 222		्य	3
Field Surveying, C. E. 225, and Topographic Drawing. C. E. 221		1	1
Telective English	1	16	
*Military Science II, Mil. 201, 202, 203	100		19
Sports Activities, P. E. 201, 202, 203	1	1	1

#### Summer Camp

19

# (Ten weeks at Hill Forest)

COURSES		Credits
Surveying and Mapping, C. E. s300		3
Dendrology, For. s214		2
Mensuration, For. s274		2
Silviculture, For, s204		
For. Protection, Improvements, and Influences	I, For. 8244	2
		***
		12

### Junior and Senior Years

### (Spring term of Junior Year at Hofmann Forest)

†Elective English Plant Physiology, Bot. 321 and Plant Ecology, Bot. 441 Economic Entomology, Zool. 213 Soila, Soila 202	redits
Economic Entomology, Zool. 213	6
	8
	4
Solis, Solis 202	5
Introduction to Exp. Statistics, Stat. 311	3
Land Economics, Agr. Econ. 212	3
Diseases of Forest Trees, Bot. 311	- 3
Electives in Social Science	6
Non-Forestry electives	21 49
Forestry courses .	48
	105

<sup>\*</sup> Or six credits in one or two of the following departments: Economics, Ethies and Religion, History and Political Science, Modern Lanzuages, Psychology, and Sociology. T Students who have been credited by the Department of Regulish as predictent in English may substitute for the courses listed a modern inspace. A minimum of 240 credits is required for graduation.

21 19

#### HORTICULTURE

### Professor M. E. Gardner, Head of the Department

Professor G. O. Randall; Research Professor I. D. Jones; Associate Professor Robert Schmidt; Research Associate Professors E. B. Morrow, Otto Veerhoff. C. F. Williams; Extension Assistant Professor J. H. Harris.

The Field.—The production of tree fruits and nuts, small fruits and grapes, and foral crops, including bulks, under glass and in the open requires intensive methods and suitable conditions from the standpoint of favorable sites, soils and climate. Since North Carolina extends from the Atlantic Occan to the highest peak cast of the Rockies, it is not difficult to find, somewhere within the borders of the state, almost ideal conditions for the production of practically all of the Horticultural crops grown in the temperate zone. In addition to these natural advantages, the nearness of large eastern markets and rapid transportation facilities place the state in an envirable position among the states of the Nation.

The Facilities. The department operates four greenhouses and two propagating houses with a total of thitteen thousand square feet under glass. A number of research projects with fruits, vegetables and ornamental plants are being conducted at the McCullers branch station near Raleigh and are available to students for observation and study. The same is true of floral and other crops grown in the greenhouses. The department iburry contains approximately twenty-five thousand technical and popular bulletins and periodicals covering all phases of Horticulture, and complete bound volumes of the Proceedings of the American Society for Horticultural Science, Horticultural Abstracts, Journal of Agricultural Research and others.

Land has recently been made available for the establishment of a new horticultural farm and student laboratory. Plans are being developed and planting and construction will begin in 1946. A modern laboratory for fruit and vegetable processing and utilization is under construction which will include quick-treezing facilities.

The Opportunities—Students will have the choice of one of three options: pomology, Vegetable Gardening or Floriculture. The curriculum in each will be flexible enough to permit the student to prepare himself for work in General Agriculture or Technical Agriculture. Those students who are interested in general agriculture should elect the General Curriculum in Agriculture outlined on page 62. This curriculum will provide training for those who are interested in becoming County Agents, fruit and vegetable growers, nurserymen, or in the production of greenhouse crops. A student interested in the more technical phases of Horticulture schuld register for the Specialized Curriculum in Agriculture on page 64. This will give a better background for graduate work and will lead to teaching and research positions with State Experiment Stations and Colleges, Federal agencies, or industries.

## Juniors and Seniors

The following courses will be required of all students in either the General or Specialized curriculum:

COURSES		Cr	edits
Zool, 411, Genetics F. C. 402, Plant Breeding Bot 221, Plant Physiology Soils 301, Soil Fertility and Fertilizers Bot 302, Diseases of Fruit Crops			53653
Bot. 303, Diseases of Vegetable Crops .			:

Each student will have the privilege of specialization in Fruit, Vegetable or Flower growing at the beginning of the junior year. In addition to the courses listed as required, the student will schedule, with the approval of the Department, courses which will satisfy the requirements for specialization in his chosen field.

## LANDSCAPE ARCHITECTURE

# Professor J. P. Pillsbury, Head of the Division

## Professor G. O. Randall

A comparative study of Landscape Architecture with architecture, the oldest art of design, will disclose the fact that distinct parallelism exists between these two fields of human endeavor. Not only in the character and extent of the training required in each case is this shown, but also in the division of work which takes place, and in the relations existing among those responsible for various parts of the work in the practice of these two closely associated professional fields.

Training in Landscape Architecture is a composite derived from the fine arts, certain branches of engineering, and ornamental horitoiluture. Properly, it is dominated by the principles of design, and therefore may be correctly classified as a fine art. Its province is the design of landscapes, the preparation of plans and specifications for them, and supervision during construction.

The Curriculum in Landscape Architecture is strictly undergraduate. Its purpose is to provide a broad and through foundation for the additional postgraduate training which the profession requires of those desiring to enter its ranks. It also presents an open door to the professional fields of city or regional planning as the student may elect when undertaking graduate work. The soundness of the curriculum here presented is attested not only by the fact that at no time has the demand for the services of its graduates been fully satisfied, but also by the successes of those who have pursued graduate training and attained to full rank in the professional field of Landscape Design. Training in Landscape Construction is similar to that in Landscape Architecture, but with emphasis upon materials and methods of construction employed in engineering and ornamental horticulture.

Training in Landscape Gardening is essentially ornamental horticulture. In neither case is graduate work required, since their provinces will not include the design of landscape, but only the execution of plans under supervision in the one case, and the maintenance of the constructed landscape in the other. Students electing either of these two lines of study will, during their first two years, pursue the Basic Curriculum in General Agriculture, with two or three substitutions from other curricula, as indicated.

General Equipment and Special Facilities for instruction are ample in the combined resources of Civil and Architectural Engineering, Horticulture, and Landscape Architecture.

Plant Materials in extensive collections on the College grounds and at various points elsewhere within a short distance, furnish an ample supply of all kinds for both study and use. In addition, several notable collections are available for occasional visits and study.

The Material for Landscape Design and Construction available on College grounds, private properties, and numerous public and semipublic areas and institutions in and about Raleigh, provide a wide range of subjects for study and practice. The City of Raleigh itself is a most interesting cityplanning study, since it is one of the very few existing examples of a capital city which was planned in advance of its building.

## CURRICULUM IN LANDSCAPE ARCHITECTURE

#### Freshman Year

		CREDITS	
COURSES	First Term	Second Term	Third Term
Algebra, Trigonometry, Analytical Geometry,			
Math. 101, 102, 103	6	6	6
Composition, Eng. 101, 102, 103	8	3	3
Botany, General and Systematic, Bot. 101, 102, 203		4	6 3 3
Engineering Drawing IL and			
Descriptive Geometry, M.E. 105, 106, 107	3	8	3
Arboriculture, L.A. 101, 102, 103	1	1	1
Drawing, C.E. 101, 102, 103		4	
Military Science I. Mil. 101, 102, 103, or			
Human Relations, Soc. 101, 102, 103	2		2
Fundamental Activities and Hygiene, P.E. 101, 102.	100 1		
Fundamental Activities and Hygiene, F.E. 101, 102,	103 1	1	4
	-		20
	21	21	20

## Sophomore Year

Business English and Public Speaking, Eng. 211, 231	3	0	8
Plant Physiology, Bot. 221	ŏ.	0	5
Pencil Sketching, Arch. 100	3	0	0
Physical Geology, Geol. 120	0	4	0
Introduction to Economics, Econ. 205	0	3	0
Introduction to Economics, Econ. 205 Introduction to Psychology, Psychol. 200	3	0	0
Introduction to Architecture, Arch. 201	3	0	0
Elements of Architecture, Arch. 202, 203	0	3	3
Surveying, Theoretical, C.E. 221, 222	3	8	0
Field Surveying, C.E. 225, 227	1	0	1
Plant Materials: Woody Plants, L.A. 201, 202, 203	2	2	2
Theory of Landscape Design, L.A. 212, 213 Military Science II, Mil. 201, 202, 203, or	ō	3	3
World History, Hist. 104	2	2	2
Sport Activities, P.E. 201, 202, 203	1	ī	1
opare meaning, a nor each each each	-		
	21	21	20

Surveying, C.E. s310, concurrent with Summer School, 3 credits, or Surveying, C.E. s310, a, b, c, Junior Year, 3 credits.

## Junior Year

Plant Materials : Herbaceous Plants, L.A. 303	0	0	2
Plant Ecology, Bot. 441	3	0	0
History of Landscape Design, L.A. 311, 312	3	3	0
Landscape Design I, L.A. 321, 322, 323	4	4	4
Technical Writing, Eng. 321	0	0	3
Shade and Shadows, Arch. 205	2	0	0
Freehand Drawing I, Pen and Pencil Drawing, Arch. 102	0	2	0
Freehand Drawing II, Water Color, Arch. 101	2	0	0
Freehand Drawing III, Charcoal, Arch, 103	0	0	2
Surveying, C.E. s310 a, b, c	1	1	1
Economic Zoology and Entomology, Zool. 102, 213	0	4	4
History of Architecture, Arch. 321, 322	3	3	0
*Electives	3	3	3

· Elective credit must include 12 credits in Social Science.

## Senior Year

COURSES	First Term	Second Term	Third Term
Planting Design, L.A. 411, 412, 413 Landscape Design II, L.A. 421, 422, 423 City Planning, L.A. 432 Landscape Construction, J.A. 451, 452, 453 Perspective Drawing, Arch. 206 Accounting for Fraineers, Econ. 212 Appreciation of Fine Arta, Arch. 111, 112, 113 Definition, Denn. 307	8 4 0 2 1 3 	3 4 3 2 0 8 0 3	3 4 0 2 0 0 3 3 3
	10	10	19

### POULTRY SCIENCE

# Professor R. S. Dearstyne, Head of the Department Associate Professors H. C. Gauger, J. W. Kelly Assistant Professors R. E. Greaves and N. W. Williams

Laboratories. The Poultry Department is housed on the second floor of Ricks Hall. It embraces the Discase Diagnostic, the Anatomy-Hematolo gy, and Discase Research Laboratories, the Incubar Room, and two Live Bird Laboratories. The laboratories are well equipped for teaching and research. The Seminar Room.—Affording access to technical and to popular publications, to preserved pathological specimens, is open to the students at all times.

Purposes and Scope.—The Poultry Department, as a major division of the School of Agriculture and Forestry, serves North Carolina through Leaching, research, and extension. Its research personnel embraces the field of avian genetics, parasitology, sero-lacetrology, histology, pathology and hematology. It has two poultry farms (chickens and turkeys) near the campus and two Experiment Station farms in the eastern and western parks of the state. The staff devotes its full time to poultry problems of the student, the poultryman and the industry. It serves a chicken and tarkey farm industry of nearly 10,000,000 birds in North Carolina valued at approximately \$30,000,000. It cooperates with the commercial concerns allied with poultry.

Central Poultry Plant.—Consists of forty buildings located on seventeen acres. Six having houses and sixteen mating pens house approximately 250 breedors and 1,500 layers. All layers of three breeds of chickens are podigreed and trans-nested. About 4,000 chicks are produced each year, all of these being podicreed. An 18,000 capacity incubaor is used for teaching commercial incubation.

Central Turkey Plant. Consists of five new buildings located on twentyfive acres. One laying house and six mating pens house approximately 250 large bronze turkeys, all pedigreed and trap-nested. One 1,500-capacity incubator is used.

These two Plants provide abundant material for teaching and demonstrating principles of poultry management, breeding, judging and sanitation.

Disease Diagnostic Laboratory.—Serves directly and indirectly the poultrymen of the State. Approximately 30,000 birds have been autopsied since 1923; 3,000 are now autopsied annually. One thousand or more poultrymen are reached each year by correspondence and 250 receive personal attention in the laboratory. The birds received serve as excellent material for teaching, for laboratory material in the courses in anatomy and poultry diseases, and for investigational work in avian bacteriology, sero-bacteriology, nantomy, histology, pathology, hematology and parasitology.

Research.—A substantial research program is pursued in genetics, serobacteriology, histology, pathology, hematology and parasitology.

### CURRICULUM A

#### (See page 62.)

Students majoring in Poultry Science will be required to take the following courses in Poultry Science: Poultry Anatomy, Poultry Judging, Poultry Nutrition, Commercial Poultry Production, Incubation and Brooding, Poultry Diseases (2 terms), Sero-diagnosis in Poultry Diseases, Preparation and Grading of Poultry Products, Poultry Breeding, Turkey Production, and Poultry Seminar.

Other required courses in junior and senior years are Animal Physiology, Genetics, Bacteriology, General Economics (2 terms), and Statistics.

### CURRICULUM B

#### (See page 64.)

The entire program for the junior and senior years for students majoring in Poultry Science will be developed in each instance by a committee of the Poultry Department.

#### RURAL SOCIOLOGY

# Professor C. Horace Hamilton, Head of the Department Professors G. W. Forster, Sanford Winston, William McGehee Associate Professor Selz C. Mayo Assistant Professor L. Walter Seegers

Objectives.—The principal objectives of this department are: (1) to give all students an appreciation of the human and social values in agriculture and rural life; (2) to give the future farmer and rural citizens an understanding of the social problems of the rural community; (3) to train rural leaders in methods of group organization and social control; (4) to train a few exceptional young men in rural sociological research and extension methods.

Relation to Other Departments.—The Department of Rural Sociology is closely related to and dependent upon Social Science Departments in the College and in the Consolidated University. Students specializing in rural sociology will be expected to take courses in such departments as: Sociology, Psychology, Statistics, Agricultural Economics, History, and Political Science. The Department of Rural Sociology functions also in a service capacity to Agricultural Beopartments and other rural agencies. Students taking courses in technical agriculture may take one or more courses in Rural Sociology as an elective Social Science.

Laboratory and Research Facilities.—The Department of Rural Sociology is constantly engaged in statistical and asciological studies of rural population, rural standards of living, rural communities, and related problems. Funds, laboratory equipment, and other facilities for this work are provided by the Agricultural Experiment Station and are available for the use of advanced students specializing in the field of Rural Sociology.

In a broader sense, the entire State is a laboratory for the study of rural social problems. Field trips and extended surveys may be carried out by advanced students during the summer months. New Opportunities,—The field of rural social work offers new opportunities for agricultural graduates who have specialized in rural sociology. There is a great need now for men particularly, to fill administrative positions in all kinds of social security and welfare organizations, public and private. The rural sociology curriculum is designed to prepare agricultural college graduates for advanced professional training in social work and administration.

Curricula.—In the Department of Rural Sociology students may major in either the General Curriculum in Agriculture (page 62) or the Specialized Curriculum in Agriculture (page 63).

## ZOOLOGY AND ENTOMOLOGY

#### Professor Z. P. Metcalf, Head of the Department

Professors C. H. Bostian, T. B. Mitchell, B. B. Fulton, F. H. McCutcheon, R. O. Stevens; Associate Professor R. Harkema, C. F. Smith; Assistant Professor W. M. Kudasi; Instructors M. W. Wing, H. F. Schoof.

Teaching and Research.—The space devoted to Zoology is equipped to present the various subjects and to carry on research in its own and related fields. The Entomology Laboratory has a large Insectary with the usual equipment, and has an especially large collection of breeding animals for research and instruction in the field.

Beekeeping. The Beekeeping Laboratory is well provided with apparatus to illustrate all phases of beekeeping. A small apiary is maintained on the College grounds.

Graduate Work. The Technique and Graduate Laboratories are especially well equipped for the teaching of graduate work. The Museum contains a synoptic collection illustrating most groups of animals.

Curricula. The Department of Zollogy offers curricula in Entomology and in Wildlife Conservation and Management set forth as follows. In Entomology students may major in either the General Curriculum in Agriculture (page 62) or the Specialized Curriculum in Agriculture (page 64).

# WILDLIFE CONSERVATION AND MANAGEMENT

Principles. The Wildlife Management Curriculum is based on the following fundamental principles: (1) All forms of wild animal life must be considered in any extensive system of wildlife management; (2) the animal life of any given area is in close relationship to the vegetation existing in that area; (3) in favorable environment, the species of wildlife will normally produce a surplus, a part of which can be harvested each year in a manner similar to the harvesting of other crops. Conservative Approach—Since wildlife management is just getting under way in this country, it would not seem advisable to encourage too rapid expansion of this profession at the present time, although there is a distinet need for a moderate number of well-trained men to promote and supervise wildlife management in the many sections of the country.

Positions.—The curriculum is designed to furnish a technical and practical background for the following types of positions: (1) Wildlife-Alanagement Technicians in State Game and Fish Departments; (2) Biologists in the United States Biological Survey, Forest Service, Soil Conservation Service, National Park Service, and other Federal Land-Use Departments; (3) Game Managers on private preserves or leased areas, State game refuges, and on other land areas which are being developed primarily for wildlife.

Research. Because of the great need for research and experimental work in this field, the required courses in the curriculum are also designed to give the basic technique necessary to students who may desire to enter this phase of wildlife management. Several elective courses will be available for junior and senior students to enable them to specialize in some particular phase of the work.

State Advantages—Unusual advantages are offered to competent students by the wide range of natural environments in the North Carolina Coastal Plain, Piedmont, and Mountain Regions. Further advantages are available by reason of close coöperation with the State Division of Game and Inland Fisheries, and the opportunity to observe developments in wildlife management on the following areas: Mount Mitchell Game Preserve, Sandhil Land-Use Project, Soil Conservation Service Projects, Matamuskeet Water Fowl Preserve, The Nantahala and Piggah National Forests, The Great Smoky Mountain National Park. and private preserves in the Piedmont and on the Coastal Plain.

### CURRICULUM IN WILDLIFE CONSERVATION AND MANAGEMENT

## Freshman Year

COURSES	First Term	CREDITS Second Term	Third Term
Composition. Eng. 101, 102, 103 General Inorganic Chemistry. Chem. 101, 102, 103 Mathematical Analysis, Math. 111, 112 General Zoology, Zool. 101 Economic Zoology, Zool. 102 Physical Geology, Geol. 120	3 1 0 4 0 0	3 1 4 0 4 0	344004
History of the U. S. and Am. Govt. and Political Science, Hist. 121, 122, 211 Elementary Wildlife Management, Zool. 111 Military Science I, Mil. 101, 102, 103, or alternate Fundamental Activities and Hygiene, P.E. 101, 102,	. 1 103 1	0 9 1	3 0 2 1
	18	21	21

### STATE COLLEGE CATALOG

### Sophomore Year

		CREDITS	
COURSES	First Term	Second Term	Third Term
Agricalitural Physics, Phys. 115 Bataway, General and Systematic, Dot. 101, 102, 203, Bataway, General and Systematic, Dot. 201, 102 General Resonances, Res. 201, 202 Bataway, Stranger, Schwarz, 201, 202 Bataway, Stranger, 201, 202 Bataway, Schwarz, 201, 202 Bataway, Schwarz, 201, 202, 201, Schwarz, Fueld, CE, 202 Bataway, Fueld, CE, 203, Stranger, Fueld, CE, 203, Stranger, Fueld, CE, 203, Stranger, Fueld, CE, 203, Stranger, Schwarz, Schwarz, 203, 203, Stranger, Schwarz, 201, 202, 203, or alternate Sport Activities, Phys. 201, 202, 203, Stranger, Schwarz, 201, 202, 203, Stranger, Schwarz, 201, 202, 203, Stranger, 201, 201, 201, 201, 201, 201, Stranger, 201, 201, 201, 201, 201, 201, 201, Stranger, 201, 201, 201, 201, 201, 201, 201, 201	9 1 0 . : 0 8 0 0 0 0 0 1 1 2 1 1 19	04000423021	5050005020021
Junior Year			
Plant Proceedings, Mert. 201 Detrology, Rol. 21, 213 Predivacy, Rol. 21, 213 Predivacy, Rol. 217 Predivacy, Rol. 217 Predivacy, Rol. 217 Animal Physiology, Rol. 212 Animal Physiology, Rol. 212 Animal Physiology, Rol. 213 Animal Physiology, Rol. 213 Principles of Forestry, Rol. 111 Principles of Forestry, Rol. 112 Nettree	· · · · · · · · · · · · · · · · · · ·	0 0 4 0 3 5 0 3 6 3 5 0 3 6 2 1	3 0 0 4 0 3 3 10
Senior Year			
Aguathe Biology, Rot. 47.3 Elective Social, Science Bicchier Social, Science Bicchier Statistics Soci Classificzon, Solis 312 Advanced Antimal Boology, Zool. 462, 463 Technical Writing II, 323 Electives	0 3 0 0 0 0 18	0 0 3 3 3 3 3 0 6 	3 0 3 0 3 3 5 20

# THE AGRICULTURAL EXPERIMENT STATION

## L. D. Baver, Director

### R. W. Cummings. Assistant Director

Establishment. The Agricultural Experiment Station was established in accordance with an Aci of the General Assembly of 1877. Its progress has been enhanced by different Acts of Congress giving to the Station additional funds in 1887, 1906, 1925, and 1935. These are known as the Hatch, the Adams, the Purnell, and the Bankhead-Jones acts, respectively. The General Assembly has allocated to the Station annually certain funds from the general fund. Purpose.—The purpose of the Agricultural Experiment Station is to study methods for economic production of the highest grades of livestock, poultry, and plants on the many soil types and varied conditions existing throughout the commonwealth; to study methods for the control of parasitic insects and organisms that cause serious economic losses of animals, poultry, and plants; to find and develop varieties of animals, poultry, and plants, new, and resistant to diseases and the changeable conditions prevailing in this State; and to perfect better marketing for all agricultural products.

Work.—The staff of the Agricultural Experiment Station conducts experiments throughout the State on areas owned by farmers, on six strategically located test farms, on farms rented for short periods, and in the greenhouses and laboratories of the College.

Research.—The agricultural research aims, through the discovery of new facts, to improve the well being of farmers throughout the State; to strengthen the regulatory work of the State Department of Agriculture; to develop new and necessary facts for the teaching of sound agricultural principles by vocational agricultural instructors, acricultural extension agents, and agricultural instructors in the College.

Experts.—The Agricultural Experiment Station staff brings to the College many experts.—Notes teachings in many specialized fields of agriculture assure the maintenance of curricula of high standards. It contributes much to the advanced training of students who are destined to become the leaders, teachers, and investigators so necessary in the maintenance of agriculture on sound and economic planes.

Publications.—The Agricultural Experiment Station publishes many bul letins and scientific papers on results of research conducted by the staff. These are free and sent upon request of anyone in the State.

Problems.—The staff diagnoses and interprets many problems for the farmers of this State; holds council with farmers and others interested in the agricultural industry; discusses farming procedures over the radio, and writes many letters on the more specific problems of agriculture at the request of farmers, members of garder clubs, and of fertilizer. fungicide, and insecticide manufacturers. It takes part in many of the administrative functions of the College.

# COOPERATIVE AGRICULTURAL EXTENSION WORK

# Dr. I. O. Schaub, Director John W. Goodman, Assistant Director Dr. Jane S. McKimmon, Assistant Director Ruth Current, State Home Demonstration Agent

Support.—The Agricultural Extension Service of State College is conducted coöperatively with the United States Department of Agriculture and the one hundred counties of the State. The work is supported by Federal funds derived from the Smith Lever Act of 1914, the Capper-Ketcham Act of 1928, and the Bankhead-Jones Act of 1935, from State appropriations and county appropriations. The Federal and State appropriations are used to maintain an administrative and specialist staff, and to supplement salaries and travel exponses of county Extension agents.

Purpose.—The purpose of the Extension Service is to teach by demonstration. In carrying out this purpose, the College maintains a staff of trained specialists, a system of county agents and assistant agents, and a corps of home-demonstration agents. Instruction is given at group meetings by method and result demonstrations, and by the written word, by training leaders, and through organized effort with clubs of men, women, and young people. In all of these activities, the plan is to carry the rural people of North Carolina the latest and best information obtainable for building a more prosperous and satisfying life on the farm. The Extension Service holds a number of short courses, both on the College campus and elsewhere holds a number cortain and better farms, in the use of more efficient practices, thus creating a more satisfying way of life.

## THE SCHOOL OF ENGINEERING

## John Harold Lampe, Dean of the School of Engineering

#### Organization

The School of Engineering of the North Carolina State College of Agriculture and Engineering of the University of North Carolina is organized for purposes of administration into the following Departments:

#### Line Departments

Administrative Officer

Aeronautical Engineering		
Architectural Engineering		Professor Ross Shumaker
Ceramic Engineering		. Professor A. F. Greaves-Walker
Chemical Engineering		. Professor E. M. Schoenborn, Jr.
Civil Engineering		Professor C. L. Mann
Electrical Engineering		Professor C. G. Brennecke
General Engineering		Professor G. Wallace Smith
Geological Engineering	10.000	Professor J. L. Stuckey
Industrial Engineering		
Mechanical Engineering		Professor L. L. Vaughan

#### Service Departments

Engineering Experiment	Station	Professor W. G. Van Note
Engineering Mechanics		Professor G. Wallace Smith
Mathematics		Professor H. A. Fisher
Physics .		Professor C. M. Heck

The School of Engineering is organized to offer technical and professional engineering instruction on the higher levels, undergraduate and graduate, vocational and professional, to meet the needs of the people of North Carolina. It is also organized and equipped to conduct research in the fundamentals of Engineering, and it coöperates with the College Extension Division in offering extension courses in Engineering and its allied fields.

Effective July 1, 1938, the consolidation of Engineering instruction at the University Unit in Ralejch was consummated, and the instructional staff and laboratory facilities were enhanced by additions from the Engineering College formerly maintained by the Unit at Chapel Hill. This gives the School of Engineering in Ralejch the largest and most extensive engineering staff and equipment in this section of the country, and offers to the young men of North Carolina excellent facilities for securing an undergraduate education in Engineering. The excellence of the instruction in the School of Engineering is attested by the fact that the Engineers' Gouroil for Professional Development has accredited its curricula in Ceramic, Civil, Electrical, and Mechanical Engineering. It is the policy of the School of Engineering to have all of its curricula maction the standards of this nationally recognized accrediting accreditions. Engineering education requires extensive laboratory facilities, and araphily as funds are available all of its laboratories are being brought into shape to meet the highest standards attained in any technological institution of higher learning.

## Location and Facilities

Indeph is a particularly favorable place for the study of Engineering. It is not only the State Capital where are located many State Departments of interest to engineers, such as the State Highway Commission, State Board of Health, State Geologist, Department of Conservation and Development, and important State institutions, but it is a rapidly growing city marked by modern developments in residential commercial, and municipal construction. The local building and engineering go on the year round and afford excellent opportunities for observation and study. Raleigh is so situated geographically that it is within easy distance for inspection trips to commercial chemical works, woodworking mills, railway shops, machine slops, airports, and manufacturing industries.

Raleigh is also a center from which electric power is distributed to a large section of the State. A transformer and meter substation adjoins the campus, and from it high-tension lines radiate in four directions. Hydro-electric and steam-electric plants on the Cape Fear River are within easy reach. The important systems of highways centering in Raleigh are exceptionally valuable for the observation and study of the construction, use, and maintenance of roads.

On the State College campus are six large buildings devoted exclusively to engineering instruction and research. These buildings contain much laboratory equipment which can be inspected at any time, but is best seen during the Engineers' Fair, which is held each year in March or April.

#### Purposes of the School

The purposes of the School of Engineering are: to educate men for professional service in Aeronautical, Architectural, Caramic, Chemical, Civil, Construction and Building Materials, Electrical. Geological, Industrial, Mechanical. Sanitary, and Transportation Engineering; to equip them to participate in commercial and public affairs; to develop their capacities for intelligent leadership: to ald in the development of commerce and industry through research and experimentation: to investigate natural resources and demonstrate their value to the people of the State; to cooperate with private companies, municipalities, public authorities, and commercial and industrial organizations through scientific research, thus increasing technical skill, inproving the value of manufactured products, and eliminating waste.

#### **Occupations** Open to Graduates

Those who graduate and receive a bachelor's degree in some specialized branch of engineering are equipped to assume at once the duties and responsibilities usually given Junior Engineers. The graduates of the School of Engineering are found in many technical fields, but most of them find employment in some one of the following: Aeronautical, Architectural and Structural Engineering: the Ceramic, the Chemical industries: and Private Professional Practice, Consulting Engineers: Hydro-electric Engineering, Electrical Manufacturing, Contracting, Central Steam-Electric Station Design and Construction, Telephone Service, Maintenance and Operation of Electrically-driven Mill Equipment. Lighting. Illumination, and Railway Signaling: Construction, Maintenance, and Operation of Steam and Electric Railways; the Design and Manufacture of Machinery, the Operation of Shops. and the Furniture Industry; Geological Engineering, Highway Engineering, Industrial Engineering, and the Management of Industries, Municipal Engineering, Sanitary Engineering; as City Managers, Public-Utility and Health-Service Officials; Sales Engineering, Research and Development.

#### Curricula

Besides a curriculum leading to the Bachelor of Science degree in General Engineering, the School of Engineering offers curricula which lead to the Bachelor's degree in the following specialized fields of Engineering:

Aeronautical Engineering Architectural Engineering Architecture Ceramic Engineering Chemical Engineering Civil Engineering, with options in: (a) Construction and Building Materials (b) General Civil (c) Sanitary (d) Transportation Electrical Engineering, with options in: (a) Power Generation and Distribution (b) Electrical Communication Geological Engineering Industrial Engineering (a) Furniture Option Mechanical Engineering, with options in:

- (a) General
- (b) Heating and Air Conditioning
- (c) Metals

All of the curricula contain courses of general educational value which prepare students for the duties of citizenship in a democracy. However, the curricula are primarily technical and practical, and designed to prepare young men for professional practice and for definite vocations as well as for leadership in the industrial advancement of the State.

The instruction is such as will foster the individual talent, imagination, and initiative of students, and instill in them ideals of accomplishment, service, and good citizenship, while assuring to them that scientific education and practical training which will prepare them for professional service and leadership in engineering and in industry. In this way the School of Encincering aids in the advancement of commerce and industry and furthers the development and economic utilization of the State's resources for the general welfare.

All the engineering curricula emphasizes thoroughness in the study of English and of the sciences—Mathematics, Physics, and Chemistry with a thorough drill in the application of fundamental principles to engineering and industrial problems. Engineering is a profession, and the students come to realize that it is both honorable and learned, and that it offers exceptional opportunities for asretice.

The several engineering curricula have a common freshman year and differ only slightly in the sophomore year, in which years the students study English, Mathematics, Drawing, Shopwork, Physics, and Chemistry. In the junior and senior years the students are directed definitely to the professional aims in carefully considered and well-balanced curricula.

Summer Work.—At least six weeks of summer employment, approved by the Head of the Department in which the student is enrolled, preferably in the summer following the junior year. is a specific requirement for graduation in Engineering.

The purpose of this is to have every student. before graduation, acquire the valuable experience of actual work with responsibility and pay in the field of his vocation. Departmental advisers will aid students in getting summer employment.

\* Inspection Trips.—In order to familiarize himself with the practice of his profession, each senior in Engineering is required as a part of his curriculum to take the departmental inspection trips. None will be excused except for grave reasons.

These inspection trips are arranged by the Head of the Department in which the student takes his major work. The cost of such trips vary from \$25.00 to \$60.00 per student, depending on the time and distance traveled.

Degrees. Six different types of degrees may be secured through the School of Engineering. These are:

 Bachelor of Science (B.S.). This decree can be obtained only through completion of the curriculum in General Engineering. This is a course of study founded upon the fundamentals of engineering with no specialized courses but with liberal allowances for electives in the cultural courses. It is an earned undergraduate degree and can be obtained by four years of undergraduate work. 2. Bachelor of a Specialized Branch of Engineering. for example, B.C.E. Bachelor of Civil Engineering. This is an earned undergraduate degree which includes in the last two years some specialized courses in the particular branch of engineering in which the student is studying. This course is planned for for gruy years of study; but due to the fact that it is very difficult, only the very best prepared and most diligent students can successfully complete it in the time allotted.

3. Master of Science (M.S.) in a specialized branch of engineering. This is an earned graduate degree which can be obtained only after the Bachelor's degree. It requires at least one year of graduate work, a reading knowledge of at least one foreign language, and a thesis showing ability to pursue in-dependent research. The core of graduate courses taken must emphasize a scientific objective. Further information concerning the requirements for this degree may be obtained by addressing Dr. Z. P. Metcalf, Director of Graduate Studies, State College, Raleigh, N. C.

4. Master of a Specialized Branch of Engineering, for example, (M.C.E.). Master of Civil Engineering. This is an earned graduate degree which can be obtained only after the specialized Bachelor's degree and requires one year of graduate work which emphasizes the technical and specialized professional engineering courses, and a thesis along professional engineering lines indicating ability to carry on independent professional investigations. For further information concerning this degree address Dr. Z. P. Metalf, Director of Graduate Studies, State College, Raleigh, N. C.

5. The Professional degree, for example, Architectural Engineer, Ceramic Engineer, Chemical Engineer, Civil Engineer, Electrical Engineer, Mechanical Engineer.

This is an earned degree which is conferred only upon the graduates of some branch of the University of North Carolina, after five years of professional engineering practice in responsible charge of important work, the acceptance of a thesis on a subject related to the professional engineering practice in which the applicant is engaged, and the passing of an examination upon the candidate's professional experience. For further information concerning this degree address Dr. Z. P. Metcalf, Director of Graduate Studies, State College, Raleigh, N. C.

6. The Honorary Degree of Doctor of Engineering (D.Eng.). This degree is purely an honorary degree conferred upon men of extraordinarily high professional engineering attainments who are graduates of one of the branches of the University of North Carolina, or upon professional engineers who have rendered distinguished services to the State of North Carolina.

Graduation.—The requirements for graduation in a specialized branch of Engineering are the satisfactory completion of all the courses in one of the prescribed curricula (see tabulation of curricula on the pages following), a total of not less than 240 honor points.

Of the minimum of 240 term credits required for graduation in Engineering, 117 are common to all curricula: 30 term credits in Mathematics, 18 in Language, 9 in Economics, 12 in Chemistry, 12 in Physics, 9 in Mechanics, 9 in Drawing and Descriptive Geometry, 12 in Military Training, and 6 in Hygiene and Physical Education.

Each of the curricula permits election of at least 18 term credits and contains not more than 72 special technical term credits.

Graduates in Liberal Vrts. An increasing number of graduates of liberalarts colleges and universities are seeking an engineering degree. The policy of the School of Engineering is to allow as liberal an arrangement of courses as possible to suit the individual student's needs so that the degree in engineering may be obtained in the briefest time possible. However, the liberal-arts courses are distinctly different from those offered in an engineering school even when they have the same name and deal with the same subject matter. Students are therefore advised that the best economy of their time and money will be attained if they enroll at the beginning of their college careres as freshmen in an engineering curriculum.

A graduate with an A.B. degree will normally require two years additional work to obtain a Bachelor's degree in engineering.

A graduate with a B.S. degree may obtain a degree in engineering with from one to two years of additional study. A final decision in each case can be made only after an evaluation of the transcript of the student's record in the college from which he has received his degree.

Short Courses; Institutes. The School of Engineering coöperates with the College Extension Division in offering short courses and institutes for adults and graduate engineers. These courses vary in length from one day to one week; each year the courses covered are different and vary according to the public demand. The faculty of the School of Engineering usually furnishes a large portion of the instruction offered in these courses, which in the past have been for Electrical Metermen, Gas Plant Operators, Waterworks Operators, Heating and Plumbing Contractors, Surveyors and Engineers. These short courses are usually held in Raleigh because the School of Engineering has unusual laboratory and classroom facilities which offer a decided advantage to those who desire to "brush up" on their specialty and bring themselves abreast of the times by attending such short courses. For information concerning any short course, address inquiry to Mr. Edward Rucgles, Director, Extension Division, State College, Raleigh.

## SERVICE DEPARTMENTS

An explanation of the purposes, and a listing of the personnel engaged in the three Service Departments in the School of Engineering follow:

### ENGINEERING MECHANICS

Professor G. Wallace Smith, Head of the Department Professor N. W. Conner; Associate Professor A. Mitchell; Assistant Professor C. E. Feltner\* Instructors J. T. Masev, \*J. N. Parlow\*

The Department of Engineering Mechanics, which is housed in the Civil Engineering Building, teaches and administers the courses in theoretical and applied mechanics, strength of materials, and fluid mechanics. These courses have been grouped under an independent Department, which is the eustom in most large engineering schools, for two reasons: first, to economize by preventing duplications and overlapping; second, because the mechanics courses are back; required courses in all the engineering curricula, and here all engineering students meet on an equal footing. The best and most uniform results are thus obtained when such courses are taught in a Department completely separated from the bias of any particular type of specialization.

## THE DEPARTMENT OF MATHEMATICS

Professor H. A. Fisher, Head of the Department

Professors C. G. Mumford, H. Page Williams, J. M. Clarkson; Associate Professors J. W. Cell, R. C. Bullock, J. Levine, L. S. Winton, H. V. Park; Assistant Professors H. M. Nahikian, C. F. Strobel, Rohert Hooke, W. P. Seggraves; Instructors H. C. Cooke, H. J. Zimmerherg, G. C. Watson, N. P. Yeardley, C. W. Williams, E. P. Miles, Jr.

Mathematics is one of the basic sciences in Engineering. At State College the large and competent Mathematics Department not only teaches the subject as a science but gives also a large amount of drill and practice to the students so that, upon completion of the courses, the students not only know the subject matter but are skilled and rapid in its use when applied to the problems of technology.

<sup>•</sup> On leave to U. S. Army.

## THE PHYSICS DEPARTMENT

#### Professor C. M. Heck, Head of the Department

Professor J. B. Dericux; Associate Professors J. S. Meares,<sup>1,\*</sup> F. W. Lan caster; Assistant Professors R. F. Stainback,<sup>5</sup> G. W. Bartlett, J. I. Hopkins, E. J. Brown, J. T. Lyun; Instructor G. W. Charles,<sup>1,\*</sup>

Physics is another of the basic sciences upon which Engineering and Agriculture are founded.

Pacifities,—The Department of Physics accupies the northern half of Daniels Hall three floors, with six laboratories and six lecture rooms. The basement is devoted to research laboratories, shops, dark rooms, battery room, and power center. The two floors above comprise laboratories, lecture rooms, offices, and apparatus rooms.

Faujment. The Department is equipped with laboratory apparatus in a sufficient number of sets to permit all students in a laboratory to work during the same period on the same experiment. All lectures are demonstrated with a larce assortment of equipment and apparatus collected through many years.

On the roof of the building is located the astronomical observatory and the radio-research laboratory. The five inch telescope is equatorially mounted and driven by clock work.

The Department is equipped for research and engineering students desirous of using Physics as a minor in their work for an advanced degree may use these facilities.

## THE ENGINEERING EXPERIMENT STATION

## Professor W. G. Van Note, Assistant Director

#### Room 112, Civil Engineering Building, State College Station, Raleigh.

Establishment,—The Engineering Experiment Station of North Carolina State College of Agriculture and Engineering was established in 1923, as provided by the General Assembly of that year. It is an integral part of the School of Engineering, and is engaged in an organized program of research, the purposes for which are:

<sup>•</sup> On military leave.

(a) The investigation of resources and processes, through experimentation and tests, with the object of opening and developing wider fields for the use of the natural resources of the State.

(b) Cooperation with industrial organizations in the solution of technical problems, and the development of new products.

(c) To seek further knowledge, through fundamental research, in the field of the natural sciences.

The station endeavors to coordinate the research work undertaken within the Engineering School, and publishes the results of the sponsored projects upon their completion.

Publications,--The Experiment Station has, since its organization, cooperated with various organizations and industries in the State in the investigation of problems peculiar to North Carolina. The results of such investigations have, from time to time, been issued in the form of Bulletins. The following is at present a complete list of the publications of the Station:

- Bulletin No. 1. "County Roads: Organization, Construction and Maintenance," by Harry Tucker. James Fontaine, and L. D. Bell.
- Bulletin No. 2. "Tests of Face and Common Brick Manufactured in North Carolina," by A. F. Greaves-Walker and James Fontaine.
- Bulletin No. 3. "Poles from North Carolina Forests," by Wm. Hand Browne, Jr., and James Fontaine.
- Bulletin No. 4. "Motor Vehicle Accidents in North Carolina," by Harry Tucker.
- Bulletin No. 5. "Occurrence and Physical Properties of North Carolina Marble," by Jasper L. Stuckey and James Fontaine. Price twenty cents.
- Bulletin No. 6. "The Occurrence, Properties, and Uses of the Commercial Clays and Shales of North Carolina," by A. F. Greaves-Walker, N. H. Stolke, and W. L. Fabianic. Price fifty cents.
- Bulletin No. 7. "Highway Grades and Motor Vehicle Costs," by Howard Burton Shaw and James Fontaine. Price twenty cents.
- Bulletin No. 8. "Financial Management for Highways," by Marc C. Leager. Price one dollar.
- Bulletin No. 9. "Highway Accidents in North Carolina and Guides to Safety," by Harry Tucker. Price fifty cents.
- Bulletin No. 10. "North Carolina Building Code," by the North Carolina Building Code Council. Price one dollar.

- Bulletin No. 11. "The Production of an Insulating Brick Using North Carolina Shales," by A. F. Greaves-Walker, W. C. Cole, Jr., and S. C. Davis. Price twenty cents.
- Bullctin No. 12. "The Development of Pyrophyllite Refractories and Refractory Coments," by A. F. Greaves-Walker, C. W. Owens, Jr., T. L. Hurst, and R. L. Stone. Price fifty cents.
- Bulletin No. 13. "The Preparation of Concrete Using North Carolina Materials," by Harry Tucker and W. G. Geile.
- Bulletin No. 14. "The Location and Distribution of the Ceramic Mineral Deposits of North Carolina," by A. F. Greaves-Walker and S. G. Riggs, Jr. Price twenty-five cents.
- Bulletin No. 15. "A Study of Courses in Technical Writing," by A. M. Fountain. Price one dollar.
- Bulletin No. 16. "The Production of Unfired and Fired Forsterite Refractories from North Carolina Dunites," by A. F. Greaves-Walker and R. L. Stone. Price fifty cents.
- Bulletin No. 17. "Papers Presented at School for Street Superintendents, 1939," compiled by Harry Tucker.
- Bulletin No. 18. "Net Revenue Method of Comparing Distribution Transformers," by R. R. Brown.
- Bulletin No. 19. "The Origin, Mineralogy and Distribution of the Refractory Clays of the United States," by A. F. Greaves-Walker.
- Bulletin No. 20. "Papers Presented at School for Street Superintendents, 1940," compiled by Harry Tucker.
- Bulletin No. 21. "Drafting Room Practices," by T. C. Brown and P. E. Moose. Price twenty-five cents.
- Bulletin No. 22. "The Development of an Unfired Pyrophyllite Refractory," by A. F. Greaves-Walker and J. J. Amero. Price fifty cents.
- Bulletin No. 23. "The Suitability of North Carolina Shales and Clays for Mortar Mixes," by A. F. Greaves-Walker and W. A. Lambertson. Price twenty-five cents.
- Bullctin No. 24. "The Development of Light Weight Concretes from North Carolina Vermiculites," by William A. Scholes, A. F. Greaves-Walker, E. R. Todd, and D. F. Cox. Price fifty cents.
- Bulletin No. 25. "Ceramic Dielectric and Insulator Materials for Radio and Radar Instruments," by R. L. Stone. Price fifty cents.

- Bulletin No. 26. "Suitability of North Carolina Trees for Chemical Conversion Products and for Certain Other Uses," by E. E. Randolph. Price fifty cents.
- Bulletin No. 27. "Investigation of Factors Affecting the Firing Shrinkage 6f Dry-Pressed Steatite Bodies," by R. L. Stone. Price thirty-five cents.
- Bulletin No. 28. "Part I. Investigation of Binders for Dry-Pressed Steatite Porcelains. Part II. The Development of Systems of Shrinkage Control for Dry-Pressed Steatite Porcelains," by R. L. Stone. Price thirty-five cents.
- Bulletin No. 29. "Part I. The Development of a System of Shrinkage Control for Extruded Staatite Bodies (Chapters I and II). Part II. The Development of Special Bodies for Production of Electron Tube Spacers (Chapters III and IV)," by R. L. Stone. Price thirty-five cents.
- Bulletin No. 30. "An Investigation of the Design and Capacity of Gutter Inlets," by N. W. Conner. Price twenty-five cents.

Current Activities.—The Experiment Station is now assisting in the following investigations that are being conducted by the several Departments of the Engineering School:

- In cooperation with the North Carolina State Highway and Public Works Commission: Investigation of steel-beam bridges with concrete floors.
- In cooperation with the North Carolina State Board of Health: The efficiency of small sewage-treatment plants.
- A study of the effects of inertia, viscous, elastic, and surface tension forces on small scale models of fluid flow.
- 4. The development of electroplating processes.
- A study of the electrical properties of North Carolina micas at 3000 megacycles.
- A theoretical and experimental investigation of the responses of nonlinear circuit elements.

### CURRICULA OFFERED IN THE SCHOOL OF ENGINEERING

Each of the following curricula is not only well balanced, but offers a liberal course of study in a technical and professional field. Each conforms to what is regarded by engineering educators as the best modern practice.

Also offered in the School of Engineering is a curriculum leading to the Bachelor of Science degree in Engineering (see page 129). This curriculum has no specialization and requires but 238 term credits with at least 238 honor points. It is recommended to those who desire a broad general training in the basic principles of Engineering.

	CREDITS		
COURSES	First Term	Second Term	Third Term
Algebra, Trigonometry, Analytical Geometry, Math. 101, 102, 103			
Composition, Eng. 101, 102, 103	3	3	2
General Inorganic Chemistry, Chem. 101, 102, 103	4	4	4
Engineering Drawing II, M.E. 105, 106	3	3	0
Descriptive Geometry, M.E. 107	1	0	3
Military Science I, Mil. 101, 102, 103, or			
World History, Hist, 194	2	2	2
Fundamental Activities and Hygiene, P.E. 101, 102, 105	. T	ī	ī
	19	19	19

## FRESHMAN YEAR of ALL CURRICULA in ENGINEERING

Summer requirement following the freshman year in Aeronautical, Architectural, Ceramic, Electrical, General, and Mechanical Engineering: Surveying, C.E. \$200, 3 credits.

### \*Citizenship Requirement for All Curricula in Engineering

In order that every graduate of the School of Engineering may have a working knowledge of the fundamentals of American Government, all students in the School of Engineering are required to take prior to the end of their sophomore year a citizenship test, and in the event a student fails to pass this comprehensive examination, he will be required to take American Government (Political Science 211) 3 or 3 or 3. Students may elect to take the course in leu of the examination, and students taking the course will be permitted to apply the credit earned in partial assisfaction of their social science electives. A student must pass the comprehensive examination or the course in American Government before he can graduate from the School of Engineering.

<sup>.</sup> Waived for the duration of the war.
### AERONAUTICAL ENGINEERING

# (Under supervision of Mechanical Engineering Department until further notice.)

Associate Professor R. F. Rautenstrauch; Instructor R. W. Truitt.\*

### Building and Equipment-

The Department of Aeronautical Engineering has a new building centrally located on the campus. It contains the offices of the aeronautical engineering faculty and the aeronautical laboratory.

The Aeronautical Laboratory provides for the testing of component parts of aircraft. The latest machines and instruments are available for use in this connection. A Luscombe monoplane of all metal construction, completely equipped with instruments, is used for purposes of study and flight testing.

### Curriculum---

Since the trend of airplane design changes quite rapidly, no attempt is made to produce specialists in any phase of aeronautical engineering. The course of study is intended to give the student a well rounded knowledge of fundamentals. Upon graduation most students find positions in aircraft industry or the aviation services where they may receive further training of more specialized nature. Thus a student may prepare himself for any one of the many ground and flying positions available in the aviation industry today. In view of the present war requirements more time is being devoted to aircraft production subjects. Courses in Air Transportation are normally offered.

<sup>•</sup> On military leave.

# CURRICULUM IN AERONAUTICAL ENGINEERING

### (Under supervision of Mechanical Engineering Department until further notice)

Due to the present untable conditions brought about by postwar reaction on engineering developments, this curriculum will be effective until further notice.

# For the Freshman Year, refer to page 106.

Summer requirement following the freshman year: Surveying, C. E. s200. 3 credits.

COURSES		Terms	and	Credits
Calculus J. H. 111, Math. 201, 202, 300 Huminas Explain, Pub. Speaking, Expl. 211, 231 Physics for Engineers, Phys. 10, 202, 203 Mechanical Drawing, M. E. 211, 212, 213 Shopwork, M. E. 124, 125, 126 Engineering Mechanics, E. M. 311, 312 "Military Science, Mil, 201, 202, 203 Physical Education, P. E. 201, 202, 203	and Elective English	1 3 4 2 0 2 1	404010100-	4 11 4 01 01 01 01 01
		18	21	21
Junior	Year			
Expinential Mechanics, E. M. 313 Begr. Thermo. N. 247, 303, 304, 310 Thermo. Leb., M. E. 313, 314, 316, 317 Greenia, Arconautica, Arco, E. 303 Greenia, Arconautica, Arco, E. 304 Metallurar, M. E. 321, 324, 324 Metallurar, M. E. 321, 324 Metallurar, M. E. 321, 322 Technical Withing, Eng. 321 Technical Withing, Eng. 321 Technical Withing, Eng. 321 Technical Withing, Eng. 321		31111003003233	031130330033	0 1 1 0 3 0 3 11 0 3 3 20
Senior	Year			
Business Law, Econ. 307 Aircraft Engines, Acro. E. 451 Industrial Management, Econ. 325, 326 **Electives		3 3 3 1 0 3 3 1 9	333313033   2	3 3 3 3 1 0 3 0 3 0 3 1 9

#### Sophomore Year

<sup>+</sup>Students who have been certified by the Department of English as proficient in English may substitute Modern Language for the courses listed. <sup>+</sup> Or 6 credits in one or two of the following departments: Economies, Psychology, History and Political Science, Modern Languages, Sciology.

\*\* To be selected from the following fields: Humanities, Military Science III and IV, Language and Literature, Pure Mathematics, Pure Natural Science, and Social Science.

# ARCHITECTURE AND ARCHITECTURAL ENGINEERING

#### Professor Ross Shumaker, Head of Department Professor J. D. Paulson Assistant Professors F. Carter Williams\*, W. L. Baumgarten, James H. Grady

The courses in Architecture and Architectural Engineering have been arranged after careful study of the best curriculs offered by the leading educational institutions in the United States. These studies and many years of practical experience on the part of the faculty—both in the profession and in teaching, enable this Department to offer two alled courses of merit, proved by the very high proportion of graduates of this Department who successfully follow the profession of architext.

The first three years of study in Architecture and in Architectural Engineering are very similar—so arranged that a student may transfer from one curriculum to the other until the end of the junior year—with a minimum loss of credits. After the third year, however, there is a wide divergence in the courses.

Architecture is one of the most valuable and constructive professions in modern civilization. While an art, it must be firmly routed in science; and the greater the project, the more positively this is true. Consequently, a student who is ambidious to be a great architect must maker the artistic scope of architecture and also such science as is pertinent. To compress such a course into four years would necessarily eliminate some essential studies or reduce the content of all. Therefore the curriculum in Architecture is presented as a five-year course of study.

Architectural Engineering is designed to prepare students for the pursuit of engineering as allied with architecture. Modern architecture has so many engineering aspects as in construction, fabrication and use of materials. provision of conveniences, that a student may well plan to specialize in some one of these fields. This four-year course provides a thorough training in the theoretical engineering of architecture and a sufficient knowledge of architecture as an art to enable the graduate to pursue any specialized branch he may select. Also it is possible for him to continue in the field of architecture and eventually obtain registration as a licensed architect.

Equipment.—The Department of Årchitecture and Architectural Engineering occupies the third for of Daniels Hall, an excellent location proviing adequate space in well-lighted and comfortable rooms. Large drawing rooms, library, lecture rooms, photographic dark room, and offices, overlooking the entire State College Campus, constitute an ideal physical layout for the Department. Drawing tables, stools, lockers, and essential furniture are all provided.

Alumni.-Graduates of this department have little difficulty in normal times in finding employment and experience such that in a few years they can obtain registration as licensed architects. Many graduates have been conspicuously successful, and it is worthy of note that a very large proportion remain in the State of North Carolina or adjacent territory.

<sup>•</sup> On military leave.

# CURRICULUM IN ARCHITECTURAL ENGINEERING

# For the Freshman Year, refer to page 106.

Surveying, C.E. \$200, 3 credits, is required in the summer immediately following the freeliman year.

#### Sophomore Year

cophoniste re	3.5	CREDITS	
COURSES	Circle Western	Second Term	mit. 1 . 4 m
	rirst lerm		
Calculus I, II, III, Math. 201, 202, 303 *Business English, Public Speaking, Eng. 211, 231, a		4	4
Elective English		3	3
Physics for Engineers, Phys. 201, 202, 203	4	4	4
Engineering Mechanics, E.M. 311, 312	U	33	3
Elements of Architecture I, H. H. Arch. 201, 202, 203 Shades and Shadows, Arch. 205 Pencil Sketching, Arch. 100 Perspective Drawing, Arch. 205	2 21	3	2301021
Pencil Sketching Arch 100	1	1	
Perspective Drawing, Arch. 206		ô.	<u>0</u>
Military Science II, Mil. 201, 202, 203 (or elective)	2	2	2
Military Science II. Mil. 201. 202, 203 (or elective) Sport Activities, P.E. 201, 202, 203	1		1
Sophomore Year	21	21	21
Junior Year			
Engineering Mashapian F.M. 212	3	0	0
Engineering Mechanics, E.M. 313 Strength of Materials, E.M. 321, 322 Materials Testing Laboratory, C.F. 322	ő	3	3
Materials Testing Laboratory, C.E. 322	ñ	1	0
Strength of Materials, E.M. 321, 322 Materials Testing Laboratory, C.E. 322 Materials of Construction, C.E. 321 Sanitary and Mech. Equipment of Buildings,	1	0	3
CE 265 266		3	0
General Economics, Econ. 201, 202, 203		3	3
Sanitary and Mech. Equipment of Buildings, C.E. 365, 366 General Economics, Econ. 201, 202, 203 Freehand Drawing 1, 2, 3, Arch. 101, 102, 103	2	2	2
intermediate Design D-1, D-2, D-3,			3
Arch. 301, 302, 303 History of Architecture 1, 2, 3. Arch. 321, 322, 323 *Electives		23	3
**Electives	3	3	3
	÷.		
Junior Year Summer Requirements: Six Weeks Industrial Emr	20	21	20
Summer Requirements: Six weeks industrial Emp	loyment.		
Senior Year			
	~		
Reinforced Concrete, C.E. 421, 422 Graphic Statics, C.E. 423, 424, 425 Theory of Structures, C.E. 431a, 432a	3	13	9
Theory of Structures C.E. 421a 422a	en 🛔 –	4	
Photographic Practice, Arch. 304	õ		ĭ
Specifications, Arch. 416	0	Ô	3
Building Materials I, Arch. 409	ŝ	0	0
Incory of Structures, C.L. 4313, 4323 Photographic Fractice, Arch. 304 Specifications, Arch. 416 Building Materials I. Arch. 409 Electrical Equipment of Buildings, E.E. 343 Business Law, Econ. 307	00000	0	8
Architectural Design, E-1, E-2, Arch, 351, 352	3	3	ő
Architectural Office Practice, Arch. 411, 412	0	3	3
Architectural Estimates, Arch. 408	0	0	2
Business Law, Econ. 307 Architetural Design, E-1, E-2, Arch. 351, 352 Architetural Office Practice, Arch. 411, 412 Architetural Betinates, Arch. 405 Structural Design, C.E. 426, 427 •*Electives		3	0101308003233
Senior Year	19	19	19

Total credits required for completion of course: 241. Degree: Bachelor of Architectural All seniors will be required to go on the inspection trip as part of their curriculum.

Students who bave been certified by the Department of English as proficient in English may substitute for the course listed French, M.L. 101.

may substitute for the course listed French, M.L. 101. 1 Or mix credits in one or two of the following Departments: Economics, Psychology, History and Political Science, Modern Languages, Secology, \*\* To be selected from the following fields: Humanities, Military Science III and IV. Language and Literature, Pure Mathematics, Pure Natural Science, and Social Science.

# CURRICULUM IN ARCHITECTURE

# Freshman or First Year

		CREDITS	
COURSES		Second Term	Third Term
Mathematics 101, 102, 103 Composition, Eng. 101, 102, 103 French, or Modern Language, M.L. 102, 201 en Foula	5	6 3	6 3
Internet for Modern Language, M.I. 101, 102, 201, or Equiv.	3	3	3
		1	1
World History, Hist. 104 Architectural Drawing, Arch. 107	2	2	2
	3	3	0
Descriptive Geometry, M.E. 107	n	0	3
<ul> <li>Gor M.E. Equivalent)</li> <li>Descriptive Geometry, M.E. 107</li> <li>Military Science I, Mil. 101, 102, 103 (or elective†)</li> <li>Fundamental Activities and Hygiene, P.E. 101, 102, 103</li> </ul>	103 1	2	21
Freshman or First Year Summer Requirements: Surveying, C.E. s200, 3 cr	edits. 21	21	21
Sophomore or Secon	d Year		
Calculus I. II. III. Math. 201, 202, 303		3	4
Background for Modern Thought (or Elective)	2	3	3
		4	0
Shades and Shadows, Arch. 205	2	0 3 3 0	0 3 2 2
Snades and Snadows, Arch. 205 Engineering Mechanics, E.M. 801, 302 Elements of Architecture I. H. HI, Arch. 201, 202, 203 History of Sculpture and Mural Decoration, Arch. 325 Waching Derminer Arch. 205		3	3
History of Sculpture and Mural Decoration, Arch. 325	0	0	20
Working Drawings, Arch. 305 .	0	0	2
Working Drawings, Arch. 305 Perspective Drawing, Arch. 206 Military Science II, Mil. 201, 202, 203 (or elective-)	1	02	0
Sport Activities, P.E. 201, 202, 203	21	ĩ	ĩ
Sophomore or Second Year	20	20	20
Junior or Third	Year		
Business English, Pub. Speaking, Eng. 211, 281, a	nd		
Business English, Pub. Speaking, Eng. 211, 231, a Elective English (or M.L.) Strength of Materials, E.M. 321, 322	3	3	3
Strength of Materials, E.M. 321, 322	0	1	8
Materials Testing Laboratory, C.E. 322 Materials of Construction, C.E. 321		ò	0
Sanitary and Mech. Equip. of Buildings, C.E. 375	201	0	0
Sanitary and Mech. Equip. of Buildings, C.E. 375 Freehand Drawing 1, 2, 3, Arch. 101, 102, 103 Availational Office Devices Arch. 111, 102, 103	2	2 2	2
Intermediate Design P 1 P 2 P 2		3	3
Arch, 301, 302, 303	3	3	3
Arch. 301, 302, 303 History of Architecture 1, 2, 3, Arch. 321, 322, 323	3	3	3
**Electives	3	3	3
Junior or Third Year Summer Requirements: Six Weeks Industrial Emp	20 slovment.	21	20
Senior or Fourth	Year		
General Economics, Econ. 201, 202, 203	3	3	3
Reinforced Concrete, C.E. 421, 422 Graphic Statics, C.E. 423, 424, 425	1	3	0
Electrical Equipment of Buildings, E.E. 343	ò	ó	3
Architectural Design B-4, B-5, B-6,			
Arch. 353, 354, 355 History of Architecture 4, Arch. 421	6	6	6
	3	0	0
Professional Practice, Arch. 414	0	n	1
Professional Practice, Arch. 414 Clay Modeling, Arch. 114 Photographic Practice, Arch. 304	1	1	1
*Electives	0	0	1
			100
Senior or Fourth Year	20	20	19

†Or six credits in one or two of the following Departments: Economics, Psychology, History and Political Science, Modern Languages, Sciology, \* To be selected from the following fields: Humanities, Military Science III and IV, Language and Literature, Pure Mathematics, Pure Natural Science, and Social Science.

#### Professional or Fifth Year

			CREDITS	
COURSES		First Term	Second Term	Third Term
Business Law, Econ. 307		3	0	0
Specifications, Arch. 416		0	0	8
Theory of Structures, C.E. 431a, 432a Architectural Design A-1, A-2, A-3,		. 3	3	õ
Arch. 401, 402, 403		6	6	6
Freehand Drawing 4, 5, 6, Arch. 211, 212, 213		3	3	3
Architectural Composition, Arch. 407		2	0	ò
City Planning, Arch, 415		0	2	õ
Architectural Estimates, Arch. 408		0	ō	2
**Electives		- 3	6	6
			_	-
Fifth Year	100	20	20	20

Total Credits: 306. Completion of the course to be recognized by granting the degree of Bachelor of Architecture.

# CERAMIC ENGINEERING

Professor A. F. Greaves-Walker, Head of the Department; Associate Professors W. W. Kreigel, R. L. Stone."

The Department of Ceramic Engineering occupies its own building, which contains classrooms, a design room, a chemical laboratory, an equipment laboratory, and a kiln laboratory.

The Equipment Laboratory contains an adequate variety of machines for preparing and processing ceramic bodies of all kinds and making ceramic products on a laboratory scale. It also contains the necessary equipment for carrying on ceramic research, and the testing of materials and products.

The Kiln Laboratory contains twelve kilns and furnaces of different types, which provide for the firing or testing of all ceramic materials and products.

Ceramic Engineering includes those phases of engineering which have to do with the study of the nonmetallic, inorganic minerals, except fuels and ores as such, and the manufacture of products therefrom. The nonmetallic minerals compose over 30 per cent of the earth's surface, and the industries based on them rank above the automobile, and the iron and steel industries in value of product. Principal among these products are those made of clay and associated minerals, such as building brick, hollow tile, sewer pipe, refractories, wall and floor tile, tableware, pottery, electrical porcelain, chemical and sanitary stoneware, flat glass, chemical and table glassware, enameled iron and steel, portland and hydraulic cements, and limes.

North Carolina has enormous deposits of shale, clay, kaolin, feldspar, sand, limestone, and other ceramic minerals, equal in quality to any others in the United States; with the introduction of modern processes and methods will produce in future quantities of ceramic products and adequately develop its ceramic industries.

<sup>•</sup> On leave.

<sup>\*\*</sup> To be selected from the following fields: Humanitics, Military Science III and IV, Language and Literature, Pure Mathematics, Pure Natural Science, and Social Science.

The demand for ceramic engineers has far exceeded the supply for a number of years past, there being fewer than 100 ceramic engineers graduated in the United States each year. It is with the idea of supplying this demand and developing the latent resources of North Carolina that a fouryear curriculum in Ceramic Engineering. leading to the degree of Bachelor of Ceramic Engineering, is offered.

The instruction in Ceramic Engineering is enriched by the intensive investigation of ceramic resources and manufactures constantly under way in connection with the Engineering Experiment Station. Students will have the great advantage of these investigations along with other instruction.

Courses in advanced subjects for graduate students are offered in Advanced Refractories and Furnaces, Industrial Adaptability of Clays, Designing of Ceramic Equipment and Plants, Advanced Silicate Technology, Glass Technology, and Ceramic Research.

The eurriculum in Ceramic Engineering, which has been accredited by the Engineers Council for Professional Development, contains fundamental courses, and courses in Ceramic, Geological, Civil, Electrical, and Mechanical Engineering, as well as in Economics, to provide for the general training in engineering with the particular study of Ceramic Engineering. The Ceramic Engineering courses consist of the theoretical and practical study of the mining, manufacturing, and testing of ceramic materials and products as well as the design of ceramic equipment and plants.

Graduates in Caramic Engineering are employed in the ceramic industries as plant executives, research engineers, plant-control engineers, sales engineers, product-control engineers, plant designers and constructors, equipment manufacturers, consulting engineers, and ceramic chemists and technologists. Graduates of the Department at State College, which ranks fourth in registration in the United States, are successfully holding positions in all of these branches.

### CURRICULUM IN CERAMIC ENGINEERING

# For the Freshman Year, refer to page 106.

Surveying, C.E. \$200, 3 credits, is required in the summer immediately following the freshman year.

Sop	homore	Year
-----	--------	------

		CREDITS	
COURSES	First Term	Second Term	Third Term
Calculus I, II, III, Math. 201, 202, 303 Qualitative Analysis, Chem. 211 Quantitative Analysis, Chem. 212 Physics for Engineers, Phys. 201, 202, 207 Engineering Geology, Geol. 220 Mineralogy, Geol. 230 Basiness English, Public Speaking, Eng. 211, 233	4 1 1 0	4 0 4 1 0 0	400103
Elective English Ceramic Materials, Cer. E. 202 Ceramic and Mining Processes, Cer. E. 203	, and n	2	8 5
†Military Science II, Mil. 201, 202, 203 Sport Activities, P.E. 201, 202, 203	1	í	ĩ
	21	25	20

\*Students who have been certified by the Department of English as proficient in English may substitute for the courses listed Elementary German, M.L. 102. Hor six credits in one or two of the following Departments: Economics, Psychology, History and Political Science, Modern Languages, Sociology.

# STATE COLLEGE CATALOG

## Junior Year

			CREDITS	
COURSES	- 3	First Term	Second Term	Third Term
Engineering Mechanics, E.M. 311, 312, 313	- 22	. 3	3	3
Strength of Materials, E.M. 321		- 0	0	3
General Economics, Econ. 201, 202, 203		3	8	3
Drying Fundamentals and Practice, Cer. E. 301		3	0	0
Firing Fundamentals and Practice, Cer. E. 302		13	3	0
Ceramic Calculations, Cer. E. 303		0	ö	3
Ceramic Products, Cer. E. 305			0	2
Engineering Thermodynamics, M.E. 307, 308		3	3	0
Mechanical Engineering Laboratory I, M.E. 313, 314		1	ĩ	ŏ
Materials Testing Laboratory, C.E. 322		Ô.	- i	ŏ
Thermal Mineralogy, Geol. 338		. 0	3	õ
Physical Chemistry, Chem. 331			0	ő
Business Law, Econ. 307		0	ö	3
**Electives		. 3	3	3
		-		-
		21	20	21

#### Senior Year

Refractories, Cer. E. 405	0	0	3
Silicates, 1 and II, Cer. E. 403, 404	2	ž	ñ
Ceramic Laboratory, Cer. E. 411, 412, 413	3	8	3
Ceramic Designing, Cer. E. 414, 415	õ	4	4
Parometry, Cer. E. 401	1	0	ő
Technical Writing L Eng. 321	3	0	0
Elements of Electrical Engineering I. E.E. 320, 321	0	3	3
Strength of Materials, E.M. 322		0	0
Optical Mineralogy, Geol. 431, 432, 433	3	3	8
-*Electives	 3	3	3
			-
	19	19	19

All sensors are required to go on the inspection trip as part of their curriculum.

# CHEMICAL ENGINEERING

Professor E. M. Schoenborn, Head of the Department

Professors B. E. Lauer, T. C. Doody, E. E. Randolph: Associate Professor

R. Bright; Assistant Professor J. F. Seely; Instructor R. L. Overcash.†

Facilities. The laboratories of the Department of Chemical Engineering are in Winston Hall. They consist of a Unit Operations laboratory; an exhibit study room; Water and Engineering-Materials Laboratory; Electrochemical Engineering Laboratory; Fuel- and Gas-Technology Room; Experimental Rayon outfit; Destructive Distillation Installation; Dark Room for metallographic and micro-photographic study; the Graduate Research Laboratory: Unit-Processes Laboratory: Plant- and Equipment-Design Laboratory; Cellulose Laboratory.

The Chemical Engineering laboratories have suitable equipment, much of it specially designed, for the study of the main processes and plant prob-

<sup>†</sup> On leave.

<sup>.</sup> On leave to U. S. Army,

<sup>\*\*</sup> To be selected from the following fields: Humanities. Military Science III and IV, Language and Literature, Pure Mathematics, Pure Natural Science, and Social Science.

lems of the chemical engineering industries. They are supplied with direct and alternating current, gas, water, steam, compressed air, electric motors, generators, and storage batteries. They are equipped with precision and control instruments, such as refractometer, surface-tension apparatus, polariscope, potentiometer, microscopes, colorimeter, calorimeters, tintphotometer, thermocouples, and optical pyrometer. They are equipped also with filter presses, centrifuges, crushers, grinders and pulverizers, vacuum pan, stills, autoclaye, jacketed kettle, gas, water, and electrical meters, equipment designed and built, such as double-effect evaporators, heat exchangers, flow-of-fluid experimental equipment for orifices, venturi meters. pitot tubes, weir, and gauges, column still, absorption tower, crystallizer, rotary, vacuum and tunnel driers, gas furnace, resistance and arc electric furnace, rotary vacuum filter, and humidifier. An experimental refinery and hydrogenation plant for vegetable and other oils has been installed. A complete permutit softening equipment forms a unit of an experimental water-purification and -treatment system. In addition the nearby industrial plants offer opportunity for study of plant operation and problems.

Recently added to the Department of Chemical Engineering is a valuable exhibit room, where products of many chemical engineering industries are exhibited and used for instruction. They are arranged in the form of flow sheets showing the various steps in manufacturing processes.

The Department Shop is supplied with machines and tools for building and repairing equipment.

Curriculum. This curriculum provides thorough training in unit operations and unit processes, and in the methods of manufacturing industrial chemical products on a large scale. It includes basic courses in Chemistry, Physics, Mathematics, and fundamental Engineering as a background for the professional Chemical Engineering training of this Department, so that the graduate is prepared to enter any field of applied chemical work as a junior engineer.

The Chemical Engineer is expected to determine the process, the material, the design, and the economic capacity of the equipment needed. Efficient production requires exact control in every stage of the process. He must devise efficient and economical methods, discover sources of loss and the remedy, recover by-products, convert waste products, and make industrial calculations of input, output, efficiency, cuality, and cost.

North Carolina is a center of chemical industries in the South, with an annual output estimated at approximately one-fourth billion dollars. Some of the largest chemical industries of the country are located in this State, manufacturing such products as paper, fertilizers, vegetable oils, food optoducts, leather, bromine, aluminum, metallurgical products, paints and varnishes. Such industries require properly trained Chemical Engineers. Chemical Engineering offers therefore inviting opportunities to render distinct service to the welfare and comfort of the people. STATE COLLEGE CATALOG

Graduates find employment in such fields as control work and industrial research; as plant operators, superintendents of chemical industries, municipal engineers, engineers in the State and Federal health service, consulting chemical engineers, manufacturers of chemicals and of chemical equipment, chemical salesmen and representatives, developers of new chemical industries.

Ninety-three percent of the graduates of this Department are successfully engaged in Chemical Engineering work. Because chemical problems are intricate, and scientific chemical-control work in industries is required, salaries for Chemical Engineering graduates are inviting. Many graduates of this Department now hold very responsible positions.

The Department cooperates with the State Departments in their chemical problems. Facilities are available for graduate work, upon which emphasis is placed.

### CURRICULUM IN CHEMICAL ENGINEERING

For the Freshman Year, refer to page 106.

## Sophomore Year

COURSES	First Term	CREDITS Second Term	Third Term
Calculus I, II, III, Math. 201, 202, 303	4	4	4
*Business English, Public Speaking, Eng. 211, 231 Elective English Introduction to Chemical Engineering,		3	3
Chem. E. 201, 202, 203 Physics for Engineers, Phys. 201, 202, 203	1	1	2
Physics for Engineers, Phys. 201, 202, 203	4	4	4
Qualitative Analysis, Chem. 211 Quantitative Analysis, Chem. 212, 213		9	
Shopwork, M.E. 122, 123	1	1	õ
<sup>†</sup> Military Science II, Mil. 201, 202, 203	2	2	4 0 2 1
Sport Activities, P.E. 201, 202, 203	. 1	1	1
	20	20	20
Junior Ye	ar		
Engineering Mechanics, E.M. 311, 312, 313		3	3
Strength of Materials, E.M. 321	0	0	3
Organic Chemistry, Chem. 421, 422, 423 Chemical Engineering I, Chem. E. 311, 312, 313	2 4 A 1	4	4
Industrial Stoichiometry, Chem. E. 331	3	3	3
Chemical Engineering Laboratory I.			
Chem. E. 321, 322, 323	1	1	1
Physical Chemistry, Chem. 431, 432	4	4	0
Elements of Electrical Engineering 1, E.E. 320, 321	. 3	3	-0
Machine Shop I, M.E. 225, 226 Electives		2	-0 0 3
And the second s		_	-
	22	22	20

Summer requirements: Six weeks industrial employment. \*\*Pilot Plant Practice-3 credits.

 Students who have been certified by the Department of English as professer in English may substitute for the course listed German, M.L. 198, 199, 194, 293 or equivalent.
 † Or six credits in one or two of the following Departments: Economics, Psychology, History, Modern Language, Sociology.

\*\* Elective Summer of 1946.

110

#### THE SCHOOL OF ENGINEERING

Senio	ea	

		CREDITS	100 B
COURSES	First Term	Second Term	Third Term
Principles of Chemical Engineering,			
Chem. E. 411, 412, 413	. 3	3	3
Chem. E. 411, 412, 413	3	0	0
Chemistry of Engineering Materials, Chem. F. 422		12	0
Electrochemical Engineering, Chem. E. 423	0	U	3
Chemical Engineering Lab. and Design II, Chem. E. 431, 432, 433	2	2	2
Engineering Thermody namics, M.E. 307, 308	S 8	5	0
Mineralogy, Geol. 230	õ	ŭ	3
General Economics, Econ. 201, 202, 203	3	0	3
Elementary Modern Physics, Phys. 407	3	0	0
Technical Writing I, Eng. 321 Business Law, Econ. 307	ő	3	0
Rusinees Law Fron 307	0	0	3
Electives	3	3	3
	20	20	20

#### CIVIL ENGINEERING

Due to the present unstable conditions brought about by postwar reaction on engineering developments, the consolidated curriculum in Civil Engineering will be the only one offered until further notice.

> Professor C. L. Mann, Head of the Department Professor T. S. Johnson\*

Associate Professors C. R. Bramer, R. E. Stiemke

Assistant Professors C. M. Lambe, W. F. Babcock

Instructor M. E. Ray

The Department of Civil Engineering is located in the Civil Engineering Building in which the offices, classrooms, laboratories, and instrument rooms were designed and built to provide suitable facilities for efficient teaching and laboratory demonstrations.

The equipment common to general civil engineering includes surveying instruments, transis, levels, plane tables, current meters, sextants, planimeters, calculating machines, blueprint apparatus, lantern slides, and moving-picture machine. Special equipment includes precise surveying instruments and such equipment as Beggs deformeter, contour finder and other of this class.

The equipment in the Physical-Testing Laboratory, in the Cement- and Bituminous-Materials-Testing Laboratory, and in the Sanitary Laboratory, fully meets the present-day requirements for laboratory instruction.

The Soil Mechanics Laboratory has been furnished and equipped with the newest apparatus now used in laboratories engaged in the study of the action of soils relative to engineering problems dealing with structures, foundations, highway subgrades, and soil stabilization.

Civil Engineering is the oldest and most general of all the branches of modern engineering; in fact, from it all of the others have developed. The usefulness of Civil Engineering is so well recognized that a student who does not have a strong predilection for some other special branch may be safely advised to study Civil Engineering.

• On leave.

The Civil Engineering curriculum in the School of Engineering has been accredited by the Engineers' Council for Professional Development. It is a well-balanced course of study, upon the completion of which the graduate is equipped to assume the duties of junior engineer in any of the following important fields: design, construction, operation, or testing of water-power developments, railroads, highways, water supplies, sewergae systems.

The Civil Engineering Department offers a student the choice of the following options:

General Civil Construction and Building Materials Sanitary Transportation

The first two years of these curricula are the same. They begin to differentiate slightly in the junior year and more decidedly in the senior year; essentially, however, they are the same and are designed to develop in the student engineer a well-trained mind, one which reasons logically, accurately, quickly. This is accomplished by a thorough training in applied mathematics and physics, which is supplemented with practical work in the field, drafting rooms, and laboratories.

More men are practicing Civil Engineering in North Carolina than any other branch of engineering, and it is to train young men to serve under those already in the profession and subsequently to follow in their footsteps that the Civil Engineering curricula are offered.

City Management.—Students in Civil Engineering may by proper selection of their electives during the junior and senior years prepare themselves for work eventually leading to the position of City Manager.

### CONSTRUCTION & BUILDING MATERIALS ENGINEERING

#### Professor C. R. Bramer, Faculty Adviser

North Carolina's progress indicates great increase in building and general construction. Construction needs more and better-trained men to meet the immediate demands as well as to anticipate the increased demands of the future. The contractor, to be successful, must conduct his business systematically and economically. Therefore, he must learn not only general engineering technique, but also something of architecture and business methods and practices; he must delve further into construction and learn the principles involved, the methods, practices, and successful policies in use.

The contents of the curriculum in this option represent a thorough study of the needs of the industries operating in this field. This curriculum, combining construction with building materials, has been adopted to replace the former option in Construction Engineering given in the Department of Civil Engineering. It is believed that this will result in improving the training for men entering the field of contracting and construction and it also has the advantage of including subjects essential to those entering the building materials industry. Combined into this curriculum are the fundamental courses in the Civil Engineering curriculum, courses in Architecture, courses dealing with business, and special courses covering construction and building materials in the junior and senior years.

The classroom work in this option is supplemented by frequent inspection trips to projects under construction; particular emphasis is placed upon estimating, modern methods, and management of operations.

#### SANITARY ENGINEERING

#### Professor R. E. Stiemke, Faculty Adviser

Because Sanitary Engineering so vitally concerns the health of the people, and because of the progress in North Carolina in this field, the demand for men trained in Sanitary Engineering has increased.

The Sanitary Engineering option is offered to meet this need. In the main it is the curriculum in General Civil Engineering with selected courses in Bacteriology. Chemical Engineering, and Sanitary Engineering.

As there is a large demand in this State for men familiar with the design and operation of water and sewage plants, special attention is given to the actual design and practical operation of water-purification and sewagedisposal plants.

The Sanitary Engineering Laboratory equipment is similar to that used in water and sewage-plant laboratories; the student makes the same tests, using standard methods, as are made in water and sewage-plant laboratories.

The City of Raleigh water-purification plant and the College gymnasium syminming-pool filter plant are available for practical demonstration and instruction. Through the cooperation of the Bureau of Sanitary Engineering, State Board of Health, located in Raleigh, the student has an opportunity to study all phases of its works, not.only in Sanitary Engineering, but also in the broad field of public health.

Upon graduation, students are prepared to hold positions as water and sewage-plant operators, assistant resident engineers with private consulting engineers, junior engineers with state boards of health, and with the United States Public Health Service. After a few years of experience, graduates may be expected to advance to positions as superintendents of waterworks, city engineers and city managers, consulting engineers, state sanitary engineers, and senior engineers with the United States Public Health Service.

The curriculum of the Sanitary Engineering Option has been reviewed and the Laboratory and equipment inspected by the Engineers' Council for Professional Development. The Council has indicated its approval by accrediting this option.

# TRANSPORTATION ENGINEERING

#### Professor W. F. Babcock, Faculty Adviser

Advancement in study and improvements in construction in the ways and means of modern-day travel have progessed so rapidly in the last decade that each division presents a field of study and investigation of its own. The railways, the highways, the inland waterways, and the airways, each performing to some extent a specific purpose, have covered our country with a transportation system far superior to any other in the world.

In order that young engineers may be trained to carry on and continue this expansion, specialized training in colleges must be available to students who wish to follow in this field.

Among the first college curriculum subdivision in the civil engineering profession was railroad engineering; this was followed by highway engineering; now that airplane travel has become so essential, it is found necessary to associate this means of travel with railroads and highways. With this in mind, the Department of Civil Engineering is offering the option Transportation Engineering, which includes a study of railroad maintenance of way, highway location and pavement design, economics of locations, waterways, airports, public relations and regulations, coordination of the different forms of transportation.

The curriculum of this option replaces the option formerly offered in lighway Engineering and follows along the same lines, broadening the scope of study to cover the field of transportation. The curriculum for the first two years is identical with and for the third year is practically the same as the regular Civil Engineering curriculum. In the fourth year, however, the student who specializes in Transportation Engineering is given more specific instructions in those subjects pertaining to the various means of transportation.

### CURRICULUM IN CIVIL ENGINEERING

General Civil Engineering Sanitary Engineering Construction and Building Materials Engineering Transportation Engineering

For the Freshman Year, refer to page 106.

#### Sophomore Year

			CREDITS	
COURSES	Fit	at Term	Second Term	Third Term
Calculus I, II, III, Math. 201, 202, 303 *Business English, Public Speaking, Eng. 211, 231.	and	4	4	4
Elective English		3	3	3
Physics for Engineers, Phys. 201, 202, 203		4	4	4
Engineering Geology, Geol. 220		3	0	0
		3	3	3
Field Surveying, C.E. 221, 222, 223		1	0	1
Mapping, C.E. 226		0	1	0
Engineering Mechanics, E.M. 311, 312		0	3	3
†Military Science II, Mil. 201, 202, 203		2	2	2
Sport Activities, P.E. 201, 202, 203		1	1	1
		21	21	21

Surveying, C.E. s310, concurrent with Summer School, 3 credits,

\*Students who have been certified by the Department of English as profesient in English may subdituite for the courses listed Elementary French, M.L. 101, 102, 201, or equivalent. † Or six credits in one or two of the following Departments: Economics, Psychology, History and Political Science, Modern Languages, Sciology.

# THE SCHOOL OF ENGINEERING

# Junior Year

# Required

		CREDITS	
COURSES	First Term	Second Term	Third Term
Engineering Mechanics, E.M. 313 Strength of Materials, E.M. 321, 322 Materials of Construction, C.E. 321 General Economics, Econ. 201, 209, 203	····· 3 ···· 3	0 3 0 3	0 3 0 3
	9	6	6

Choice must be made of one of the following:

#### GENERAL CIVIL OPTION

Elements of Electrical Engineering,	E.E.	320	).	32	1		0	3	0
Technical Writing I, Eng. 321 Transportation Engineering I, C.E.	372,	373					0	03	0
Fluid Mechanics, E.M. 330 Hydraulics, C.E. 343							0	3	0
Engineering Thermodynamics, M.E. Electives	307						<u>0</u>	n G	33
							18	21	18

### CONSTRUCTION AND BUILDING MATERIALS OPTION

Construction Engineering I, C.E. 362, 363	0	3	3
Sanitary and Mechanical Equipment of Buildings, C.E. 365	5	0	0
Specifications, C.E. 367	0	ō	3
Architectural Details, Arch. 306	0	0	2
Building Materials, Arch. 409, 410 Principles of Accounting, Econ. 301, 302	3	3	0
Applied Psychology for Engineers, Psychol. 335, 336	3	3	0
'Electives	3	3	3
	21	21	20

### SANITARY OPTION

Elements of Electrical Engineering, E.E. 320, 321	3	3	0
Transportation Engineering I. C.E. 372, 373	0	3	3
Fluid Mechanics, E.M. 330	0	3	0
Hydraulics, C.E. 343	0	0	3
General Bacteriology, Bot. 402	0	4	0
Aquatic Biology, Bot. 473	U	0	2
Sanitary Engineering, C.E. 383	0	0	3
Treatment of Water and Sewage, Chem. E. 308	3	0	0
Electives	3	3	3
	-	-	
	18	22	20

### TRANSPORTATION OPTION

Elements of Electrical Engineering, E.E. 320, 3	21	3	3	0
Transportation Engineering I. C.E. 372, 373	~ .	0	3	3
Fluid Mechanics, E.M. 320		0	3	0
Hydraulics, C.E. 343		0		3
Engineering Thermodynamics, M.E. 207		0	0	3
Accounting for Engineers, Econ. 212		3	0	0
Business Law, Econ. 307		0	3	0
Technical Writing L Eng. 321	1	0	0	3
Electives		6	3	3

<sup>1</sup>To be selected from the following fields: Humanities, Military Science III and IV, Language and Literature, Pure Mathematics, Pure Natural Science, and Social Science.

# STATE COLLEGE CATALOG

# Senior Year

## Required

		CREDITS	
		Second Term	Third Term
Reinforced Concrete, C.E. 421, 422 Graphic Statics, C.E. 423 Theory of Structures, C.E. 431, 432 Structural Design, C.E. 426, 427	3	3	0
Theory of Structures, C.E. 423	. 3 0	0	0
Structural Design, C.E. 426, 427	0	3	3
	-	9	3
Choice must be made of one of	the folle	owing:	-
GENERAL CIVIL O			
Materials Twiting Lakorstory, CE. 322, 323, Arplied Attoneumy, CE, 431, 472, Smilary Denremy, Lakorator, CE, 431, 482, Severace, CE, 486, Severace, Severace, Sev	0	1	1
Applied Astronomy, C.E. 453 Transportation Engineering II C.E. 471 479	- 4	03	0
Sanitary Engineering Laboratory, C.E. 481, 482	ĩ	1	0 0 3 3 5
Waterworks, C.E. 485	3	0	0
Soil Mechanics, C.E. 435	0	ő	3
Aerial Surveying, C.E. 455	0	0	3
Electives		3	3
	21	20	19
	21	20	19
CONSTRUCTION AND BUILDING		ALS OPTIC	ON
Elements of Electrical Engineering, E.E. 320, 321	3	3	0
Elements of Electrical Engineering, E.E. 320, 321 Electrical Equipment of Buildings, F.E. 343 Construction Engineering II, C.E. 461, 462, 463 Marketing Methods and Sales Management, Econ. 311, 312, or Corporation Finance, Econ. 320, and Labo	1.	3	3
Problems, Econ. 331	3	3	0
Personnel Management, Econ. 333	. 0	Ŭ	3 3
Problems, Econ. 331 Personnel Management, Econ. 333 Business Law, Econ. 307 'Electives	3	3	3
	19	21	18
SANITARY OPTI	ON		
Materials Twiling Lakorstory, C.E. 332, 283 Soni Metanica, C.E. 43 Saniary Denimetring Induction Control (Control (Contr		1	1
Soil Mechanics, C.E. 435	. 0	0	3
Sanitary Engineering Laboratory, C.E. 481, 482	. 1	1	0
Sewerage, C.E. 486	Č Ő	3	0
Water Purification, C.E. 488	U	3	0
Sewage Disposal, C.E. 489 Financing of Sanitary Utilities, C.E. 483	0	0	3
Business Law, Econ. 307	. 3	0	õ
Technical Writing I, Eng. 321	. 0	0	0 0 3 3 3 3
	20	20	19
	20	20	19
TRANSPORTATION O	OPTION		
Materials Testing Laboratory, C.E. 322, 323	. 0	1	1
Transportation Engineering II. C.E. 471, 472	- 4	0	0
Transportation Design, C.E. 473	2	0	õ
Materinia (testing Laboratory, C.E. 322, 523 Applied Astronomy, C.E. 453 Transportation Engineering II, C.E. 471, 472 Transportation Design, C.E. 473 Highway Engineering, C.E. 474, 475 Soll Mechanics, C.E. 475	0	3	0 3 3
Soil Mechanics, C.E. 435 Business Organization, Econ. 305 Electives	č	0	8
Electives	. 3	3	6
	19	19	19

NOTE: Until further notice, the above junior and senior curricula will be superseded by the consolidated curriculum shown on the following page.

#### THE SCHOOL OF ENGINEEPING

### IUNIOR AND SENIOR CONSOLIDATED CURRICULUM IN CIVIL ENGINEERING\*

## Junior Year

COURSES	First Term	CREDITS Second Term	Third Term
Engineering Mechanics, E.M. 313 Strength of Materials, E.M. 313, 322 E.E. 320, 321 Elements of Electrical Kontineering Fuld Mechanics E.M. 330 Transportation Engineering I, C.K. 372, 373 Transportation Engineering I, C.K. 372, 373 Transportation Engineering I, C.K. 471 Engineering Thermodynamics, M.E. 907 General Economics, Econ. 301, 202, 203 Elective	3	0 3 0 3 0 3 0 3 0 3 0 3 0 3 3 2 1	0 30 00 30 30 33 33 15
Senior Year			
Reinforced Concrete, C.E. 421, 422 Graphic Statics, C.E. 433 Structural Design, C.E. 426, 427 Sall Machanics, C.E. 435 Applied Antonomy, C.E. 435 Asplied Antonomy, C.E. 435 Asplied Antonomy, C.E. 435 Severage, C.E. 435 Severage, C.E. 435 Severage, C.E. 435 Construction Engineering I, C.E. 362, 363 Specifications (C.E. 367 Bailings Law, Econ. 307 Electives		3033000101130003	0 0 3 0 0 4 1 0 0 0 1 0 8 8 3 20
	20	20	20

#### DIESEL ENGINEERING

In co-operation with the Navy Department, the college recently has completed a new Diesel Engineering Laboratory Building. The building cost approximately \$200,000 and the naval equipment installations are complete and modern.

The facilities of the Diesel Laboratory are now being devoted entirely to the war program through the training of officers for Diesel propelled ships in the United States Navy.

It is anticipated at the termination of the war that the building and equipment will be available for regular college instruction including both basic fundamental courses for undergraduate students and special courses in design, production, and research for graduate students.

Beginning students interested in this field, for the present, register in Mechanical Engineering, Diesel Engineering is a specialty within this field and the facilities for Diesel instruction will undoubtedly be available for civilian students by the time they have received their fundamental training in Mechanical Engineering.

<sup>•</sup> Due to the present unstable conditions brought about hy postwar reaction on engineering developments, this curriculum will be effective until further notice.

# DEPARTMENT OF ELECTRICAL ENGINEERING

### C. G. Brennecke, Head fo the Department

Professors William Hand Browne, Jr., J. E. Lear; Associate Professors R. R. Brown, K. B. Glenn, L. M. Keverr; Assistant Professors R. J. Pears-al, E. W. Winkley; Laboratory Technician J. H. Nichols.

Buildings and Equipment. The Department is housed in Daniels Hall. This is an L-shaped building, the main part of which is four stories of brick, stone and steel construction, with a two-story wing of shop construction.

Laboratories. The laboratories can be classified as follows: Dynamo, Communications and Transmission; Photometric, Measurements, Standards, High-Tension, and Electronies. The Dynamo, High-Tension, and Electronies Laboratories are located in the wing; all the others are in the basement of Daniels Hall.

The Dynamo Laboratory is sixty by eighty feet in area. Here the characteristics and operating conditions of representative types of machines are studied. This laboratory has a total of approximately 300 kva of motors and generators (about 50 in all). There are about 150 kilowatts available in motor-generator sets, and rotary converters.

There are also available approximately 150 kva of transformers for tests. The laboratory is well supplied with accessory equipment, such as load units, field rheostats, starting boxes, prony brakes, inductances, capacitors, and other devices.

The Communications and Transmission Laboratory is equipped for measurements and tests on communication and power-transmission circuits. It contains an outstanding artifical power-transmission line on which power-transmission-line characteristics can be duplicated for study and testing. A complete long-line telephone system, with two two-way repeaters and associated apparatus, arranged for all usual and several special tests, is another feature of this laboratory. Other equipment for study and test includes an artificial line for the study of corona effects, artificial telephone lines, telephone central-station equipment, telegraph equipment, teletypewriter equipment, and a complete 100-line private automatic exchange with its associated appliances. Test equipment includes standard oscillators, transmission-measuring sets, noise-measuring sets, power-level instruments, audibility meters, attenuators, and apparatus for measuring distortion.

The Photometric Laboratory is housed in a room especially fitted up for the purpose. The equipment includes photometric standard lamps, two 300-cm. Leeds & Northrup photometer bars, a 36" Ulbrecht spherical photometer, two Macbeth-Evans Illuminometers, several Weston footcandle meters, and other portable photometers. There is also the usual list of accessories, such as sight boxes of the Lummer-Brodhun and flicker types, rotating disks, and screens. The Measurements Laboratory is arranged for making standard and special tests and measurements on the fundamental electrical units. The apparatus includes standards of resistance, inductance and capacitance, with special bridges for the measurement of each, Fahy permeameter and Epstein core-loss test sets for magnetic measurements on iron and steel, a double-bridge and oil-bath arrangement for conductivity measurements, and other special test appliances.

The Standards Laboratory is arranged for making accurate calibration tests on all types of electrical instruments. There are two specially designed test tables equipped with convenient means of controlling current and voltage. A large number of high-quality instruments of all types is prodied. These include standard cells, a Ledesh-Northron Typpe K and a Queen-Gray Potentiometer, standard voltmeters, ammeters, wattheours meters, transformers, resistances, condensers and inductances. Certificates of accuracy from the National Bureau of Standards in Washington, D. C., have been obtained for many of these instruments. Special equipment used includes a sine-wave generator, a constant-speed frequency set, Silabee current- and potential-transformer test sets, and others.

The High-Tension Laboratory has a 7<sup>+</sup> kva, 50,000-volt, and a 10-kva, 100,000-volt transformer. The induction regulators, which go with these transformers make it possible to vary the voltage from zero to 150,000 volts. There is also standard oil-testing equipment for testing transformer oil, a standard spark gap, and numerous insulators of various types for carrying on routine tests. Frequent use is made of the cathode-ray oscillograph in studying surges and other disturbances.

The Electronics Laboratory.—The Electronics Laboratory is arranged for testing electronic devices and their associated equipment and circuits. It is supplied with the various types of electron tubes, including vacuum tubes, gaseous tubes, phototubes, mercury-vapor tubes, eathode-ray tubes, and apparatus for operating and testing them. The test equipment includes vacuum-tube bridge and test sets, oscilloscopes, television equipment, and the various sensitive instruments required for electronic measurements.

Instrument Room and Shop. A centrally located instrument Room screes all of the laboratories. Instruments are issued upon requisition and returned at the end of the laboratory period. They are kept in repair by a competent man, who divides his time between the care of the instruments and the Departmental Shop, which adjoins the Instrument Room. The Shop is fitted up with sufficient tools for making all minor repairs to laboratory equipment, as well as apparatus for special research.

The Storage-Battery Room contains two 120 volt. 100 ampree hour batteries; two 12-volt, 200-ampree-hour batteries, the complete battery and counter emf cells for operating the automatic telephone station, and porttable cells of various types. Motor-generator sets, and mercury-vapor and tungar rectifiers are provided for charging the batteries.

The Purpose of the Curriculum is to train young men for active work in a wide and diversified field. The electrical industry demands, above all else, a thorough preparation in the sciences underlying all branches of engineering, a broad foundation in fundamental electrical theory, and a clear understanding of the characteristics of electrical machinery and systems. These factors are essential for success, whether it be in the design and manufacture of electrical equipment, in power production and utilization, or the fields of communication and signaling, since in all these branches of the industry technical advances are being made with increasing rapidity. With this object in view, the curriculum in Electrical Engineering includes comprehensive training in mathematics, physics, and chemistry the fundamental sciences-and adequate training in allied branches of engineering. All courses are accompanied by coördinated work in the laboratory and intensive drill in the applications of theory by means of carefully planned problems. In the senior year, the student is offered two options, one in the fundamentals of communication, the other in the field of industrial applications.

The curriculum includes a thorough drill in the preparation of technical reports. There is a decided trend in industry to select for high administrative positions men who have had good technical training and have in addition developed executive ability. The electives included in the curriculum in Electrical Engineering enable a student inclined toward executive work to take nonprofessional courses which deal with the economic and sociological problems of the day. On the other hand, those students who prefer the more technical phases of engineering can select electives specially helpful in that particular branch of the profession into which they wish to go. Students are urged to plan as early as possible a worth-while group of elective courses so chosen as to round out their curriculum.

Each student is also required to spend at least six weeks in satisfactory industrial employment before receiving his degree.

Close coördination in the work of the American Institute of Electrical Engineers is effected through a student branch at the College, which meets twice a month, through the State Section of the Institute, which meets several times during the year, and through the regional meetings of the Institute, one section of which is organized as a student-activities conference.

# CURRICULUM IN ELECTRICAL ENGINEERING

# For the Freshman Year, refer to page 106.

Surveying, C.E. s200, 3 credits, is required in the summer immediately following the freehman year.

#### Sonhomore Year

		CREDITS	
COURSES	First Term	Second Term	Third Term
Calculus I, II, III, Math. 201, 202, 303	4	t	4
Physics for Engineers, Phys. 201, 202, 203 *Business English, Public Speaking, Eng. 211, 231, au	nd 4	4	4
Elective English		3	3
General Economics, Econ. 201, 202, 203 Forge and Welding Practice, M.E. 128	3	3	3
†Electrical Engineering Fundamentals, E.E. 201, 202		3	0
Military Science II, Mil. 201, 202, 203	5	2	2
Sport Activities, P.E. 201, 202, 203 .	1	1	1
	-	-	20
	20	20	20
Junior Year			
Engineering Mechanics, E.M. 311, 312, 313	3	8	3
Elementary Mechanism, M.E. 215, 216, 217	e 1	1	1

Engineering Thermodynamics, M.E. 307, 308, 309	2.	3	3
Mechanical Engineering Laboratory I. M.E. 313, 314, 315	1	1	1
Fundamentals of Electronics, E.E. 315	0		3
Differential Equations, Math. 431a	3	1	0
Elementary Modern Physics, Phys. 407	0	3	0
Electrical Engineering, E.E. 301, 302, 303	4	4	4
Electrical Engineering Laboratory I, E.E. 311, 312, 313	2	2	2
Electives	28	3	3
	÷.	-	-

Summer requirements: Six weeks industrial employment.

### Senior Year

Engineering Economics, LE, 301	3	0	0
Accounting for Engineers, Econ. 212	0	3	0
Business Law, Econ. 307	0	0	3
Strength of Materials, E.M. 320	3	0	ō
Electrical Industry, I.E. 402	0	3	0
Fluid Mechanics, Hydraulic Machinery, E.M. 330, 331	3	3	0
Illumination, E.E. 437	0	0	3
Technical Writing, Eng. 321	0	0	3
Alternating Current Machinery, E.E. 401, 402	1	1	0
Electric Transmission, E.E. 403	0	0	4
Electrical Engineering Laboratory, E.E. 411, 412, 413 First Option	2	2	2
Electric Power Applications, E.E. 421, 422, 423		1	3
Electric Communication, E.E. 425, 426, 427 Second Option	3	3	3
Electives	3	3	8
	21	21	21

NOTE: For the duration of the war the above curriculum will be superseded by the modified curriculum shown on the following page.

Studenia who have been certified by the Department of English as proficient in English may abstitute for the courses listed a Modern Language.
 Sophomore class is divided into two sections, ose half taking Fundamentals and Metal Work as acheduled, the other half taking the Metal Shop during the Fall Term and the Electrical Engineering Fundamentals the second and third terms.

t Or 6 credits in one or two of the following Departments: Economics. Psychology. History and Political Science, Modern Languages, Sociology.

# CURRICILLUM IN ELECTRICAL ENGINEERING

# (Modified curriculum as now offered for the duration of the war)

#### For the Freshman Year, refer to page 106.

Surveying, C.E. s200, 3 credits, is required in the summer immediately following the freshman year.

#### Sophomore Year

		CREDITS	
COURSES	First Term	Second Term	Third Term
Calculus I, H. HI, Math. 201, 202, 303 Physics for Engineers, Phys. 201, 202, 203 *Business English, Public Speaking, Eng. 211, 231, a	4 4	4	4
Elective English General Economics, Econ. 201, 202	3	3 3 0 3 2 1	3
Forge and Welding Practice, M.E. 128	Ó	õ	3
Electrical Engineering Fundamentals, E.E. 201, 202, 2 Military Science II, Mil. 201, 202, 203	2	3	3
Sport Activities, P.E. 201, 202, 203	1		0 3 2 1 20
	20	20	20
Junior Year			
Engineering Mechanics, E.M. 311, 312, 313 Elementary Mechanism, M.E. 215, 216, 217	1	3	3
Engineering Thermodynamics, M.E. 307, 308, 309 Mechanical Engineering Laboratory I, M.E. 313		1 3 0 4 2 4	3
Differential Equations, Math. 431a	. 3	ŏ	ŏ
Differential Equations, Math. 431a Electrical Engineering, E.E. 301, 302, 303 Electrical Engineering Laboratory I. E.E. 311, 312, 313	3 2	4 2	4
Fundamentals of Electronics, E.E. 315, 316 Electives		4	3 0 4 2 4 3
Electives		-	-
	20	20	20
Summer requirements: Six weeks industrial emplo	yment.		
Senior Year			
Pleasanth of Matasiala P.M. 2011		3	0
Strength of Materials, E.M. 321 Engineering Economics, I.E. 301	. 3	0	
Technical Writing, Eng. 321 Fluid Mechanics, E.M. 330 Alternating Current Machinery, E.E. 401, 402	0 3	ě	3
Alternating Current Machinery, E.E. 401, 402	. 4	4	0
Electric Transmission, E.E. 403 E.E. Laboratory, E.E. 411, 412, 413	0 2 3	2	42
Electric Transmission, E.E. 403 E.E. Laboratory, E.E. 411, 412, 413 Electric Communications E.E. 425, 426, 427 Ultra High Frequency Techniques, E.E. 445, 446, 447	. 3	4 0 2 3	030042348
Ultra High Frequency Techniques, E.E. 445, 446, 447 Electives		3	4 3
	-	-	-

Students who have been certified by the Department of English as proficient in English may substitute for the course listed a Modern Language.
 † Or siv credits in one or two of the following Departments: Economics, Psychology, History and Political Science, Modern Language, Sociology.

22

19

19

# GENERAL ENGINEERING

### The Curriculum in Engineering Leading to the Degree, Bachelor of Science in Engineering

# Professor G. Wallace Smith, Administrative Officer

We live in a world of applied science; for that reason, the cultured gentleman of the twentieth century must know something of Engineering.

Engineering is not only a means of carning a livelihood; it is also a culture, a manner of thinking and living. It is founded upon the pure sciences of Mathematics. Physics, and Chemistry. It deals largely with Materials, Methods, Men, and Moncy. There appears to be an increasing demand for a curriculum which will offer to young men the opportunity to study Engineering as a field of culture, with no specific purpose of specialization but solely with the idea of obtaining a well-balanced thoroughly rigorous training and discipline in the basic principles of Engineering. Largely for this reason this curriculum is offered, and it omits no essential foundation stone in the present recognized Engineering curricula. The freshman year is identical with the other Engineering curricula. The sophomore, junior, and senior years maintain the basic fundamental courses, but the special technical courses as required in the other Engineering curricula are replaced by electives, which may be chosen according to the major interest of the student. However, a number of these electives must be chosen from courses that are outside of the technical and special technical fields.

The advantages of this curriculum are:

The student acquires a broad training in the basic principles of Engineering.

He has more electives and more freedom in the choice of these electives than in the specialized curricula.

If the student upon entering college is in doubt as to what particular field of specialization he desires, this curriculum will enable him to start his academic training and complete his first full year without losing time or credits required in any of the specialized curricula.

In his second year the student will receive the basic training required of all the engineering curricula and have an opportunity to elect courses that will prepare him for future study in some particular field of specialization in which he might be interested.

The proper use of electives throughout the last three years will, therefore, enable the student to complete the requirements for a degree in this curriculum and at the same time obtain a considerable number of credits for use in some specialized curricula, so that he can return to school for not more than one year and receive a degree in the particular field of study in which he has become interested.

### STATE COLLEGE CATALOG

# CURRICULUM IN GENERAL ENGINEERING

### For the Freshman Year, refer to page 106.

#### Sophomore Year

		00000000	
COURSES	First Term	CREDITS Second Term	The last the same
	Firse Lerm	Second Term	Third Term
Calculus I, II, III, Math. 201, 202, 303	4	4	4
Physics, Phys. 201, 202, 203 Business English, Public Speaking, Eng. 211, 231, 1	and a		•
	3	3	3
-Military Science II, Mil. 201, 202, 203 or Alternate	2	3 2 1	2
Sport Activities, P.E. 201, 202, 203 'Electives	1	1	3 2 1 6
- Sieccives		-	-
	20	20	20
Junior Year			
Sumor rear			
Engineering Mechanics, E.M. 311, 312, 313	3	3	3
Strength of Materials, E.M. 321	. 0	0	3
Engineering Geology, Geol. 220 .	0	0	3
Engineering Mechanics, E.M. 311, 312, 313 Strength of Materials, E.M. 321 Engineering Geology, Geol. 220 Thermodynamics, M.E. 307, 308 Mechanical Engr. Lab. J. M.E. 313, 314 Fernomic Eon 201 202 203 or other Social Science		1	ő
		1 3 3	3
"Military Science III, Mil. 301, 302, 303 or Alternate	3	3	33300336
'Electives	6	6	6
	19	19	21
Senior Year			
Senior rear			
Elements of Elect. Engr. I. E.E. 320, 321	. 0	3	3
Elements of Elect. Engr. Lab. II, E.E. 325, 326	0	1	1
Theory of Structures, C.E. 431, 432	0	3	3
Fluid Mechanics, E.M. 330 Accounting I, Econ. 301, 302, 303		3	3
Strength of Materials, E.M. 322	3	0	ō
Business Law, Econ. 307 Military Science IV, Mil. 401, 402, 403 or Alternate	3	0	0
'Electives	. 3	035	3 1 3 0 3 0 0 3 6
		-	
	21	19	19

<sup>&</sup>lt;sup>1</sup>Students who have been certified by the Department of English as proficient in English may substitute for the courses listed a Modern Language.

may substitute for the course listed a Modern Language. 20 ° 6 e-mills in one or two of the following departments: Economics, Psychology, His To be an ended to be a substitute of the substitute of the substitute of the substitute Language and Listerature, Pure Mathematics, Pure Natural Science, and Social Science. <sup>4</sup> Free elective, except that not more than 30 term credits may be chosen from the tehnical or special technical course in the School Science.

stemman or special ucefinical couries in the School of Engineering. <sup>5</sup> Students who contemplate the addition of a fifth year in Engineering for the purpose of obtaining a professional degree will consult the head of the department in which be intends to major and make such substitutions for the Engineering course offered in this curriculum as are necessary for the satisfactory completion of the technical requirements of the degree sought.

# GEOLOGICAL ENGINEERING

# Professor Jasper L. Stuckey, Head of the Department Assistant Professors John M. Parker," E. L. Miller, Jr.

Function and Facilities.—The function of the Department of Geology is twofold: first, to offer service courses required as prerequisites in the Agricultural, Educational, and Engineering curricula; second, to administer the curriculum in Geological Engineering.

The classrooms, laboratories, and offices of the Department are in Primrose Hall. The equipment includes a varied collection of minerals, rocks, and fossils, illustrating the materials of different parts of the earth's crust; laboratory equipment for carrying on qualitative chemical and blowpipe examination of minerals and rocks; microscopes and other optical equipment; facilities for making thin sections of rocks and minerals; geological models; a collection of topographic maps and geologic folios illustrating important and typical areas in the United States; laboratory testing equipment for mineral preparation and concentration; equipment for geophysical exploration.

The Curriculum is designed to train young men in the fundamentals of engineering with its special application of geology. Many engineering undertakings, especially major construction projects, such as large dams and reservoirs, tunnels, large buildings, depend for success on exact knowledge of their geological setting. On the other hand, such geological problems as the economical development of mineral resources require the use of the precise methods of engineering. The curriculum combines these two sorts of information and training so necessary to success in this important specalized field.

Professional Outlook.—Geological engineering is a new and rapidly growing field of engineering. Geological engineers are unique in that a number of varied fields are open to them. They are in demand by State and Pederal Surveys, by oil and mining companies for service here and abroad, by cities and municipalities, by engineering construction companies, by technical schools as teachers, and by many others.

For the young man who wants to live and practice his profession in the South this curriculum offers excellent training in the application of geological science to engineering construction, especially in foundations. The importance of this relationship has been emphasized in recent years by failures of engineering works such as dams, bridges, buildings, and highways, caused by the lack of thorough geological investigations.

The problem of supplying water to our growing cities and to the thousands of small communities and farms in the South is one that the geological engineer is well-trained to solve.

Many large cities have become aware of the importance of geological knowledge in subway construction, water distribution, building and bridge

• On leave.

foundations, etc., and have geological engineers to handle problems which arise from such work. In the future, more of this kind of underground exploration will be performed in the interests of safety and economy.

The greatly increased transportation of the world in the next few years will tax heavily all of our transportation facilities, and harbors, rivers, coastal erosion, inland waterways, highways, railroads, and airports will demand many geological engineers.

The Southeast offers tremendous possibilities to geological engineers who are interested in the mineral industries. Here in this region are deposits of iron, coal, phosphates, mica, feldspar, spodumene, copper, nickle, kaolin, cyanite, barite, limestone, pyrophyllite, marls, and other minerals.

A graduate of this curriculum is trained to follow two broad fields of engineering either in the United States or in foreign countries: one, the application of geology to engineering work, and the other, the application of geology in the mineral industries.

### CURRICULUM IN GEOLOGICAL ENGINEERING

For the Freshman Year, refer to page 106.

### Sophomore Year

			CREDITS	
COURSES	Fir	st Term	Second Term	Third Term
Calculus J, II, 111, Math. 201, 202, 303 *Business English and Public Speaking, Eng. 211.	231	4	4	4
and Elective English		3	3	3
Qualitative Analysis, Chem. 211		4	0	0
Quantitative Analysis, Chem. 212 Physics for Engineers, Phys. 201, 202, 203		0	4	0
Physics for Engineers, Phys. 201, 202, 203		4	- A.	4
Engineering Geology, Geol. 220		3	0	0
Historical Geology, Geol. 222		U	3	0
Mineralogy, Geol. 230		0	0	3
Geomorphology, Geol. 223	1000	0	0	3 3 2 1
fmilitary Science 11, Mil. 201, 202, 203		2	2	2
Physical for Engineers, Phys. 201, 202, 283 Bartontesing Goology, Cock. 220 Mineralogy, Geol, 230 Geomorphology, Geol, 233 TMilltary Science II, Mil. 201, 202, 203 TMilltary Science II, Mil. 201, 203		1	0 3 0 2 1	1
		21	21	20
		21	21	20
Junior Yea	r			
Engineering Mechanics, E.M. 311, 312, 313		8	8	8
Fluid Mechanics, E.M. 330 Strength of Materials, E.M. 321 Elements of Electrical Engineering, E.E. 320, 321		0	õ	8
Strength of Materials, E.M. 321		õ	ŏ	3
Elements of Electrical Engineering, E.E. 320, 321		3	3	ō
Physical Chemistry, Chem. 331		5	õ	õ
Physical Chemistry, Chem. 331 Theoretical Surveying, C.E. 221, 222		3	3	Ó
Field Surveying, C.E. 225	. <u>`</u> .	1	0	0
Mapping, C.E. 226		0	1	0
Stratigraphy and Index Fossils, Geol. 361		3	0	0
Incoretical Surveying, C.E. 221, 223 Mapping, C.E. 226 Stratigraphy and Index Fossils, Geol. 361 Petrology, Geol. 443 Advanced Mineralogy, Geol. 332		õ	0	4
Advanced Mineralogy, Geol. 332		0	3	0
Structural Geology, Geol. 352		ō	4	0
Structural Geology, Geol. 352 Geophysics, Geol. 353		0	0	4
Electives		3	3	3

Students who have been certified by the Department of English as proficient in English may substitute Modern Language for the courses listed.

20

20

126

<sup>†</sup> Or six credits in one or two of the following departments: Economics, Psychology, History and Political Science, Modern Languages, Sociology.

### Senior Year

COURSES	First Term	CREDITS Second Term	Third Term
General Economics, Econ. 201, 202, 203 Business Law, Econ. 307 Optical Mineralogy, Geol. 431, 432, 433 Engineering Thermodynamics, M.E. 307 Technical Writing I, Eng. 221 Economic Geology, Geol. 141, 422, 413 Economics Geology, Geol. 4142, 414 Geological Surveying, Geol. 445 Mining Engineering, Mine Design, and Ore Pressing,	0 3 3  3  0		3 0 3 0 3 0 4
Geol. 471, 472, 473 Electives	: 3	3	33

# INDUSTRIAL ENGINEERING

### Under the supervision of the Mechanical Engineering Department until further notice.

North Carolina has an abundance of natural resources, and its industries are progressing steadily, which facts mean that there are increasing needs for educated personnel and informed leaders to deal with the complexities of modern industries.

Engineers have had a surprisingly large share in America's amazing industrial progress through their engineering knowledge and the adaptation of engineering methods and approach to the solution of industrial problems. To be even more effective in industry and modern life, engineers should, to their study of engineering, add knowledge of the economic and social sciences since they must deal, not only with the materials and forces of nature, but also with men, money, and mfäris, in their industrial relations.

The aim of the curriculum in Industrial Engineering is to prepare students to enter the employ of industries as engineering graduates, then through experience, to develop into positions of responsibility and service, and thus to meet the demands of industries for men educated as engineers with special preparation for the activities of industries.

The curriculum provides thorough education in the fundamentals of engineering, with a three term course in each Mechanical and Electrical Engineering. Accounting, Economics, and Psychology are emphasized. The special technical courses apply engineering methods in the studies of industry, to the end that students may learn to make engineering, economic, and social analyses concurrently, and to apply them to the conduct of enterprises.

Electives from engineering and other courses, approved by the adviser, offer opportunity for the development of individual aptitudes. Students in Industrial Engineering get class and laboratory instruction from other

<sup>•</sup> On military leave.

Engineering Departments and from other courses, which are correlated and extended by the Industrial Engineering courses.

The classrooms and offices of Industrial Engineering are in rooms 125 to 132, on the first floor of 1911 Building.

The purpose of the Furniture Option is to train young men, who are interested in wood industries and want a practical and scientific insight into the production of furniture, to enter the field of actual production of modern furniture and to lay a foundation for future work as managers. or executives in the wood products industries.

### CURRICULUM IN INDUSTRIAL ENGINEERING

(Due to the present unstable conditions brought about by postwar reaction on engineering developments, this curriculum will be effective until further notice.)

#### For the Freshman Year, refer to page 106.

#### Sophomore Year

			CREDITS	
COURSES	Fi	nst Term	Second Term	Third Term
Calculus I, II, III, Math. 201, 202, 303 *Business English, Public Speaking, Eng. 211, 231,		4	4	4
Elective English	and	3	3	
Physics for Engineers, Phys. 201, 202, 203		4	2	ž
General Economics, Econ. 201, 202, 203		4	3	4 2 3 2
Shopwork, M.E. 124, 125, 126		2	2	2
Industrial Organization, I.E. 101, 102, 103		8	3 2 3 2	3
†Military Science II, Mil. 201, 202, 203		2	2	2
Sport Activities, P.E. 201, 202, 203		1	1	1
		22	22	22
Junior Yes	ır			
Engineering Mechanics, E.M. 311, 312, 313		3	3	3
Strength of Materials, E.M. 321		õ	ö	3
Engineering Thermodynamics, M.E. 307, 308, 309		3	3	3
Mechanical Engineering Laboratory I, M.E. 313, 314 Machine Shop II, M.E. 22", 228, 229	. 315	ĩ	1	ī
Machine Shop II, M.E. 22", 228, 229		1	1	1
Factory Equipment, M.E. 224		3	0	0
Principles Accounting, Econ. 301, 302, 303 Management Engineering, I.E. 201, 202, 203		3	3	3
Management Engineering, I.E. 201, 202, 203 Motion and Time Study, I.E. 322		3	3	3
Electives		3	3	0
Filectives .		3	1 3 3 3 3	1 0 3 3 0 3
		20	26	20
Summer requirement: Six weeks industrial employment	ent.	20	24	20
Senior Yea	IT.			
Technical Writing I. Eng. 321		0	3	0
Business Law, Econ. 307		3	ñ	ő
Industrial Psychology, Psychol. 338		3	0	
Materials of Construction, C.E. 321		3	ñ	0
Elements of Electrical Engineering, E.E. 320, 321, 3	22	3	3	3
Electrical Engineering Laboratory, II, E.E. 325, 326	, 327	1	1	1
Engineering Economics, I.E. 301		0	3	0
Electrical Industry, I.E. 402		ő	1 3 3 0	3031 0033 86
Industrial Engineering Problems, I.E. 312, 313 Investigation and Report, I.E. 433		0	3	3
Electives		2	6	2
Elessises		0	0	_
		19	19	19

\*Students who have been certified by the Department of English as proficient in English may substitute Modern Language for the course listed. 1 Or six credits in one or two of the following departments: Economics, Psychology, History and Political Science, Modern Languages, Scollogy, Ethica and Religion.

# INDUSTRIAL ENGINEERING-FURNITURE OPTION

### Under supervision of Mechanical Engineering Department until further notice.

### For the Freshman Year, refer to page 106.

# Sonhomore Year

	Terms	and (	Credits
COURSES	F	w	S
Calculus I, II, III, Math. 201, 202, 203	4	4	4
"Business English, Public Speaking, Eng. 211, 231, and Elective English	3	- 3	3
Physics for Engineers, Phys. 201, 202, 203	4	4	
Physics for Engineers, Phys. 201, 202, 203 General Economics, Econ. 201, 202, 203			3
Shopwork, M. E. 124, 125, 126	2	2	2
	3	ō	ō
Industrial Management, Econ. 325, 326	0	3	0 3 2
Military Science, II. Mil. 201, 202, 203	2	2	2
†Military Science, II, Mil. 201, 202, 203 Sports Activities, P. E. 201, 202, 203	1	1	1
	22	22	92

### Junior Year

Engineering Mechanics, E. M. 311, 312	3	a (
Strength of Materials, E. M. 321	0	0 2
Strength of Materials, E. M. 321 Engineering Thermodynamics, M. E. 307, 308, 309	3	3 5
Mech Eng Tab T M E 313 314 315	1	1 1
Forest Products, Forestry 422	0	3 0
Lumber Sepsoning and Grading, Forestry 321	3	0 0
Forest Products, Forestry 422 Lumber Seasoning and Grading, Forestry 321 Fabric Structure and Analysis. Textiles 235, 236	2	2 (
Fabric Testing, Textiles 343	0	0 1
Accounting, Econ. 212	3	0 0
Accounting, Econ. 212 Motion and Time Study, I. E. 322	0	3 0
Management Engineering, I. E. 201, 202, 203	3	3 :
Factory Layout and Equipment, M. E. 224	D	0 3
Factory Layout and Equipment, M. E. 224	3	3 2
	-	
same of the second s	21	21 17

Summer requirement: Six weeks industrial employment.

# Senior Year

Technical Writing, I. Eng. 321	3	0	0
Business Law, Econ. 307	3	0	0
Industrial Psychology, Psychol. 338 Timber Preservation, Forestry 301	0	0	3
Timber Preservation, Forestry 301	3	0	0
		3	0
Labor Problems, Econ. 331	3	0	0
Labor Problems, Econ. 331 Industrial Relations, Econ. 332	0	3	0
	ñ	õ	3
Elements of Electrical Engineering, E. E. 320, 321, 322	3	3	3
Electrical Engineering Laboratory II, E. E. 325, 326, 327	ï	1	1
Electrical Industry, I. E. 402	ñ	3	0
Industrial Engineering Problems, I. E. 312, 313	ñ	3	3
Engineering Economics, I. E. 301	ñ	0	3
Electives	2		
the second secon			
	19	19	19

• Students who have been certified by the Department of English as proficient in English may substitute Modern Language for the courses listed. † Or six credits in one or two of the following departments: Economics, Psycholagy, History and Political Science, Modern Language, Sociology, Ethics and Religion.

#### MECHANICAL ENGINEERING

#### Professor L. L. Vaughan, Head of the Department

Professors H. B. Britzey, E. G. Hoefer, R. B. Rice, W. G. Van Note, F. B. Wheeler: Associate Professors W. S. Bridges, T. C. Brown, \* W. E. Soklinghaux; Assistant Professors W. E. Adams, R. L. Cope, P. B. Leonard; Instructors T. E. Hyde, W. Lowen, C. W. Maddison, W. G. Mendenhall, W. M. Neake, E. H. Stinson.

Purposes. The Mechanical Engineer is primarily a designer and builder of machines and other equipment for use in manufacturing processes, transportation, and the generation of power. He is responsible for the conservation and economical use of the power-producing resources of the world through the application of the proper equipment in each field of production. He is called upon to take charge of the executive management of the manufacturing, transportation, and power industries. For the Mechanical Engineer to be well grounded in his profession, he must be thoroughly familiar with both the science and the art of engineering.

The curriculum in Mechanical Engineering begins with a thorough training in Mathematics. Physics, and Chemistry, as a foundation for the technical work which is later developed along several parallel lines. The student is taught how these fundamental sciences are applied to the physical properties of the materials of construction, and to the transformation of heat energy into work and power. This is accomplished by means of courses in Drafting, Metallurgy, Mechanics, and Thermodynamics; through the work in the wood shop, forge and welding shop, foundry, and machine shop; by the tests performed in the mechanical laboratories.

Through the training offered in this curriculum it is hoped that the young graduate, after gaining some experience in industry, will be qualified to accept the responsibilities which will be imposed upon him in the professional field of Mechanical Engineering.

Buildings and Equipment. The Department of Mechanical Engineering occupies both Page Hall and the Park Building. In Page Hall are the offices of the Department, offices for the Drawing Division and the Laboratory Division, classrooms, drafting rooms, the Internal-Combustion-Engine Laboratory, and Hydraulies and Fluid Flow Laboratory. The Park Building contains the Mechanical Engineering Laboratory, the Wetallurgy Laboratory, the Heating and Air-Conditioning Laboratory, the Wood Shop, the Foundry, the Forge and Welding Shop, and the Machine Shop. It also contains the offices of the Faculty in the several Shops and one classroom.

Drafting Rooms.—The drafting rooms are equipped with tables, stools, cases for boards, reference files, and models. The drafting rooms have two Universal Drafting Machines in addition to other necessary equipment. The Dueprint room contains an electric blueprint machine, a sheet washer, and

<sup>\*\*</sup> On leave,

an ozalid printing machine, besides the usual sun frames. Fluorescent lights are used in the drafting rooms.

Shops.—The Wood Shop is equipped with a variety of woodworking machines: lathes, combination saw, dado asw, eut-off saw, jointer, mortiser, sanders, moulder, sticker, trimmer, shaper, boring machines, band saws, jig saw, various types of clamps, a glue room, and other essentials that go to make an up-to-date shop. The machines are motor driven with either individual or group drive. The shop includes work benches, hand tools and necessary auxiliary equipment and a modern spray-gun for finishing surfaces.

The Foundry Equipment consists of a 36" cupola, a 22" cupola, brasfurnace, core oven, core machine, moulding machines, cleaning mill, motordriven elevator, emery wheel and buffer, and the necessary tools and patterns for practical moulding. Sand-testing equipment is available for experimental work.

The Forge and Welding Shop is equipped with thirty anvils and forges, the blast for the forges being produced by a large powder blower and regulated by individual controls on each forge. The shop is also equipped with a modern down-draft-type exhaust system. Other equipment consists of iron shears, vises, emery wheels, and other necessary forging equipment. A 300ampere direct-current electric welder and a ten-station oxy-acetylene welding-manifold system completes this equipment.

The Machine Shop, well heated, lighted, and ventilated, is equipped with work benches, machinist's vises, and a variety of machine tools: engine lathes, bench lathes, shapers, planers, milling machines, vertical and horizontal boring mills, drill presses, slotting machines, grinders, arbor presses, and a variety of hand tools, eutters, clamps, jigs, and other equipment necessary to modern machine-shop practice. Some of the machines are group driven, others are individually driven.

Laboratories.—The Heat-Power, Heating and Air-Conditioning, and Metallurgical Laboratories are located in the Park Building. The Heat-Power Laboratory is equipped with plain slide-valve, automatic cut-off, multipleexpansion, and unifolds enginess arranged for condensing and noncondensing operation. It is provided with a turbo-generator set complete with a highvacuum condenser. A two-stage air compressor driven by a uniflow engine supplies air for experimentation. Weighing tanks and steam pumps make possible tests in this field. This division of the laboratory is equipped with instruments and apparatus for making coal and gas analyses and tests, lubrication tests, calibration tests, heat-transfer tests, nozzle tests, and general efficiency and thermodynamic tests.

The Heating and Air-Conditioning division of the laboratory contains several heating boilers with appropriate oil-burning equipment, weighing tanks and instruments for complete tests. The laboratory is also equipped with an air conditioner, unit heaters, radiator-testing equipment, a halfton refrigeration machine, insulation-testing equipment and a fan-andduct testing unit. The Metailurgical Laboratory is equipped for work dealing with the structure and the physical and mechanical properties of metals and alloys. The equipment includes clectric and gas heat-treating furnaces with conrols; indicating and recording pyrometery; apparatus for polishing and etching specimens; metailurgical microscopes with complete lens combinations; dark rooms for photographic; and, photoclastic equipment. The laboratory is equipped with 15,000 lb. and 50,000-lb. material-testing machines.

The Hydraulic-Machinery, and Internal-Combustion-Engine Laboratories are housed in the basement of Page Hall. The Laboratories are equipped with a new twenty-inch wind tunnel capable of speeds in excess of 100 miles per hour. The tunnel is equipped with automatic balances. A smokebox is provided for flow-analysis work. Photographic equipment is provided for flow study.

The Ilydraulic Testing Laboratory contains a ten-inch Francis-Type Hydraulic Turbine, of the most modern design, directly connected to an electric dynamometer, together with weir, Venturi, finwe, and instruments for complete test. The laboratory has high speed and low-speed centrifugal pumps arranged for tests, also Venturi tubes, weirs, nozzles, meters, and a hydraulic channel for the study of flow.

The Internal-Combustion-Engine Laboratory is equipped with high-speed and low-speed compression ignition engines, automotive and stationary spark ignition engines, air-cooled and liquid-cooled aircraft engines, all of modern design. Each of the test engines, of which there are ten at present, is equipped with its power-absorbing device, such as club-propellers in the case of areo engines and water brakes, calibrated electric generators and electric crafted-dynamometers for the other engines. A 5-hp, electric dynamometer is provided for accessory testing and a 125-hp, dynamometer for high-speed-engine testing. Engines, carburctors, ignition equipment and accessories are provided for study. C.F.R.-A.S.T.M. units are available for gasoline and liesel fuel research.

Recent additions to the Internal Combustion Laboratory consist of a 500 H.P. tvelve cylinder Vee type marine diesel engine; two 150 H.P. 6 cylinder high-speed marine diesel engines; a high-speed automotive type 85 H.P. diesel; a 60 H.P. stationary diesel engine with direct connected generators; a complete iteriary of diesel fuel-pumps, nozeles, governors, transfer pumps, and allied equipment together with a fuel pump testing and calibrating unit, nozzle testors, and spray analyzers. The laboratory is also equipped with high-speed indicators of the cathode ray type and vibration analyzers for the study of motion and vibration of engine parts; and a centrifugal supercharging testing unit with a high-speed dynamometer.

All of the laboratories are designed around the unit system for instruction, whereby units in or whole divisions of the laboratory may be operated without depending on or interfering with other units or divisions.

# CURRICULUM IN MECHANICAL ENGINEERING

# For the Freshman Year, refer to page 106.

Surveying, C.E. s200, 3 credits, is required in the summer immediately following the freehman year.

#### Sophomore Year

COURSES	First Term	CREDITS Second Term	Third Term
Calculus I, II, III, Math. 201, 202, 203 Painness English, Public Speaking, Eng. 211, 231, a Physics for Engineers, Phys. 201, 202, 203 Mochanical Diravits, M.E. 211, 212, 213 Antiperiodic Science (M. 201, 202, 203) Motion (M. 201, 201, 201, 201, 201, 201, 201, 201,	nd 3	4 3 4 2 2 3 2 1 21	4 3 4 2 3 2 1 21
Junior Year			
Engineering Mechanics EM 313 Manhim Ehm II. M. 22, 23, 230 Meet. Breg. Lab. J. M. E. 316, 430 Meet. Breg. Lab. J. M. E. 316, 44, 316 Meet. Breg. Lab. J. M. E. 316, 44, 316 Metallurge 221, M. E. 217, 418, 319 Metallurge 221, M. E. 217, 418, 319 Metallurge 231, M. E. 217, 418, 319 Metallurge 231, M. E. 217, 418, 419 Metallurge 231, M. S. 217 Metallurge 231, M. S. 217 Metallurge 231, 221 *Elective		0 1 3 1 3 3 0 0 0 3 8 20	0 1 3 1 3 3 3 3 0 0 3 20

Summer requirement: Six weeks of industrial employment.

### MECHANICAL ENGINEERING I-GENERAL OPTION

# Professor L. L. Vaughan. Faculty Adviser

### Senior Year

General Economics. Econ. 201, 202, 203	3	3	3
Power Plants, M.E. 401, 402, 403	3	3	3
Heating and Air Conditioning, M.E. 404	0	3	0
Machine Design, M.E. 411, 412, 413	3	3	3
Refrigeration, M.E. 405	0	0	3
Mechanical Engineering Lab. II. M.E. 407, 408, 409	1	1	1
Elements of Electrical Engineering. E.E. 320, 321, 322 .	3	3	3
Electrical Eng. Lab. II. E.E. 325, 326, 327	1	1	1
Hydraulic Machinery, E.M. 331	3	0	0
**Electives	3	3	3
		-	

<sup>\*</sup> Students who have been certified by the Department of English as proficient in English may substitute Modern Language for the courses listed.

<sup>&</sup>quot;My Substitute Modern Language for the courses listed. 1 Or sit credits in one or two of the 'dilowing departments: Economics, Psychology. History, Modern Language, Sociology. \*\*To be elected from the Goldwing Andre Humanities. Military Science III and IV. Language and Direature, Pure Mathematics, Pure Natural Science, and Social Science.

#### STATE COLLEGE CATALOG

# MECHANICAL ENGINEERING 11—HEATING AND AIR-CONDITIONING OPTION

### Professor E. G. Hoefer, Faculty Adviser

The Mechanical Engineering Department offers this option because of the increasing interest in heating and air conditioning for confort; and furthermore because the engineering profession is largely responsible for the health and well-being of society through the effective construction and operation of heating and air-conditioning systems. Emphasis is placed on this phase of engineering through the application of fundamental principles to design, laboratory investigations and research. Through this means the student is given an opportunity to become familiar with standard practice in this field.

Freshman, Sophomore and Junior sears identical with the General Mechanical Engineering Curriculum.

Summer requirement: Six weeks of industrial employment.

### Senior Year

COURSES	View	Term	CREDITS Second Term	Third Term
	1.11.00	reiui	Second Term	runto retu
General Economics. Econ. 201, 202, 203 Power Plants, M.E. 401, 402, 403 Heating and Air Conditioning Lab., M.E. 455, 454, 457 Hydraulics Mchinery, E.M., 331 M.E. 411, 452, 453 Heating and Air Conditioning Design, M.E. 458, 459 Elements of Elec. Engr., E.K. 320, 321, 327 **Electives		33100000	331003331	33103333113
		20	20	20

All seniors are required to go on the inspection trip as part of their curriculum.

# MECHANICAL ENGINEERING III-METALS OPTION

# Professor W. G. VanNote, Faculty Adviser

The Mechanical Engineer is becoming steadily more dependent upon metals and alloys for the efficient construction, operation, and maintenance of improved and new units under his supervision. Similarly in the design industry for materials of superior properties. Because of this close interdependence of mechanical engineering and metallorgy the Metals Option is offered. Emphasis is given to the control which may be exercised over the properties of metals through methods of manufacture and subsequent physical and thermal treatments. Since weekling design and practice has a prominent place in the metallurgical applications made by the mechanical engineer, substantial instruction in this field is included in the option.

<sup>\*\*</sup> To be selected from the following fields: Humanities, Military Science III and IV, Language and Literature, Pure Mathematics, Pure Natural Science, and Social Science.

Freshman, Sophomore and Junior years identical with the General Mechanical Engineering Curriculum.

Summer requirement: Six weeks of industrial employm	lent.		
General Economics, Econ. 201, 202, 203 Elementa of Elec. Eng., Ec. 202, 321, 322 Electrical Engineering Lab., E.E. 335, 326, 327 Machine Design, M.E. 411, 412, 413 Welding, Theory and Practice, M.E. 431, 432, 433 Physical Netallurgy, M.E. 441, 442, 443 Experimental Engineering, M.E. 461, 462, 465	010-002101.00	00 00 00 01 00 00	12 12 14 20 10 10 10 10
	21	21	18

All seniors are required to go on the inspection trip as part of their curriculum.

\*\* To be selected from the following fields: Humanities, Military Science III and IV, Language and Literature, Pure Mathematics, Pure Natural Science and Social Science.

#### STATE COLLEGE CATALOG

### DIVISION OF TEACHER EDUCATION

### Professors:

T. E. Browne, M.A., Director of the Division Leon E. Cook, M.S., Agricultural Education J. R. Lutington, Ph.D., Industrial Arts Education J. K. Coggin, M.S., Agricultural Education J. Warren Smith, M.S., Industrial Education William McGehee, Ph.D., Psychology

#### Associate Professors:

L. O. Armstrong, M.S., Agricultural Education D. J. Moffie, Ph.D., Psychology

### Supervisor of Student Teachers in Industrial Arts

#### C. Merrill Hamilton, M.A., Industrial Arts Education

Purposes. The Division of Teacher Education at North Carolina State Collecgie iorganized and equipmed for the purpose of carrying out a specific function allocated to the College by the trustees of the Greater University. The particular objective of this Division is to provide professional training, to organize curricula, and to give direction to those students who indicate an interest in becoming teachers of Vocational Agriculture, Trade and Industrial Education and Industrial Artis Education. The technical subject matter instruction for such teachers is provided by the technical schools on the Campus.

The State Board for Vocational Education has designated State College as the training center for vocational teachers in the fields of Agriculture and Industrial Education, and federal funds are used to aid in the maintenance of teacher training in these two fields.

Organization—The Division offers graduate and undergraduate curricula for the preparation of tenchers of Arriculture, of Industrial Ars, and of Industrial Education. The training includes four definite objectives. The first embraces the fundamentals of general education: English, mathematics, sociology, history, and the natural sciences—biology, geology, chemistry, and physics. Next are the technical subjects selected according to the professional course of the student: for Agricultural Tenching, in the School of Agriculture; for Industrial Arts and Industrial Education, in the School of Agriculture; for Industrial Arts and Industrial Education, in the School of Engineering. In the third group are the principles and methods of teaching, Educational Psychology here is obviously essential. The last objective is practical experience. To meet the requirements of the State Department of Public Instruction for teaching certificates, students, before graduation, observe and teach under the direction of the faculty of the Division in selected high schools. Moreover, experience in the respective occupations is required for those preparing to teach agriculture, and the trades and industries.
Psychology. General Psychology, giving an understanding of man's reactions to individual and social forces, constitutes one of the fundamentals of liberal education. Educational Psychology, applying the general principles to the problems of instruction, learning, and character building, becomes obviously essential in the equipment of teachers. Courses in Applied. Industrial, and Social Psychology of specialized nature meet the needs of the various technological curriculu. The Department of Psychology, in view of its intimate relation to the problems of teacher education, is the same time it functions instructionally throughout the Basic Division and the Professional Schools.

Guidance and Counseling.—Special facilities are provided in the Division of Teacher Education for mature students and persons who have had teaching or personnel experience and hold a Dachelor's Degree to enroll for courses leading to a Master's Degree in Occupational Information and Guidance. Advanced courses in education, psychology, sociology, and economics will be selected to insure competent leadership in guidance and counseling techniques.

Candidates for a decree in this field will be assisted by an advisory committee of faculty members in education and psychology in the formation of a program of study and research which will meet their individual needs.

For further information concerning graduate work in this field consult Dr. Z. P. Metcalf, Associate Dean of the Graduate School, North Carolina State College, Raleigh, North Carolina.

Requirements for Graduation. For graduation in the Division of Teacher Education, the scholastic requirement in all curricula is the satisfactory attainment of at least 230 term credits with not fewer than an equal number of honor points.

Of the term credits required for graduation, a student must have at least 27 in Education, 18 in Language, 18 in the Natural Sciences, 18 in Social Science, 12 in Military Training or alternatives, 6 in Physical Education. Subjects must be taken as indicated in the several curricula.

Students who enter with advanced standing are allowed one point for each term credit accepted.

Further requirements consist of practice teaching in the subject and practical experience in the work to be taught as indicated above or under the several Departments.

Degrees. Upon the satisfactory completion of one of the curricula in Education, a student is awarded the degree of Bachelor of Science with the name of his special curriculum appended: in Agricultural Education, in Industrial Arts Education and in Industrial Education.

The Graduate Division of State College offers the Master's Degree to mature students of superior ability upon successful completion of its requirements. For the details, see the statement of the Graduate Division in this Catalog.

# Agricultural Education

### Leon E. Cook

Object. Agricultural Education is designed to prepare students for positions as teachers of vocational agriculture in the high schools of the State, and to qualify as such under the provisions of the Smith-Hughes and the George-Deen Acts of Congress.

The curriculum is comprehensive in nature. It is, of course, essential that teachers have a good foundation in English and in the sciences basic to an understanding of agriculture. They should also have a sufficient understanding of the social sciences to appreciate the development of contemporary life, with the emphasis on those having to do with agriculture and the rural community. Manifestly they should have a grasp of agriculture in all phases of importance in the State, including the improvement of the farm home and of the social as well as of the economic development of comprehensive and thorough preparation in the professional field with upon comprehensive and thorough preparation in the professional field with youth and adults, and in handling the various responsibilities of community service.

An adequate background of farm experience is essential for students looking forward to agricultural teaching, and experience in fields related to farming is desirable. A student should be farm-reared or should have several years of farm experience as a part of his preparation for teaching vocational agriculture.

Placement of Graduates. There has been a strong demand for teachers of vocational agriculture with little difficulty in placing students who are qualified from the standpoint of personality, character, training, and farm experience. A coöperative arrangement with the supervisory staff in agricultural education of the State Department of Public Instruction facilitates the placement of students in situations adapted to their experience and training.

Successful teachers of agriculture are in demand for higher positions in the educational service and by other agencies for positions offering higher salaries than those paid in the teaching profession.

Graduate Study. The Department provides opportunities for students, fully qualified, to do graduate work in Agricultural Education. Graduate students taking majors in this field should have completed the undergraduate work in Agricultural Education or the equivalent. Transfer students, or graduates in general agriculture who did not take the work in education, are required to complete 15 credits in education including Principles of Teaching and Methods of Teaching Agriculture, as prerequisites to graduate study.

# CURRICULUM FOR TEACHERS OF VOCATIONAL AGRICULTURE

#### Freshman Year

			-
aempana	F	and	Credita
COURSES		a w	S
Composition, Eng. 101, 102, 103	4	4	3
Math. 111, 112 U. S. History, Hist. 121, 122, Politicsl Science, Pol. Sci. 211 Gaslory, God. 120, 121, 122, Politicsl Science, Pol. Sci. 211	1.00	3	3
Geology, Geol. 120	0	0	4
Botany 101, 102 or Zoology 101, 102	0	4	4
Geology, Geology, Geology, Ital. 121, 122, Fontucal Science, Foi. Sci. 211 Botany 101, 102 or Zoology 101, 102 Field Crops, 101 or Animal Industry 101 Animal Industry, A.I. 101 or Field Crops, F.C. 101 Hortiguiture 101 or Foultry Science 101	õ	1	0
Horticulture 101 or Poultry Science 101	0	0	4
Animal industry, A.I. 101 of Pield Grops, P.C. 101 Horticulture 101 of Poultry Science 101 Introduction to Agriculture 101 *Military Science 101, 102, 103 Physical Education and Hygienc, P.E. 101, 102, 103	1	0	0
Physical Education and Hygians P.F. 101 102 102	2	ĩ	1
Thysical Education and Lygiene, 1.5, 101, 105, 100		127	
Sophomore Year Chemistry 201, Zhongo 11, 102 or Bolany 101, 102 Zhongo 11, 102 or Bolany 101, 102 Positry 101, or Horticulurg 101	18	21	21
Supromore Tear			
English, elective	0	0	3 5
Zoology 101, 102 or Botany 101, 102	4	3	0
Physics 115 Poultry 101 or Horticulture 101 Rural Sociology or Agric. Econ. 202 or English elective	0	0	5
Poultry 101 or Horticulture 101	1 3 0 9 0	0	1
Agricultural Economics 202 or English elective	3	03	0
Agricultural Engineering 202 or Soils 202	0	1 01	5 0
Soils 202 or Agric. Engineering 202	0	0	4 or 5
Agricultural Engineering 202 or Soils 202 Soils 202 or Agric. Engineering 202 "Military Science 201, 202, 203 Physical Education, P. E. 201, 202, 203	2	2	2
rnysical Education, r. E. 201, 202, 203			4
		19	20
Man Provide Advances on	0	r 20	or 21
Junior Year			
English, elective	0	0	3
Educational Psychology, Psy. 303, 304	2	3	03
Principles of Forestry, For, 111	0	ŏ	3
Farm Shop, Agr. Eng. 331, 332	3	3	0
General Economics, Econ. 201, 202	3	3	0
Thisesses of Veretable Crops Bot 303	0	0	2
Soil Fertility and Fertilizers, Soils 301	5	Ŭ.	0
Diseases of Farm Animals, A.I. 362	0	4	U.
English, destric English, destric Vasal Ada, Ed. 198 Principles of Forestry, Full Construction of the State State Principles of Forestry, Full Construction of the State State Principles of Forestry, State State Principles of State State Principles of State State Principles of State State Principles of State State State State State State State State State State State Principles of State State State Principles of State State State State Principles of State S	0	4	0
Linduliyes in a statistic in the			
	20	20	18
Senior Year			
English, elective	0	0	3
Farm Management, Agr. Econ. 303	0	0	3
Principles of Teaching Ed 406	5	0	0
Methods of Teaching Agriculture, Ed. 407	5	Ű.	Ô.
Observation and Directed Teaching, Ed. 408	0	55	0
Evening Classes and Directed Teaching, Ed. 411	0	5	0
Agricultural Marketing, Agr. Econ. 411	3	0	Ô
Eaglish, steely Farm Management, Agr. Econ. 303 Plant Physiology, Bot. 321 or Animal Physiology, Zool. 201 Principles of Teacher Zol. 405 Physiology and Director Teaching, Ed. 408 Observation and Director Teaching, Ed. 408 Director Teaching, Ed. 408 Agricultural Marketing, Agr. Econ. 411 Secondary Roadstoin in Agriculture, Ed. 425 Agricultural Marketing, Agr. Econ. 411 Marketing, Ed. 405 Director Science, Ed. 40	0	03	8
***Electives	3	3	7
	19	18	16

<sup>†</sup> Diseases of Fruit Cross. Bol. 302 or Diseases of Field Cross. Bol. 301 may be substituted for Diseases of Vegetable Cross. Bol. 302. Bol. 301 May be added for Disease of Vegetable Cross. Bol. 302. Bol. 301 May be added by the substitute of Substitute

\*\*\* Options and electives except Mil. Sci. III and IV must be chosen with the aproval of the adviser.

## INDUSTRIAL ARTS EDUCATION

### John R. Ludington

Industrial Arts comprises that area of study and experience which deals with industry as a unit of vociety and the manner in which industry and its related materials, processes, and problems affects and has affected other units of society. For many years North Carolina State College has had an important part in aiding induividuals and groups of individuals to cope with the increasingly complex problems of living in an industrial society through its program of teacher education.

The demand for competent teachers of Industrial Arts has increased year after year and the need for Industrial Arts as an essential phase of general education at the elementary and secondary school levels is being realized by progressive school communities and leaders in education.

Purposes. The Department of Industrial Arts is organized to aid in the culcucation of teachers and supervisors of Industrial Arts, and to provide experiences for those individuals who desire to deal more appreciatively and effectively with problems of living in a democratic-industrial society. The successful completion of this curriculum leads to the granting of the degree of Dachelor of Science in Industrial Arts Education and the fulfillment of requirements for an A-grand certificate for teaching in this field.

The first two years of work in this curriculum are in line with the Basic Division of the College, which emphasizes work of a general and foundational nature. The junior and senior years are planned to include experiences of a specialized-professional nature.

In addition to added faculty personnel, new facilities have been provided in the Department which include: laboratories, machines, tools, benches, classrooms, and library resources. Further increases in physical setting and equipment have been planned which will make North Carolina State College one of the leading Industrial Arts teacher-education centers in the Southeast.

Graduate Program. Opportunities are provided for students of demonstrated interest and ability to do graduate work leading to the Master's Degree. The faculty personnel and resources of the Greater University of North Carolina are used in planning a sequence of experiences on the graduate level to meet the individual interests and needs of persons intercsted in Industrial Arts Education. Persons interested in graduate work in this field are invited to write for detailed information and courses offered.

## DIVISION OF TEACHER EDUCATION

# CURRICULUM FOR TEACHERS OF INDUSTRIAL ARTS

### Freshman Year

COURSES	First Term	CREDITS Second Term	Third Torm
Composition, Eng. 101, 102, 103 Algebra, Trigonometry, and Mathematics of Finance	- 3	3	3
Math. 111, 112, 113 General Chemistry, Chem. 101, 102, 103 Industrial Arts Drawing, Ed. (I. A.) 105a, b, c	4	1	4
Industrial Arts Drawing Ed (I A) 105 h a	- <b>-</b>	3	3
	3	5	3
Military Science I, Mil. 101, 102, 103 or World History, Hist. 104	2	2	2
Fundamental Activities and Hygiene, P.E. 101, 102, 1		1	1
	20	20	20
Sophomore Yea	r		
Business English, Eng. 211, Public Speaking, Eng. 23	10		
Elective English	. 3	3	3
	4	4	4 3
Economic History, Hist. 101, 102, 103	3	3	3
Industrial Arts Design, Ed. (I. A.) 205	0	0	3
Economic History, Hist. 101, 102, 103 Industrial Arts Design, Ed. (I. A.) 203 General Sociology, Soc. 202, 203 Laboratory Problems in Industrial Arts, Ed. 206 (I. A.) a. b. c	3	2	
Ed. 206 (I. A.) a, b, c †Military Science II, Mil. 201, 202, 203	3	3	3
†Military Science II, Mil. 201, 202, 203	2	2	2
Sports Activities, P.E. 201, 202, 203	. 1	1	1
	19	19	19
Junior Year	57		
Introduction to Psychology, Psychol. 200, Educations Psychology, Ed. 304, Psychology of Adulescenc Ed. 476	1 e. . 3	3	3
General Economics, Econ. 201, 202, 203 Problems in Secondary Education, Ed. 344, Field Wor in Secondary Education, Ed. 433, Visual Aida, E.	8 1.	5	3
308	. 3	3	3
Ed. 306 (I. A.) a, b, c	. 3	3	3
Business Law, Econ. 307	. 3	0	0
**Electives *Electives in Related Technical and Shop Courses	- 8	3 6	3
"Electives in Related Technical and Shop Courses .	21	20	18
	21	20	15
Senior Year			
Methods of Teaching Industrial, Ed. 422. Observation	n		
and Directed Teaching, Ed. 444 Labor Problems, Econ. 331, Vocational Guidance, Ed. 45	0 3	3	3
Occupational Studies, Ed. 424	0 0	0	3
Curriculum Problems in Industrial Arts. Ed. 482. In structional Aids and Devices, Ed. 483, Laborator	2 S		4
Planning and Equipment Selection, Ed. 484	3	3	3
**Electives	3	3	3 3
*Electives in Related Technical and Shop Courses	6	6	6
	18	18	18

Electives to be selected with aid of adviser to meet special needs of individual students.
f Or six credits in one or two of the following departments: Economics, Psychology, Natory and Political Science, Molern Languages, Sociology, and Ethics and Religion.
\* To be selected from the following fields: Homanities, Military Science and Social Science.

## Industrial Education

# J. Warren Smith

Object.—Vocational technical skills are necessary to the industrial development of any state. Many influential groups are urging the development of new industries for North Carolina. Vocational and technical schools have a responsibility to aid in the development of these skills necessary for the maintenance and development of our present industries as well as preparing for new industries. Schools cannot be operated without competent teachers. It is to prepare teachers for this field of service that this program is designed. A four year course is outlined with the first two years running parallel with that of Industrial Arts, then specializing by following the outlined course during the last two years.

Positions for Graduates.—The student who completes this course will be prepared to teach in the all-day trade schools, area vocational schools, the part-time, or the evening vocational classes, such as are supported by State and Federal funds for vocational education. At the present time, little difficulty should be encountered by the successful candidates in attaining positions after graduation.

Trade Experience Required. Candidates for degrees must have had at least two years of successful trade experience in the trade they wish to teach. Successful completion of this course leads to the degree of Bachelor of Science in Industrial Education. Students desiring this degree may enter with or without having the required practical experience. If the student does not have any trade experience when he enters, he must meet this requirement before getting the degree, either hy working parts of the school year or by completing the work experience after completing the required resident courses.

This Department is recognized as the official Training Department of Industrial Education for the State Department of Education. The head of the Department serves as itinerant teacher-trainer for part-time, daytrade, and evening classes, and for the preparation of prospective teachers.

# CURRICULUM FOR TEACHERS OF INDUSTRIAL EDUCATION

## For freshman and sophomore years, see Industrial Arts Education

### Junior Year

COURSES	First Term	CREDITS Second Term	Third Term
Philosophy of Industrial Education, Ed. 427 *Shopwork (selected) Introduction to Psychology, Psychol. 200, Education Psychology, Ed. 304, Psychology of Adolescent	al ce,	3	0 3
Ed. 476 Philosophy of Guidance, Ed. 420 Problems in Secondary Education, Ed. 544 Labor Problems		3 0 0	3 3 0
Labor Problems, Econ. 331 General Economics 201, 202, 70; Visual Aids, Ed. 308 Mechanical Drawing, M.E. 211, 212, 213	. 0	3 0 0 2 1	3300:3232
**Electives Electives	. <u>0</u> 20	20	2 19
Senior Year			
Local Survey: Planning a Program, Ed. 416 *Shopwork (selected) Methods of Teaching Industrial Subjects, Ed. 422 Observation and Directed Teaching, Ed. 444		30.00	00033
Occupational Studies, Ed. 424 Curriculum Problems in Industrial Arts, Ed. 482, I atructional Aids and Devices, Ed. 483, Laborato	ry	ő	
Planning and Equipment Selection, Ed. 484 •••Elective courses in Design ••Electives Electives	3	3370	3303
	17	18	18

 Birctive shopwork should be taken in fields available as Textiles, Woodshop, Machine Shop, Foundry, and Electricity.
\*\* To be selected from the following fields: Humanities, Millitary Science III and IV, Language and Literature, Pore Mathematich, Pure Natural Science and Social Science. \*\*\* Elective courses must be approved by the faculty adviser.

# THE SCHOOL OF TEXTILES

## Malcolm E. Campbell, Dean Thomas Nelson, Dean Emeritus

Organization. The School of Textiles of North Carolina State College is urganized for the purpose of administration into five departments: Yarn Manufacturing, Knitting, Weaving and Designing, Textile Chemistry and Dyeing and Textile Research.

The School of Textiles is organized to offer technical instruction, both understrukture and graduate, in the applicit sciences underlying the production and finishing of textile products. This training is supplemented by thorough academic and engineering training in the other branches of the college. It is also organized and equipped to conduct applied and fundamental textile research and cooperates with other Schools of the College and with research organizations throughout the country.

Purpose. The purpose of the School of Textiles is to educate men for professional service in Textile Manufacturing, Textile Management, Textile Chemistry and Dyoing, Yarn Manufacturing, Knitting, Weaving and Designing; to develop their capacities for intelligent leadership; to equip them to participate in commercial and public affairs; to aid in the development of the textile industry and its commerce through research and experimentation; to coöperate with the textile mills of the State in gaining, through scientific research, information that will improve the quality and value of manufactured products and increase technical skill.

Occupations. Never before in America have more opportunities in textiles been offered to young people of North Carolina and the South generally than are available today to graduates of the School of Textiles.

North Carolina is the largest textile manufacturing State in the South; it has more mills than any other State in America. It has the largest towel, damask, denim, and underwear mills in America; and it has more mills that dye and finisk their own products than any other Southern State, also a large printing industry. These plants produce a diversified line of cotton, rayon, silk, wool, and worsted textile products.

The courses of instruction are arranged and grouped so that students may get the best results from their work, and accumulate the necessary knowledge, which, together with actual experience after graduation, enables them to fill such positions as the following:

Owners of mills.

Presidents and vice-presidents of mills and other textile establishments. Secretaries and treasurers of mills.

Managers, superintendents, and department foremen in cotton, rayon, woolen, silk, and hosiery mills.

Superintendents and foremen in mercerizing, bleaching, dyeing, and finishing plants. Designers and analysts of fabrics.

Technical demonstrators in the dyestuff industry.

Textile chemists.

Textile cost accountants in mills.

Purchasing agents for mills.

Salesmen of machinery, yarn, cloth, rayon, dyestuffs, and chemicals.

Positions in yarn and fabric commission houses, with fabric converters and with research organizations.

Specialists in Government service.

Representatives for manufacturers of machinery, rayon, dyestuffs, and mill supplies.

Degrees .-- Upon the completion of any one of the curricula in Textiles the degree of Bachelor of Science in Textiles is conferred.

The degree of Master of Science in Textiles is offered for the satisfactory completion of one year of graduate study in residence. Candidates for the degree of Master of Science in Textiles enter and are enrolled in the Graduate Division of the College.

The professional degree of Master of Textiles may be conferred upon graduates of the School of Textiles after five years of professional practice in charge of important work and upon the acceptance of a satisfactory thesis.

Requirements.—The requirements for graduation in the School of Textiles are the satisfactory completion of all the courses in one of the prescribed curricula on the pages following, a total of not fewer than 240 term credits, with not fewer than 240 honor points.

Of the minimum of 240 term credits required for graduation in the School of Textiles, 150 are common to all curricula; that is, 12 term credits in Mathematics, 18 in Language, 27 in Economics and history, 12 in Chemistry, 36 in Physics, 12 in Engineering, 36 in General Textiles, 12 in Nilitary Training or Social Science alternatives, and 6 in Physical Education. Each of the curricula permits lection of 18 term credits.

Inspection Trips.—Where possible arrangements are made for students to visit outstanding mills. These trips are made to enable the student to see various manufacturing processes under actual operating conditions.

Curricula. The freshman and sophomore work is the same for all students in the School of Textiles. The training is general, and gives the student a good opportunity to make a wise choice in the selection of the particular field in which he desires to specialize. Six curricula are offered:

1. Textile Manufacturing 2. Yarn Manufacturing 4. Knitting

- 5. Textile Chemistry and Dyeing
- 3. Weaving and Designing
- 6, Textile Management

145

Textile Manufacturing and Textile Management offer work in all Departments of the School of Textiles; these are therefore general curricula with one placing more emphasis on manufacturing, the other, more emphasis on economics.

Students who select Textile Chemistry and Dycing, Knitting, Weaving and Designing, or Yarn Manufacturing devote a larger percentage of their time to specialization in one Department of the School of Textiles.

Textile Curricula for University and College Graduates. Selected courses leading to the degree Bachelor of Science in Textiles are offered to graduates of universities and standard colleges. These are arranged in accordance with the vocational aim of the individual student and in the light of credits presented from the institution by which the student has been graduated, subject to the approval of his adviser and the director of instruction. In cases where the student presents enough credits which may be used for courses required in a curriculum, he or she may be graduated wild a ltachelor of Science degree in Textiles. In no case should it take more than two years to complete the work for the degree.

Short Courses. It is the policy of the School to offer short course training for txtile mill men who have a limited amount of time to spend at the School. These courses can be offered when a demand for them exists and the subject matter will be selected to meet the needs of the group.

Extension Courses,—The staff of the School is cooperating with the Extension Division of the College in offering textile courses by correspondonce to employees of textile mills who wish to engage in this type of study. Applications for enrolment in these courses should be mailed direct to the Bureau of Correspondence Instruction, Edward W. Ruggles, Director, State Collece Station.

### DEPARTMENTS Yarn Manufacturing

# Professor Elliot B. Grover, Head of the Department Professor J. T. Hilton Professor J. F. Bogdan Assistant Professor G. R. Culherson

Purpose—The purpose of this Department is to instruct students in the theory and practice of producing yarms to conduct experimental processing in the utilization of cotton and the various synthetic fibers, and combinations of these; to study the engineering aspects of the machinery involved, and to cooperate with mills in solving manufacturing problems through research and experimentation.

Opening and Picking. The opening and picking equipment is placed in a separate room and consists of bale breaker, vertical opener, C.O.B. and condenser, distributor breaker picker, and finisher lapper.

• On military leave.

Carding and Spinning. This equipment occupies two rooms. The larger one is used for instruction. The machinery consists of cards, regular and controlled-draft drawing frames, conventional and long draft roving frames, spinning frames, warper, spooler, winders, regular and fancy twisters, and a complete unit of combing machinery for the production of fine yarms. The smaller room contains a complete unit of carding and spinning machinery, including several types of long-draft spinning; it is used as an experimental laboratory. Thus student instruction and experimental work do not conflict. Both rooms are equipped with Parks Cramer humidifiers.

Woolen. This equipment, placed in a separate room and consists of a complete woolen unit made by Davis and Furber.

Mill Control Laboratory.—This laboratory is set up and equipped for the performance of physical tests on fibers, yarns, and fabrics. It has the most modern type of air conditioning designed specifically for the control of the dry bub temperature and relative humidity within close tolerances and over a wide range of conditions.

This laboratory is used for teaching, physical testing and research.

Included in the laboratory equipment are the following: Suter-Webb fhere sorter, Pressley fiber strength instrument, several torsion and other types of balances, several combination skein and cloth breaking machines, inclined plane testers, single strand testers, Alocerop multiple and single strand tester, Mullen bursting strength tester, dry-ovens, abrasion machines, twist testers, densoneters, hydrostatic pressure tester, microscopic equipment, automatic reels, Frazier air permeability tester, yarn quadrants, and many other types of laboratory equipment.

The curriculum in Yarn Manufacture is listed with the other Textile curricula.

#### Knitting

# Professor W. E. Shinn, Head of the Department Associate Professor J. G. Lewis

Purpose—In recognition of the great importance of knitting and the other needle arts in the industrial life of this section, a department of knitting has been set up with the objective of making available to this branch of the textile industry, personnel more adequately trained in the fundamentals and practices underlying the production of knitted textiles.

The laboratories of this division are being set up to embrace every phase of the knit goods industry.

- 1. Circular hosiery design and knitting.
- 2. Circular body knitting for jersey and rib fabrics.
- 3. Selected types of flat knitting equipment.
- Hosiery and knil-goods finishing, in cooperation with the Department of Textile Chemistry and Dycing.

The wide range of equipment in the knitting laboratories makes them the outstanding center for instruction in the many aspects of knit-goods production. The knitting department functions not only to provide instruction to students in all txitle curricula, hat in addition offers a complete curriculum in knitting which enables students to specialize in the knitting branch of the txitle industry.

In cooperation with the Department of Textile Research, a program applicable to the specific needs of the knitting industry has been initiated.

### Weaving and Designing

# Professor T. R. Hart, Head of the Department Professor Thomas Nelson Assistant Professor J. A. Porter. Jr. "Instructor, W. E. Moser

Purpose. The purpose of this Department is to instruct students in the theory and practice of weaving and designing fabrics ranging from simple print cloths to elaborate leno and jacquard creations, to coöperate with the home economics department of North Carolina colleges in creating consumer interest in textile products, to coöperate with mills in solving manufacturing problems through research and experimentation.

Weave Room. This room contains a larger variety of looms than can be found in any textile mill. These have been carefully selected so that the students may obtain a knowledge of the different cotton, rayon, and silk looms made in the United States. It also contains looms to produce such fabrics as print cloths, sheetings, denims and twill fabrics, gringhams, fancy shirtings, dress goods, and plush, as well as fancy leno and jacquard fabrics. The wave room has been modernized so that the students can be trained in the technique of manufacturing fancy cotton, rayon, and combination fabrics on automatic, dobby, and jacquard looms. Other equipment in the weave room includes Universal filling winders, braiders and Bahnson humidifiers.

Warp Preparation.—Short warps are made on the silk and rayon equipment in this department, which consists of a silk and rayon skein winder, and a combination warper and beamer. Other equipment includes a slasher and cotton beaming frame.

Designing and Fabric Analysis. A full equipment of design boards for single and double cloths is provided in the classrooms. Dies for cutting samples and different makes of balances, and microscopes are provided for the analysis of fabrics. Other designing equipment includes an enlarging camera, card cutting planos and card lacing equipment.

The curriculum in Weaving and Designing is listed with the other Textile curricula.

• On military leave.

#### THE SCHOOL OF TEXTILES

## Textile Chemistry and Dyeing

### Professor A. H. Grimshaw, Head of the Department Assistant Professor A. C. Hayes

Purpose.—The purpose of this Department is to instruct students in the theory and practice of dyeing, printing, and finishing yarns and fabrics; to conduct experiments; to coöperate with the mills of the State in solving problems relating to the dyeing and finishing of textile products.

Equipment.—The Dye Laboratory is fitted up with work tables, balances, steam baths, drying oven, and other apparatus for experimental dyeing, dye testing, color matching, and the testing of dyed samples by acids and alkalies. It also contains roller, spray, and screen printing apparatus.

The Dye House is equipped with kier; raw stock, package, skein, and hosiery dyeing machines; a cloh dyeing machine of the creel type; hydroextractor; raw stock dryer and other equipment needed in the dyeing of larger quantities of material and in giving instruction in boiling out, blenching, and dyeing raw stock, skeins, warps, hosiery, and piece goods.

The Chemical Research Laboratory contains microscopes, photo-micrographic cameras and projector, fade ometer, launder ometer, pli apparatus, viscosimeters, extractors, separator, analytical balances, electric oven, equipment for testing oil and finishing compounds, as well as the analytical equipment generally used by textile chemists. It also contains a dark room fully equipped for photographic work.

The curriculum in Textile Chemistry and Dyeing is listed with the other Textile curricula.

# Textile Research

# Dr. Frederick T. Peirce, Director Miss Martha Wallace, Laboratory Technicia

Through financial assistance extended by the North Carolina Textile Foundation, a program of research has been initiated which is expected to be far reaching in its influence on the development of the textile industry in North Carolina and the nation.

The scope of this rescurch will embrace fundamental and applied investi gations in the fields of fibers, yarns, fabrics and fabrication, together with consumer performance studies.

The equipment available for research is listed under the departments. Members of the teaching staff devote a portion of their time to reesarch. Their work is being supplemented by full time research personnel trained in the physical sciences.

### STATE COLLEGE CATALOG

## Textile Library

#### Miss Rachel Penn Lane, Librarian-Abstracter

The School has organized in the Textile Building a department library near the classrooms and blowratories in which the instruction is given. The entire textile book collection was transferred to the Textile Building in June, 1945, from the D. H. Hill Library. The holdings of books and bound periodicals now amount to around 1000 volumes, and is consistently aug mented with additional material. Special collections in addition, include trade catalogs for textile machinery, chemicals and dyes, etc.; a file of patents issued in textile classes and subclasses from July 1, 1945 to date; Iterature services such as the "Natural and Synthetic Fibers Abstract Service." Theses by textile students are available for Ioan. Complete card indexes to the collections are maintained.

Copies of the leading American and foreign textile journals, newspapers and house organs are made available to the staff and students, and this division of the School is proving to be a popular and useful center of activity. Reference service and loans of the holdings of the Textile Library are available to workers in industry and research throughout North Carolina.

## Consulting Service

### George H. Dunlap, Technologist

In recognition of the need for close contact with the textile mills, this division was organized with the assistance of the North Carolina Textile Foundation. It is the function of the Technologist to visit as many mills as possible during the year, to discuss with executives their technical problems, and assist in their solution. In many cases, this involves experimental work which may be conducted in the mill or brought to the School for consultation with the staff or for special work in the laboratorics.

The Technologist frequently cooperates with the officials of trade associations in planning and arranging programs and represents the School at these meetings.

# CURRICULUM IN TEXTILE MANUFACTURING

# \*\*\* Freshman Year

		CREDITS	
COURSES	First Term	Second Term	Third Term
Composition, Eng. 101, 102, 103	. 3	3	3
Physics for Textile Students, Phys. 111, 112, 113 Alg., Trig., Math. of Finance, Math. 111, 112, 113	1	4	4 4
Shonwork, M.E. 121, 122, 123		1	1
Shopwork, M.E. 121, 122, 123 Engineering Drawing, M.E. 105, 106	3	3	õ
Cloth Calculations, Tex. 131 Textile Principles, Tex. 101, 108	0	0	3
Textile Principles, Tex. 101, 108 Mil. Sci. I, Mil. 101, 102, 103 or World History, Hist.	. 0	3	0
104 or Human Relations. Soc. 101, 102, 103	2	2	2
104, or Human Relations, Soc. 101, 102, 103 Fundamental Activities and Hyg. P.E. 101, 102, 103	ī	ĩ	2
	18	21	18
*** Sophomore			
Sophomore	rear		
Economic History, Hist. 101, 102, 103	3	-	3
Decorative Draw., Arch. 106 or Light in In., Phys.	311 3	0	0
Light in In., Phys. 311, or Decorative Draw., Arch. General Inorganic Chem., Chem. 101, 102, 103	4	4	3 4 3 0 0
English or Modern Language	. 0	3	3
		1	3
Power Weaving, Tex. 231, 232, 234	1 2	3	0
Fabric Structure and Analysis, Tex. 235, 236	. 2	2	0
*Military Science II, Mil. 201, 202, 203	2	2	2
Power Weaving, Tex. 231, 232, 234 Pabric Structure and Analysis, Tex. 235, 236 Knitting I. Tex. 207, 208, 209, 202, 203 Sports Activities, P.E. 201, 202, 203	1	1	1
	20	20	20
Junior Year			
North of Medical Transmission		0	0
English or Modern Language General Economics, Econ. 201, 202, 203		3	
**Psychology 200, 337, 338	3	0	3
Textile Calculations I ,Tex. 345		0	3
Yarn Manufacture II, Tex. 301, 302, 303, 304	1	4	1
Veneral Economics, Econ. 201, 202, 203 Prestile Calculations I, Tex. 345 Yarn Manufacture II, Tex. 301, 302, 303, 304 Dobby Weaving, Tex. 331, 382, 383, 355 Fabric Design and Analysis J, Tex. 341, 342	â	3	ð
Dyeing I. Tex. 371, 372, 373, 375		1	333140113
Dyeing I, Tex. 371, 372, 373, 376 Textile Testing I, Tex. 343 Cotton Quality I & II, Tex. 420, 421	0	0	1
Cotton Quality I & II, Tex. 420, 421		3	3
†Electives		121	270
	21	21	22
Senior Year			
Industrial Man., Personnel Man., Econ. 325, 326, 333 .	- 0 (Los	3	3
Mill Organization, Tex. 426, 427 Textile Cost Methods, Tex. 355	0	3	3
Textile Cost Methods, Tex. 355	0	80	0
Yarn Manufacture IV Tey 401 402 403 405		1	1
Dobby Design, Tex. 441	3	0	õ
Textile Cost Methods, Tex. 355 Hesiory Manufactur TCx. 4330, 44 Dobby Demign, Tex. 441 Jacquard Demign, Tex. 441 Cotton and Rayon Weaving, Tex. 431, 432, 435 Cotton and Rayon Weaving, Tex. 431, 432, 434 Cotton and Rayon Desing, T. Tex. 431, 432, 435	0	0	3
Cotton and Rayon Weaving, Tex. 431, 432, 435	1	1	2
Fabrie Analysis Tay 451	2	0	0 1 3 3 1 0 1
Fabric Analysis, Tex. 451 Textile Microscopy I, Tex. 475		0	1
Electives	5	3	3
	20	21	18
+ The extented from the following fields:	Manual fire	militare Sala	her III and

1 T<sub>0</sub> he selected from the following fields: Hormanities, military Science III and IV, Language and Litresture, Fure Mathematics, Pure Natural Science and Social Science. • Or air credits in one or two of the following departments: Economics, Bandlish, Perchology, History and Political Science, Modern Languages, Sociology, and Ethies and Religion.

\*\* Principles of Accounting Econ. 301, 302, may be substituted for Psychology.

\*\*\* Freshman and Sophomore years for all textile curricula.

## CURRICULUM IN YARN MANUFACTURING

### The freshman and sophomore years are the same as for Textile Manufacturing

### Junior Year

				CREDITS	
COURSES		First	Term	Second Term	Third Term
English or Modern Language				0	0
General Economics, Econ. 201, 202, 203			ä –	3	0
Accounting I, Econ. 301, 302			8		0
Psychology, Psyc. 200, 337, 338			00020403	ñ	8
Yarn Manufacturing III, Tex. 310, 511			0	2	3
Yarn Manufacturing Lab. III, Tex. 307, 308, 309			ž	ž	ž
Dobby Weaving, Tex, 335			ñ	ő	2
Dyeing I, Tex. 371, 372, 373, 375			4	ĩ	ĩ
Cotton Quality I & II, Tex. 420, 421			0	3	3
**Electives			3	3	0000000
			<u> </u>		
			21	21	21
Senior Ye	Par				
Industrial Man., Personnel Man., Econ. 325, 326,	333		3	0	2
Mill Organization, Tex. 426, 427			0	8	3
Textile Cost Methods, Tex. 355, 356			0	3	3
Dobby Weaving Lab. Tex. 331, 332, 333			1		1
Machine Shop II, M.E. 227, 228, 229			i .	î	1 0 2 3 3
Elements of Electrical Engr. I. E.E. 320, 321			8	ā	0
Textile Calculations II, Tex. 413			3	0	õ
Yarn Manufacturing V, Tex. 407, 408, 409, 411, 41	9		5	5	2
Manufacturing Problems, Tex, 415	e		0	0	3
**Electives			3	3	3
			_	-	
			19	22	19

\*\* To be selected from the following fields: Humanities, Military Science III and IV, Language and Liteurature, Pure Mathematics, Pure Natural Science, and Social Science.

# CURRICULUM IN WEAVING AND DESIGNING

## The freshman and sophomore years are the same as for Textile Manufacturing

### Junior Year

			CREDITS	
COURSES			Second Term	Third Term
Eaclifs or Molern Latensee General Ecoursing. Econ. 201, 202, 203 Dyeling Tex. 311, 372, 375 Dyenburg 200, 384 Prochology 200, 384 Pabric Design and Analysis J. Tex. 341, 342 Jaccard Design, Tex. 435, 353 Dobby Waving, Tex. 343, 353 Dobby Waving, Tex. 343, 353 Cotton Quality J. & H. Tex. 420, 121 Elective "Elective		3	0	0
General Economics Econ 201 202 203		3	3	3
Dusing Tay 371 372 373 375			1	1
Pershology 200 228		- A.		0
Textile Colculations I Tex 245		411030200	0	3
Febric Detion and Analysis I Tay 241 242				0
Lanuard Daview Ten 445		ő	0	
Dabha Wassing Te. 995 997 990 990			0	5
Textile Testing I Tex 242		ñ	ñ	1
Cotton Quality I & II Tay 490 191		ñ (* 1		
Election Quartes 1 to 14, 16A, 460, 161			1 0 1 0 2 0 1 1	0 11 0 15 1 11 0 1
ANVIantian				18
- Biecuves			0.	
		21	21	22
Senior Y	ear			
Industrial Man., Personnel Man., Econ. 325, 326, 3	333	Sec. 1	3	
Mill Organization Tex. 426, 427 Textile Cost Methods. Tex. 355, 356 Adv. Dobby Design., 443 Dobby Design. Tex. 441 Textile Texting II, Tex. 457, 458, 459		0	÷	
Textile Cost Methods Tex 355 356		0 0 0 0 0 1	-	
Adv. Dohhy Design 443		0		0
Dobby Design Toy 441			ũ.	0
Toytile Testing II Tay 457 458 450			1	ĩ
Leasung Design Lab Ter 447 445 449				î.
Cotton Revon Wessing Tey 435 43 7 438 439		2	2	4
Color in Wovan Design Tey 455 456		8	- E	0
Enbric Analysis Tes 451		-9	0	0
Jacquard Design Lak, 40, 405, 405, 449 Jacquard Design Lak, Tex. 447, 446, 449 Cotton Rayon Weaving, Tex. 435, 435, 456 Fabric Analysis, Tex. 451 Textile Microscopy I, Tex. 475		120000	ñ	1
**Electives		3	12	
C ANNOUNCED STOLEN STOLEN				
		18	22	19

\*\* To be selected from the following fields: Humanitics, Military Science 111 and 1V, Language and Literature, Pure Mathematics, Pure Natural Science, and Social Science.

# STATE COLLEGE CATALOG

# CURRICULUM IN KNITTING

## The freshman and sophomore years are the same as for Textile Manufacturing

### Junior Year

		CREDITS	
COURSES	First Term	Second Term	Third Term
English of Modern Language 1925 2026 General E-consensities, Four, 201 1926, 2026, 2026 Upering T. Tess. 971, 372, 373, 375 Testike Tosling, J. L. 197, 2027, 2027 Testike Tosling, J. L. 197, 2027, 2027 Knittler Galenkalows, Tess, 410 Knittler Galenkalows, J. Tess, 413, 414, 415 Knittler Jahonsery H. Tw. 413, 414, 415 Heatery Masulfacture, Tes. 443, 454 Heatery Masulfacture, Tes. 445 Heatery Masulfa	. 2	0 3 4 1 0 3 0 0 2 2 2 3	0 3 1 1 1 3 3 3 2 0 0 3
	21	21	20
Senior Year Industrial Man., Personnel Man. Econ. 252, 325, 337 Var. Manufacture IV, Tet. 402, 415, 472, 473 Accounting I, Econ. 301, 302, 303 Totila Cost Methods, Tet. 353, 366 Full Pashoned Hostery Manufacture, Tet. 429 Full Deshoned Hostery Manufacture, Tet. 429 Full Deshoned Hostery Manufacture, Tet. 429		3 4 3 3 0 2 0	3 0 1 7 3 3 0 2 0 1 3
Flat Knitting, Tex. 428 Tex. Microscopy I, Tex. 475 **Electives	Ö	0 3 21	1 3 19

\*\* To be selected from the following fields: Humanitics, Military Science III and IV, Language and Literature, Pure Mathematics, Pure Natural Science, and Social Science.

# CURRICULUM IN TEXTILE CHEMISTRY AND DYEING

## The freshman and sophomore years are the same as for Textile Manufacturing

## Junior Year

*		CREDITS	
COURSES	First Term	Second Term	Third Term
English of German General Economics Form 30, 202 503 General Economics Form 30 Courses Qualitative and Quantitative Analy. Othern 211, 212, 2 Dyring LI, Tex. 577, 578, 379, 385, 382 Dyring LI, Tex. 577, 578, 379, 385, 382 Dyring LI, Tex. 577, 578, 379, 385, 382 Cotton Quality I & II, Tex. 420, 421 	·· 3 23 4 ·· 5 ·· 0 ·· 0	0 3 4 5 0 3 3 21	0 3 3 4 2 1 3 3 20
Senior Year			
Industrial Man., Personnel Man., Econ. 325, 326, 333	. 3	3	3

Organic Chemistry, Chem. 421, 422, 423 Mill Organisation, Tex. 486, 437 Fabric Finishing, Tex. 491, 492, 493, 496 Textile Miscreeopy II, Tex. 489, 490, 477 Cotton and Rayon Dyeing II, Tex. 477, 478, 470, 480, 481 *Elective	4041423	4 3 1 1 5 3	4310153
i.	21	21	20

\*\* To be selected from the following fields: Humanities, Military Science III and IV, Language and Literature, Pure Mathematics, Pure Natural Science and Social Science.

# STATE COLLEGE CATALOG

# CURRICULUM IN TEXTILE MANAGEMENT

## The freshman and sophomore years are the same as for Textile Manufacturing

### Junior Year

COURSES	First Term	CREDITS Second Term	Third Term
Fucilia or Modern Lancuage       Accounting 1, Den. 301, 302, 303       Paychology 200, 337, 338       Pays Denoise 200, 337, 338       Pay	3	0 3 3 4 3 0 2 3 21	0 2 2 2 2

# Senior Year

Industrial Man., Personnel Man., Econ. 325, 326, 333	3	3	3
Marketing Methods and Sales Man., Econ. 311, 312, 313 Mill Organization, Tex. 426, 427	ô	3	3
Cost Accounting, Econ. 404, 405	0	0	ő
Textile Courses	8	5	4
··· Biecuves · · · · · · · · · · · · · · · · · · ·	20	20	19

### Textile courses to be selected from:

Textile Cost Methods, Tex. 355, 356	0	3	3
Fabric Design and Analysis I, Tex. 341, 342	3	3	0
Dobby Weaving, Tex. 381, 332, 333, 335	1	1	4
Dyeing, Tex. 371, 372, 373, 375	â.	î	1
Textile Calculations, 345 or 413	3	or	3
Yarn Manufacture IV, Tex. 401, 402, 403	1	1	1
Dobby Design, Tex. 441	3	0	0
Incomand Design, Tex. 445	0	0	3
Cotton and Rayon Weaving, Tex. 431, 432, 435	1	1.	3
Cotton and Rayon Dyeing, Tex. 471, 472, 473, 474	1	4	1
Fabric Analysis, Tex. 451	2	0	0
Manufacturing Problems, Tex. 415	0	0	3
Color in Woven Design, Tex. 455, 456	2	- 13	0
Wool Manufacture, Tex, 416, 417, 418	1	4	0
Textile Microscopy I. Tex. 475	n	0	1
Textile Testing II, Tex. 457, 458, 459	ĩ.	ĩ	1
Hosiery Manufacture, Tex. 433, 434	3	3	õ

\*\* To be selected from the following fields: Humanities, Military Science III and IV, Language and Literature, Pure Mathematics, Pure Natural Science and Social Science.

# The Graduate School of the University of North Carolina

# STATE COLLEGE DIVISION

William Whatley Pierson, Jr., Dean, Chapel Hill Zeno Payne Metcalf, Associate Dean of the Graduate School. Raleigh

## GRADUATE FACULTY

## Professors

D. B. Anderson, Ph.D.	Botany
L. D. Baver, Ph.D.	Agronomy
E. W. Boshart, M.A. C. H. Bostian, Ph.D.	Teacher Education
C. H. Bostian, Ph.D.	Zoology
T. E. Browne, M.A.	Teacher Education
W. H. Browne, Jr., B.E.	Electrical Engineering
*J. D. Clark, M.A.	English
J. K. Coggin, M.S.	
N. W. Conner, M.S.	
L. E. Cook, M.S.	Teacher Education
Gertrude M. Cox, M.S.	Experimental Statistics
R. W. Cummings, Ph.D.	
R. S. Dearstyne, M.S.	Poultry
J. B. Derieux, Ph.D.	Physics
T. C. Doody, Ph.D.	Chemical Engineering
	Mathematics
G. W. Forster, Ph.D.	Agricultural Economics
R. S. Fouraker, M.S.	Electrical Engineering Entomology
B. B. Fulton, Ph.D.	Entomology
M. E. Gardner, B.S.	. Horticulture
B. B. Fulton, Ph.D. M. E. Gardher, B.S. †A. F. Greaves-Walker, D.Sc. A. H. Grimshaw, M.S. F. M. Haig, M.S.	Ceramic Engineering
A. H. Grimshaw, M.S.	Textile Chemistry
F. M. Haig, M.S.	Animal Industry
C. H. Hamilton, Ph.D.	Rural Sociology
C. H. Hamilton, Ph.D. *T. P. Harrison, Ph.D., LL.D.	English
T. R. Hart, M.S.	Textiles
<sup>↑</sup> *L. C. Hartley, Ph.D.	English
C. M. Heck, M.A. J. T. Hilton, M.S.	Physics
J. T. Hilton, M.S.	
<sup>2</sup> L. E. Hinkle, D.S. es L.	Modern Language
E. G. Hoefer, M.E.	Mechanical Engineering
J. V. Hofmann, Ph.D.	Forestry
E. H. Hostetler, M.S.	Animal Industry
W. W. Kriegel, Dr. Eng.	Ceramic Engineering
*A. I. Ladu, Ph.D.	English
†B. E. Lauer, Ph.D.	

• Humanities group advisory and min its only. † On military leave.

1.M. C. Leager, Ph.D.	Accounting and Statistics
J. E. Lear, E.E.	Electrical Engineering
S. G. Lehman, Ph.D.	Botany
J. R. Ludington, Ph.D.	Industrial Arts Education
J. F. Lutz, Ph.D.	Soils
C. L. Mann, C.E.	Civil Engineering
F. H. McCutcheon, Ph.D.	Zoology
G. K. Middleton, Ph.D.	
T. B. Mitchell, D.Sc.	Zoölogy
*C. G. Mumford, Ph.D.	Mathematics
Thomas Nelson, D.Sc.	
E. E. Randolph, Ph.D.	Chemical Engineering
R. B. Rice, A.M.	Experimental Engineering
R. H. Ruffner, M.S.	Animal Husbandry
G. H. Satterfield, M.A.	Chemistry
W. E. Shinn, M.S.	
I. V. Shunk, Ph.D.	Botany
G. W. Smith, D.Sc.	Engineering Mechanics
J. W. Smith, M.S.	
R. O. Stevens, M.S.	Zoölogy
J. L. Stuckey, Ph.D.	Geology
W. G. Van Note, M.S.	. Mechanical Engineering
L. L. Vaughan, M.E.	Mechanical Engineering
B. W. Wells, Ph.D.	Botany
L. F. Williams, Ph.D.	Chemistry
A. J. Wilson, Ph.D.	Chemistry
Sanford Winston, Ph.D.	Sociology
†L. Wyman, M.F.	Forestry

# Associate Professors

*S. T. Ballenger, A.M.	Modern Language
C. R. Bramer, E.M.	Civil Engineering
1R. R. Brown, M.S. in E.E.	Electrical Engineering
*R. C. Bullock, Ph.D.	
1*J. W. Cell, Ph.D.	Mathematics
J. M. Clarkson, Ph.D.	Experimental Statistics
E. R. Collins, Ph.D.	Agronomy
*A. M. Fountain, Ph.D.	English
H. C. Gauger, M.S.	Poultry
R. E. L. Greene, Ph.D.	Agricultural Economics
†R. Harkema, Ph.D.	Zoölogy
F. W. Lancaster, B.S. in Ch.E.	Physics
†*J. Levine, Ph.D.	
†W. McGehee, Ph.D.	Psychology
W. D. Miller, Ph.D.	Forestry

• Humanities group advisory and minors only. † On military leave. † On leave.

*E.	H.	Paget,	M.A.	 	-							.,							a.		 	English
W.	Α.	Reid, I	Ph.D.														ģ	ł			÷	Chemistry
J.	A. :	Rigney	, M.S.										i.						i,			Agronomy
В.	W.	Smith,	M.S.	1.1		0				÷					10					85	÷	Agronomy

#### Assistant Professors

M	F.	Buell,	Ph.D.		 				ł	a		÷		÷	e,		 		22	ç,	Botany
																					Geology
C. 1	F.	Smith,	Ph.D		 - 11	 22								e.						Е	ntomology
†L. /	٩.	Whitfo	rd, Pł	D.							6	÷	6			÷		2			. Botany

#### Organization

Purposes.—Graduate Instruction at State College is organized to formulate and develop graduate study and research in the fields primarily of Agriculture, Engineering, and Textile Manufacturing, and in the training of teachers of these subjects. The urgent need for graduate instruction leading to research in these fields is recognized by the leaders in the occupations which depend upon the development of these branches of industry. State College, therefore, offers training for teachers, investigators, and leaders in Agriculture, Engineering, and Manufacturing. Moreover, unless graduate study and research in the technological and related fields are provided, the institutions of higher learning in this section of the country will look elsewhere for trained men, whereas there should be a fair balance of such men from every section of the country.

Facilities.—State College offers exceptional facilities and opportunities for research. The Agricultural Experiment Station of North Carolina, the Engineering Experiment Station, and the Research Laboratories of the Textile School are integral parts of the College. In the Textile School, besides the research carried on by regular members of the staff, the Bureau of Agricultural Economies and other Bureaus at Washington have, for some years, used the facilities of the School for special research. Graduate students have the advantages offered by all these agencies in addition to the regular laboratories used for instruction.

In its undeveloped resources and raw materials, as well as in its going concerns in business and industry, in its varied topography and products, North Carolina is a rich field for research. The State is already imbued with a spirit of progress stimulating to intellectual growth.

Scholarships and Fellowships.--The College offers annually graduate fellowships and a number of teaching and research fellowships. Besides these, special fellowships are supported by various commercial organizations.

College Fellowships give tuition and a stipend of \$450 an academic year, paid in nine equal installments, a month apart, beginning October 25. The holder of a fellowship may be required to render a maximum of ten hours a week of service to the Department in which he is specializing.

<sup>.</sup> Humanities group advisory and minors only.

<sup>†</sup> On military leave.

Teaching and Research Fellowships give 5600 or more an academic year. The holder of one of these fellowships may not carry more than half of a full schedule of graduate studies. The rest of his time must be given to teaching in classroom or laboratory, or to research in one of the Experiment Stations.

The Honor Society of Phi Kappa Phi Fellowship, State College Chapter, offers \$50 annually, preferably to a member of the Society, to assist in promoting research, and advanced training of worthy students.

Special Fellowships have for some years been maintained by business or manufacturing organizations desirous of having re-search made on certain problems pertaining to their interest. Some organizations maintaining these scholarships have been the National Fertilizer Association, the N. V. Potash Export My., the American Cyanamids Company, the Superphosphate Institute, F. I. DuPont de Nemours and Company, the Superphosphate Institute, F. I. DuPont de Nemours and Company, the Magara Sprayer and Chemical Company, Eli Lilly and Company, the American Potash Institute, and the Northwestern Yocat Company. The stipends aforded by these fellowships have varied from \$720 to \$1,500 for twelve months. It is hoped that some of these may be available every year.

### DEGREES

The degrees awarded by the Graduate Division of State College are cluber degrees in residence: Master of Science in some specialized branch of Agriculture, Education, Engineering, and Textiles; and the Master's degree in some profession related to the undergraduate work at State College; or Professional degrees in the fields of Agriculture, Engineering and Textiles.

A graduate student is expected to familiarize himself with the requirements for the degree for which he is a candidate and is held responsible for the fulfilment of these requirements. This applies to the last dates on which theses may be accepted, the dates for examination, the proper form for theses and all other matters regarding requirements for degrees.

### Degrees in Residence

### Admission

 A candidate for admission to graduate study must present an authorized transcript of his collegiate record as evidence that he holds a bachelor's degree for a four years' undergraduate course from a college whose standards are equivalent to those of State College.

2. All new graduate students must present to the Office of Registration written authorization from the Associate Dean of the Graduate School to enter the graduate school before permits to register can be given them.

3. Graduate students must file in the Office of Registration an application for admission before permits to register can be given them.

4. Official transcripts of undergraduate and graduate work taken at other institutions must be filed in the Office of Registration before the period of registration closes. 5. It should be clearly understood that admission to the Graduate Division does not necessarly admit a student to full graduate status. A student attains full graduate status only when he has fulfilled all the preliminary requirements of the degree which he seeks and the prerequisites of the department under whose direction he is pursuing graduate work.

Department prerequisites are determined jointly by the Administrative Board of the Graduate Division and the heads of the respective departments. In brief, it may be stated that such prerequisites usually consist of the equivalent of an undergraduate major.

6. A member of the senior class of State College may, upon the approval of the Associate Dean of the Graduate School, register for graduate courses to fill a roster of studies not to exceed eighteen credits for any term.

 Members of the faculty of State College having a rank higher than that of instructor may not be considered as candidates for advanced degrees at this institution.

## Master of Science Degree

The Master of Science Degree is awarded at State College after completion of a course of study in a specialized field related to Agriculture, Education, Engineering, or Textiles; demonstration of ability to read a modern foreign language; and completion of a satisfactory thesis and of comprehensive examinations in the chosen field of study.

The rules and requirements governing the degree of Master of Science are set forth in some detail in the following paragraphs.

In addition to complying with these purely mechanical requirements, the candidate for the Master of Science degree should understand something of the philosophy of graduate study. He is entering the field of research since he is engaged in a technical study of a single field of learning, and this study culminates in work upon a single problem, the subject of his thesis, in the solution of which he is required to give evidence of the mastery of graduate methods of investigations. He is concerned with the materials of learning, and with the organization and interpretation of these materials. Since the training is thought of as liberal, as great a latitude is permitted in the selection of courses as is compatible with the idea of a sharply defined field of major interest and with the requirement of interrelationship in the whole plan of study. The object is to make possible for the student a rela tive mastery of one of the applied sciences and to give him an introduction to critical scholarship and research methods. A beginning is made in the training of the specialist; hence the correlation of courses, the oral and written examinations, and the thesis. Since there are many possible combinations of courses, the method of administration provides for personal supervision of a student's work by a special committee.

Development of precision and method in investigation and the cultivation of power of criticism and evaluation of evidence, together with the enlarged mastery of the subject matter of a defined field, constitute a training of indisputable value to the students who plan to enter the so-called learned professions or industry. Research is the way of progress in each activity.

Credits. 1. For the Master of Science degree forty-five term credits are required.

2. Not more than ten of the academic credits required for a graduate degree will be accepted from other institutions.

3. No graduate credit will be allowed for excess undergraduate credit from any other institution.

4. All work credited toward a degree in residence must be completed within six years.

Residence. A candidate for a Master of Science degree is required to be in residence at the College, pursuing graduate work, one full academic year of three terms. The candidate is not permitted to take courses leading to forty-five credits in a shorter time.

Six summer schools of six weeks in residence at the College are sufficient to fulfill the residence requirement. By specific approval of the Associate Decan of the Graduate School one summer period may be spent away from the College if devoted to the preparation of the thesis required for graduation.

In special cases, it is possible for graduate students to secure permission from the Associate Dean of the Graduate School to do twelve weeks work during a summer session. Under these provisions a minimum of four summer sessions, two of twelve weeks and two of six weeks, are required for residence.

This does not mean that the work prescribed for each individual can always be completed in the minimum length of time. Inadequate preparation very frequently makes a longer period necessary. Part-time work during a regular term is evaluated on the basis of the amount of work carried.

Courses of Study. As designated in the College Catalog under Description of Courses, the courses numbered 500 to 599 are for graduate students only, and those numbered 400 to 499 are for graduates and advanced undergraduates.

The program of the student shall contain at least twelve credits in courses of the 500 group. A maximum of 33 credits may be gained in the 400 group.

During the first term in residence the student's program will be made up by his adviser with the approval of the chief adviser of his School and the Associate Dean of the Graduate School. Thereafter, the selection of courses shall be made by the graduate student's Advisory Committee. These advisory committees shall be appointed by the Associate Dean of the Graduate School not later than the student's second term of residence.

All study plans are subject to the approval of the Administrative Board of the Graduate Division.

The advanced courses taken by a graduate student shall constitute a unified plan of study. The greater percentage of courses on a graduate student's program shall be in his major field and the electives shall have graduate relationship to the major field. Class Work.—Since a graduate student is mature and has demonstrated his ability and earnextness, he is expected to assume greater individual responsibility and to work in a more comprehensive manner than the undergraduate student. However, in preparation, in attendance, and in all the routine of class work, the graduate student is subject to the regulations observed in other divisions of the College.

Grades.--A minimum grade of B must be made on all courses to obtain graduate credit.

Language Requirements.—1. A reading knowledge of at least one modern foreign language is required of candidates for the Master of Science degree. The knowledge will be tested by a special examination by the Modern Language Department.

2. A candidate for a Master of Science degree is presumed to have a mastery of technical writing. Students will be required to demonstrate this proficiency before they are admitted to candidacy for a degree.

Thesis.—1. A candidate for the Master of Science degree must prepare a thesis upon a subject, approved by his adviser, in the field of the student's special work. Two copies of the completed thesis must be presented to the Associate Dean of the Graduate School at least one month hefore the degree is awarded.

2. Detailed instruction in the writing of the thesis will be given to the student when he is admitted as a candidate for the degree.

3. In order to be approved, a thesis must be written in correct English and scholarly form. It must demonstrate the student's ability to handle original problems and the method of development must conform to the principles of the scientific method.

Examinations.—Candidates for the Master of Science degree must pass all required examinations in courses. In addition, two special examinations are required. The first of these, a written examination to determine the student's comprehension of this field, is to be set by the student's Advisory Committee and must be taken not earlier than the first month of the last quarter of residence. The second examination is oral and is especially designed for the defense of the thesis. These examinations are to be conducted by special committees appointed by the Associate Dean of the Graduate School and will be held after each committee member has examined the

These examinations must satisfy the committee which has charge of them that the candidate possesses such knowledge of his major and minor fields as may reasonably be expected, that he can draw upon his knowledge with promptness and accuracy, and that his thinking is not limited to the separate units represented by his courses.

The special committees on theses and on the examinations will report their recommendations to the Associate Dean of the Graduate School at least one week before the end of the last quarter of residence. If the candidate's record in these respects is satisfactory, and if he has compiled with all of the requirements for the degree, the Associate Dean of the Graduate School will report the student to the faculty for approval and recommendation to the Board of Trustees.

### Fees

The graduate student in residence will pay a \$2.00 registration fee for each registration, \$2.00 per credit hour for all courses scheduled and \$10.00 for his diploma.

# Master's Degree in a Professional Field

The Master's degree was established to meet the needs of those students who expect to terminate their graduate work at the end of one year of residence or its equivalent and whose needs are not fulfilled by the requirements of the Master of Science degree.

The candidate for this Muster's degree must meet all the regulations of the Graduate Division for students in residence. In addition he must fulfill the following requirements:

Course of Study. The program of study for the Master's degree in a professional field is to be composed of those courses which best fit the professional aims of the student. At least 9 term credits are to be chosen from the group of courses numbered 500 for graduates only and the remainder from the group numbered 400 for advanced undergraduates and graduates.

Degrees.-Examples of the types of degree that may be awarded upon the completion of the course of study in a professional field are:

Master of Dairying
Master of Civil Engineering
Master of Vocational Education
Master of Yarn Manufacturing

The chief characteristic of these degrees is that the changes made in requirements permit, in greater measure, the satisfaction of what are represented as professional needs than do the requirements for the conventional Master of Science degree. The most important modification in the requirements and principles is the graning of relatively greater dispersion in programs of study than is permissible under a strict application of the principle of interrelation of subjects in a specialized field.

Language Requirements.—The candidate for a Master's degree in a professional field is exempt from the requirement of a reading knowledge of a modern foreign language.

Other Requirements.--The other requirements for the Master's degree in a professional field, especially those concerning the thesis, residence and examination are the same as for the Master of Science degree.

#### Professional Degrees

Master of Agriculture Master of Textiles Ceramic Engineer Chemical Engineer Civil Engineer Electrical Engineer

# Mechanical Engineer

Significance. The professional degrees are not honorary; they are tests of ability and testimonials of accomplishment. To merit the professional degree, a candidate must write a thesis, which demonstrates his ability to attack and to solve a new problem of sufficient complexity to require distinctly original processes, and the solution of which shall make, however small, a real contribution to his profession. The record of his work must demonstrate his power to conceive, to plan, to organize, to carry through to completion a project of considerable magnitude. The candidate should quite obviously have grown professionally since his graduation and evince intellectual vitality to guarantee the continuance of his growth.

### Requirements

1. The degree of Master of Agriculture may be conferred upon graduates of State College after five years of service in agriculture, or upon graduates of similar institutions who have performed outstanding professional service in agriculture for the State of North Carolina for a continuous period of not less than five years. The candidate for the degree of Master of Agriculture must submit a satisfactory thesis which demonstrates his ability to handle an original problem related to his professional service in agriculture.

2. The degrees in Engineering or the Master of Textiles may be conferred upon graduates of State College after five years' professional practice in responsible charge of important work, upon the acceptance of a thesis on a subject related to the practice in which the applicant has been engaged.

 Applications for the degree must be presented to the Associate Dean of the Graduate School not less than nine months before the degree is conferred.

4. With the application for a degree, the candidate must present for approval the subject and outline of a thesis and a detailed statement of his professional work since graduation.

5. The preliminary copy of the thesis must be submitted to the Associate Dean of the Graduate School at least four months before the commencement at which the degree is to be conferred. The completed thesis in approved form must be submitted at least two months before the degree is awarded.

6. When his thesis and detailed statement of his professional work have been approved, the candidate shall appear before his Advisory Committee for oral or written examination on his professional work and thesis.

### Fees

The candidate for a Professional Degree will pay \$10.00 when he matriculates and \$15.00 for his diploma.

## The Degree of Doctor of Philosophy

The Degree of Doctor of Philosophy is offered in cooperation with The University at Chapel Hill under supervision of the Graduate School of the Consolidated University of North Carolina.

The Degree of Doctor of Philosophy is offered in certain specified departments. Graduate students who expect to become candidates for the degree arc already registered in the Departments of:

Agricultural Economics	Entomology
Agronomy	Plant Pathology
Rural S	lociology

Offerings will be provided in other departments as rapidly as personnel and facilities can be developed.

### Information

Further information about graduate work at State College may be secured from Z. P. Metcalf, Associate Dean of the Graduate School, N. C. State College, Raleigh, N. C.

#### DIVISION OF COLLEGE EXTENSION

### Edward W. Ruggles, Director

Purpose. The College Extension Division is organized to carry the practical and cultural advantage of college studies to persons who cannot attend classes on the campus, and to groups and communities that may profit by the service offered through the following means.

Extension Classes are organized where at least fifteen persons are interested and willing to take up the same subject. Such matters as the distance from the college, the nature of the subject, and the availability of instructors must be taken into consideration.

Correspondence Courses for college credit are offered in Agronomy, Animal Hushandry, Horticulture, Soils, Poultry, Acricultural Economics, Rural Sociology, Chemistry, Education, Economics, English, Geology, History, Architectural Engineering, Ceramic Engineering, Mechanical Engineering, Mathematics, Modern Languages. Sociology, Safety, and Zoology. The list of these courses is being added to as rapidly as possible. Complete information concerning them is included in the Bulletin of Correspondence Courses.

Correspondence Courses of a practical nature are offered in Business English, Mathematics, Industrial Electricity, Land Surveying, Plumbing, Engineering Drawing, Building and Estimating, Sheet-metal Pattern Drafting, Industrial Statistics and Quality Control, Poultry, Business Law, and Vegetable Gardening. In addition, the courses in Ceramic Engineering may be taken as practical where no credit is desired. Short Courses are offered by the College Extension Division to tie up the facilities of the several Schools of State College with the trades and industries of North Carolina into a permanent educational program. In carrying out this program, short courses of a practical nature are offered every year which are increasing in popularity. During the present school year the following short courses and institutes are scheduled: Electrical Meters and Relays, Engineers, Surveyors, Gas-Plant Operators, Water-Works Men, Retail Coal Merchants, Electrical Contractors, Building Inspectors, Animal Production, State Garden School, Building or Buying a Home, Frequency Modulation, Lumber Grading, Nutrition School, and a Safety School for Truck and Bus Operators. Additional courses are being added as the demand arise.

College Extension Lectures by members of the faculty and concerts by the college musical organizations are available to any high school, civic club, woman's club, science club, agricultural or engineering meeting organization, desiring to put on a good lecture or musical program.

Bulletins describing the various functions of the Division will be gladly supplied on request. Write to Edward W. Ruggles, Director, Collece Extension Division, North Carolina State College, Raleigh, North Carolina.

Full Information.—Any person interested in extension classes or correspondence courses should write to the College Extension Division. requesting the Extension Bulletin, which contains complete information concerning methods of instruction, fees. and the conditions upon which College credit will be granted.

# DESCRIPTION OF COURSES

# AERONAUTICAL ENGINEERING

Under supervision of Mechanical Engineering Department until further notice.

## Courses for Advanced Undergraduates

Aero. E. 300. General Aeronautics	0-3-0
Prerequisites: Math. 101, 2, 3.	
Required of juniors taking Aeronautical Engineering. aerodynamics and the airplanc.	A study of simple
Text: Carter, Simple Acrodynamics.	Mr. Truitt.

Aero. E. 310.	Elementary	Aeronautics				0	-0-3
Prerequisite	s: Phys. 201,	202, 203.					
Required of	juniors tak	ing Aeronautical	Engineering.	А	study	of	the
design of simp	ole componen	t parts of the air	plane.				
Text: Ande	rson, Aircraf	t Layout and Det	ail Design.			Sta	ff.

Aero. E. 332, 333. Air Transportation\* 0-3-3 or 3-3-0

Prerequisites: Aero. E. 310.

The various phases of airport design, air transportation and airline operation are studied in this course. This includes a survey of existing conditions, factors governing development, topographic survey, runway layout, methods of aircraft operations, personnel organization and aviation law. Practical examples are studied at the University-owned and operated airport. Staff

Text: Lecturer's Notes.

Aero, E. 421, 422, 423. Airplane Design Prerequisites: E.M. 313, 322, C.E. 321 and Aero, E. 310. Required of seniors taking Aeronautical Engineering. A study of the design and construction of airplanes.

Text: Niles & Newell, Vol. I. Airplane Structures: Teichmann, Airplane Design Manual. Mr. Rautenstrauch.

\* Will not be given in 1946-47.

3-3-3

Aero. E. 431, 432, 433. Aerodynamics

Prerequisites: Math. 303. Aero. E. 310.

Required of seniors taking Aeronautical Engineering.

A study of engineering acrodynamics, airplane performance and stability, and airworthiness specifications.

Text: Diehl. Engineering Aerodynamics: Jones, Elements of Practical Acrodynamics. Mr. Rautenstrauch.

Aero, E. 141, 112, 143. Aeronautical Laboratory I-J 1

Prerequisites: M.E. 313, 314, 315.

Required of seniors taking Aeronautical Engineering.

Laboratory testing and study of practical aspects of modern airplane construction, operation and maintenance. Staff.

Aero, E. 151. Aircraft Engines

Prerequisites: M.E. 307, 308, 309.

Required of seniors taking Aeronautical Engineering.

The practical aspect of aircraft engine operation and design including carburetors. magnetos, super-chargers. fuel and oil systems, engine installations and accessories.

Text: Lecturer's Nutes.	St	a	11
-------------------------	----	---	----

Aero, E. 161. Aircraft Instruments and Navigation \* 3-0-0 Prerequisites: Aero, E. 310 or 351 and 352.

Elective.

This course deals with the instruments used in aircraft engine operation, flight indication, and in navigation. The use, principle of operation, and calibration is studied in detail. The fundamentals of navigation include problems in navigation such as course plotting, radius of action from fixed and movine bases and intercention.

Text: Lecturer's Notes.

Staff.

Aero. E. 171. Aircraft Propeller Design<sup>×</sup> Prerequisites: Aero. E. 310.

Elective.

The various theories are discussed in this design course. This embraces effect of blade shape, tip speed, and gearing on propeller performance. The various types of propellers are studied in detail.

Text: Wieck. Aircraft Propeller Design. Mr. Rautenstrauch.

3-3-3

0.0.2

<sup>\*</sup> Will not be given in 1'46-17.

# Courses for Graduates Only

Aero, E. 531, 532, 533. Advanced Aerodynamics	3-3-3
Prerequisites: Acro. E. 431, 432, 433.	
Advanced performance calculations and tests.	Mr. Rautenstrauch.
Aero. E. 511, 512, 513. Aeronautics Research	3-3-3
Prerequisites: Acro. E. 441, 442, 443.	

Research and thesis in connection with an aeronautical project.

Staff.

## AGRICULTURE

Agr. 101. Introduction to Agriculture 1-0-0 Organization and function of agricultural institutions and agencies; North Carolina agriculture in relation to state and national problems.

Mr. Bayer.

## AGRICULTURAL ECONOMICS

## Courses for Undergraduates

Agr. Econ. Agricultural Economics. 3 or 3-0 The economics of agricultural production, the marketing of farm products, farm credit, land tenure, and other major economic problems of the farmer. Staff.

Agr. Econ. 212. Land Economics.

Prerequisites: Econ. 201, 202.

Land economics including land classification and land use with special emphasis on forest land; land ownership and control; the principles of land valuation; policies of land settlement and development; the taxation of forest lands. Staff.

## Agr. Econ. 303. Farm Management I.

Prerequisites: Econ. 201, 202.

Successful operation of the farm, farm planning, management of labor, farm work programs, use of machinery, and farm administration. Messrs. Forster, Greene.

0-3-0

0-0-3

Agr. Econ. 313. Farm Accounting.

Prerequisite: Econ. 201. 202.

Farm accounting, preparation of inventories of farm property, simple financial statements, methods of keeping farm records, analysis and the interpretation of results obtained from farm business transactions.

Mr. Greene.

### Courses for Graduates and Advanced Undergraduates

Agr. Econ. 402, 103. Farm Cost Accounting.

Prerequisites: Econ. 201, 202, and 301.

Accounting applied to farm transactions, the preparation of financial statements, the methods of keeping farm records, analysis of an individual farm record, the interpretation of the results from cost-accounting.

Mr. Greene.

3-0.0

0-3-0

Agr. Econ. 411. Agricultural Marketing.

Prerequisites: Econ. 201, 202.

Successful marketing of farm products, market organization and control, price-making forces; critical examination of the present system of marketing farm products. Mr. Leager.

Agr. Econ. 112. Problems of Land Economics. 0-3 0

Prerequisites: Econ. 201, 202, Agr. Econ. 202, and 6 additional term credits in Economics.

Land classification; ownership and acquisition of land; tenancy and land ownership; the functions of the landlord and the tenant; land valuation and land speculation. Messrs. Forster, Hamilton.

Agr. Econ. 421. Marketing Methods and Problems. 3 0-0 Prerequisites: Econ. 201, 202, Agr. Econ. 202, and 6 additional term credits in Economics.

The problems and methods involved in the marketing of farm products; suggestions for improvement. Mr. Mr. Mr.

Agr. Econ. 422. Agricultural Coöperation.

Prerequisites: Econ. 201, 202.

Local community coöperation, both economic and social; farmers' buying, sciling, and service organization. Mr. Abrahamsen.

0-0-3

# Agr. Econ. 123. Farm Management II.

Prerequisite: Agr. Econ. 303.

The factors involved in the management and organization of typical farms in the State. Messrs, Greene, Forster,

## Agr. Econ. 131. Agricultural Prices.

Prerequisites: Econ. 201, 202, Agr. Econ. 202, 303.

Behavior of agricultural prices; their relation to consumption, production of farm products, and marketing practices; methods of price analysis Mr. Anderson. applied to agricultural products.

### Agr. Econ. 132. Agricultural Finance.

Prerequisites: Econ. 201, 202, Agr. Econ. 202, and 6 additional term credits in Economics.

Financing the production and marketing of agricultural products. Consideration of farm mortgage credit, personal and intermediate credit, and agricultural taxation. Mr. Leager.

Agr. Econ. 142. Cotton and Tobacco Marketing. 0 - 3 - 0Prerequisites: Econ. 201, 202, Agr. Econ. 202, Agr. Econ. 411, and

2 additional credits in Economics

The problems, methods, and practices used in the marketing of tobacco and cotton. Mr. Forster.

# Agr. Econ. 113. Cooperative Accounting.

Prerequisites: Econ. 201, 202, and 301.

Accounting methods, principles, and techniques as applied to farm co-Mr. Leager. operative business.

Agr. Econ. 152. History of the Agricultural Adjustment Program. 0-3-0 Economics of the Agricultural Adjustment Acts, and of the Agricultural Conservation Programs; the effect of the programs on production and Mr. Forster. prices of cotton, tobacco, wheat, corn, and hogs.

### Courses for Graduates Only

Agr. Econ. 501. Economics of Agricultural Production. 3-0-0

Prerequisites: Econ. 201, 202, Agr. Econ. 202, and 6 additional term credits in Economics.

Economic theories and methods of analyses applicable to agricultural Mr. Forster. production.

### 0.0.3

3-0-0

0 - 3 - 0

0-0-3
Agr. Econ. 502. Farm Organization and Management. 0-3-0 Prerequisites: Agr. Econ. 303, 423, 501, and 6 additional term credits in

Economics.

The extension of the economic principles discussed in Agr. Econ. 501, and their application to the problems of farm organization and management.  $M_r$ . Forster,

Agr. Econ. 503. Agricultural Finance.

003

Prerequisites: Econ. 201, 202. Agr. Econ. 432. and 6 additional term credits in Economics.

Problems in financing agricultural production and marketing. A history of the development of financial institutions designed to serve agriculture. Mr. Leaver.

Agr. Econ. 513. Cooperative Marketing Methods and Practices. 0-0 3 Prerequisites: Econ. 201, 202, Agr. Econ. 432, and 6 additional term credits in Economics.

A critical study of the methods and practices used by large agricultural coöperatives.

Agr. Econ. 521, 522, 523. Resea. ch in Agricultural Economics. 3 3-3

Prerequisites: Economics 201, 202, and 6 additional term credits in Economics.

A consideration of the research method and procedure now being employed by research workers in the field of Agricultural Economics, including qualitative and quantitative, inductive and deductive methods of research procedure; choice of projects, planning, and execution of the research Messrs. Forster, Greene.

Agr. Econ. 531, 532, 533. Analysis of National Policies and Agricultural Action Programs.

3-3-3

Prerequisites: Econ. 201, 202, Agr. Econ. 202 and six additional term credits in Economics or Agricultural Economics.

Critical discussion of modern methods of economic analysis from the viewpoint of their applicability to problems of economic policy: an examina tion of the major agricultural action programs in the United States; the analysis of principles of economic policy with regard to their effect upon national and farm income and income distribution. Mr. Forster.

# AGRICULTURAL ENGINEERING

Courses for Undergraduates

Courses for Condergraduates
Agr. Eng. 202. Farm Equipment. 0-4 or 4 Prerequisites: Math. 111 or Physics 115 or 201.
A study of modern farm machinery, equipment and buildings for the farm.
Agr. Eng. 212. Farm Engines. 0-3-0
Prerequisites: Physics 115 or 201. The principles of gas-engine operation and their application to farm uses; selection, poeration, and repair of engines. Mr. Giles.
Agr. Eng. 222. Agricultural Drawing. 0-3-0   Drawing-board work covering both freehand sketching and elementary mechanical drawing; working and pictorial drawing, lettering, maps, graphs, tracing, and blueprinting. Mr. Weaver.
Courses for Advanced Undergraduates
Agr. Eng. 303. Terracing, Drainage and Irrigation. 0-0-3   Prerequisites: Soils 202 and Agr. Eng. 202. The different methods of disposing of surplus water and the prevention
of erosion. Mr. Weaver.
Agr. Eng. 313. Farm Machinery and Tractors. 0-0-3 Prerequisite: Agr. Eng. 202.
The design, construction and operation of modern labor-saving machinery for the farm. Mr. Giles.
Agr. Eng. 322. Farm Buildings. 0-3-0 Prerequisite: Agr. Eng. 202.
The design, construction, and materials used in modern farm buildings. Mr. Weaver.
Agr. Eng. 331, 332. Farm-Shop Work. 3-3-0
Prerequisite: Agr. Eng. 202. Lecture and laboratory practice, in drafting, sharpening farm tools, mak- ing concrete, woodworking, cold-metal working, forging, soldering, and pipe fitting. Mr. Giles.

### Courses for Graduates and Advanced Undergraduates

#### Agr. Eng. 403. Erosion Prevention. Prerequisite: Aer. Eng. 303. The causes and effects of erosion, and the methods of conserving our greatest national resource our fertile soil. Mr. Weaver.

#### Agr. Eng. 423. Farm Structures.

Prerequisite: Agr. Eng. 322.

Modern building methods as applied to farm structures; the use of laborsaying harn equipment and methods of reducing labor to a minmum; the placing of the farm group in relation to topography and farm activities, for economy, appearance, and utility. Mr. Weaver.

#### Agr. Eng. 432. Rural Electrification.

Prerequisite: Agr. Eng. 322.

Problems involved in the distribution, uses, and costs of electricity on the farm. Mr. Weaver.

### Agr. Eng. 433. Teaching Farm-Shop Work. Prerequisites: Agr. Eng. 331 and 332.

The use and care of power tools; shop management and methods of presenting the subject matter. Messes, Giles, Collins,

#### Agr. Eng. 481, 482, 483. Special Problems in Agricultural Engineering.

Prerequisites: Agr. Eng. Three credits in 300 courses.

For students who desire advanced work in one of the following subjects: Farm Engines, Tractors, Farm Mach., Buildings, Conveniences, Rural Electrification, Erosion Control and Drainage, Messrs, Weaver, Giles,

### Agr. Eng. 491, 492, 493. Senior Seminar.

Prerequisite: Senior standing in Agr. Eng.

Students will be assigned special problems the results of which are to be presented to the class. Messrs, Weaver, Giles.

0-2-0

0 0-3

1-1-1

2.0.0

0.0.3

### Courses for Graduates Only

Agr. Eng. 503. Advanced Drainage, Irrigation and	
Erosion Control.	0-0-5
Prerequisites: Grad. standing in Agr. Eng., Land Improvement	Option.
An advanced study of the more complex problems in Drainage,	Irrigation
and Erosion Control methods.	Staff.

Agr. Eng. 523. Advanced Farm Structures. 0-5-0 Prerequisites: Grad, standing in Agr. Eng., Rural Structures Option, A more advanced study of the problems of Farm Structures than is give in courses Agr. Eng. 322 and Agr. Eng. 423. Mr Weaver

5-5-5 Agr. Eng. 521, 522, 523. Research in Agr. Eng. Prerequisites: Grad, standing in Agr. Eng., Any Option, Research in specialized phases of Agr. Eng. By arrangement, Staff.

Agr. Eng. 531, 532, 533. Seminar. 1-1-1 Prerequisites: Grad. standing in Agr. Eng., Any Option. Scientific Articles, Progress Reports in Research, and special problems of

interest to Agricultural Engineers will be assigned, reviewed and discussed by students and members of the Agr. Eng. Staff.

#### DESCRIPTION OF COURSES IN ANIMAL INDUSTRY

#### Courses for Undergraduates

A.I. 101. Introduction to Animal Industry. The fundamental principles of successful livestock farming, Production and processing of livestock products. The importance of animal products in the human diet. Staff

A.I. 301. Types and Market Classes of Livestock. 5-0-0 A study of the types and market grades and classes of dairy cattle, beef cattle, swine, sheep, horses and mules together with their adaptabilities and distribution. Messrs. Pierce and Haig.

A.I. 302. Judging and Selection-Dairy Cattle. 0-3-0 Breed characteristics and score-card requirements for the five major breeds of dairy cattle. Relation of form to function. Practice judging, Messrs. Haig and Ruffner.

4 or 4-0

A.I. 303. Judging and Selection—General Livestock. 0-0-3 Fundamental principles involved and the practice of comparative judging of the different types and breeds of meat animals and work stock.

Messrs. Pierce and Ammerman.

### A.I. 304. Advanced Judging and Selection—General Livestock 3-0-0 Prerequisite: A.I. 303.

Practice and reasons in comparative judging of beef cattle, sheep, swine, horses, and mules. Only for students who have shown proficiency in general livestock judging. Extra curricular time will be required of students interested in training for judging teams. Mr. Pierce.

#### A.I. 306. Advanced Judging and Selection—Dairy Cattle. 0-0-3 Prerequisite: A.I. 302.

Special emphasis on show-ring requirements for dairy cattle; advanced judging practice with oral reasons. Judging trips to various leading dairy farms will be made. Such dairy cattle judging teams as may be chosen to represent the College will be selected from among those taking this course. Mr. Hair.

### A.I. 312. Animal Nutrition I.

Prerequisites: Chem. 203 (or equivalent) and Zool. 201.

Metabolism of carbohydrates, liquids, proteins, inorganic elements, and vitamins. Messrs. Peterson and Haig.

### A.I. 323. Meat and Meat Products.

A study of live animal and carcass relationships, dressing percentages, and cut-out values. Slaughtering, cutting, curing, freezing, and handling of meats and meat products for commercial and home use.

Messrs. Brady and Blumer.

### A.I. 324. Meat Selection.

Prerequisites: A.I. 323.

A detailed consideration of the factors involved in the selection of carcasses and wholesale cuts of beef, pork and lamb. A thorough study of the identification of retail cuts and their adaptabilities for utilization.

Messrs. Brady and Blumer.

2-0-0

0-3-0

#### 178 [ANIMAL INDUSTRY]

#### A.I. 331. Livestock Production.

For students in agricultural education.

A study of the problems encountered in dairy and general livestock production in North Carolina and adjacent areas. Attention to the various classes of livestock will be in proportion to their importance in the agriculture of the area. Messrs. Rutfmer and Hostetler.

#### A.I. 341-342-343. Livestock Production I, II, and III.

Principles and practices of general livestock management. Development of farm herds and flocks. Practical applications in feeding, breeding, and herd management on livestock farms. Subject matter sub-divided on the following basis:

1-Swine and Workstock, II Beef cattle and sheep, III-Dairy cattle. Messrs. Foster, Hostetler, Haig, Ruffner and Stewart.

#### A.I. 353. Livestock practicum.

Practice in the feeding and care of farm animals.

The use of equipment needed and methods used in fitting and training animals for exhibition. Staff.

### A.I. 362. Diseases of Farm Animals.

Prerequisite: Botany 312 and Zool. 201.

Etiology and symptoms of infectious, non-infectious, and parasitic diseases of farm animals. Methods of spread of common infectious diseases with especial emphasis upon economic losses and methods of prevention, control, and eradication of the major diseases of farm animals.

Mr. Grinnells.

### Courses for Advanced Undergraduates and Graduates

A.I. 402. Animal Breeding.

Prerequisites: Zool. 411.

Physiology of reproduction and the mode of inheritance of important characteristics in farm animals. Origin, history, and adaptability of the breds of livestock. Special emphasis on the place of selection, artificial insemination, inbreeding, and crossbreeding in an over-all program of animal improvement. Mr. Stewart.

0-0-5

0-5-0

## 3-3-3

0-4-0

### A.I. 413. Animal Nutrition II.

Prerequisite: A.I. 312.

The determination of digestibility; nutritional balances; measures of total nutritive energy; the fasting catabolism; growth; reproduction; lactation; work production; feeding standards; calculation of rations.

Mr. Peterson.

### A.I. 421, 422, 423. Animal Industry Seminar. 0-0-1

Animal industry majors will be required to participate for three quarters and will receive one credit in the third quarter.

Review and discussion of special topics and the current literature pertaining to all phases of Animal Production. Staff.

#### Courses For Graduates Only

A.I. 501, 502, 503. Topical Problems in Animal Industry. 3-3-3 Staff.

A.I. 511, 512, 513. Advanced Nutrition. 3 3-3 Prerequisite: A.I. 413.

The role of proteins, minerals, and vitamins in the nutrition of animals. Mr. Peterson.

### A.I. 521. Research Method in Animal Science. 3-0-0 Prereouisite: Stat. 413.

Sources of errors in experiments with animals, experimental designs adapted for specific types of animal research, estimation of data required for specified accuracy, factors involved in the increase of accuracy at minmum cost. Mr. Comstock.

### A.I. 525. Statistical Concepts in Genetics. 0-3-0

Prerequisite: Stat. 412.

The composition of phenotypic variance and the estimation of environmental, genetic, and heritable genetic variance. Coefficients of inbreeding and relationship. The effects of various selection procedures and systems of breeding on population means and variances. Mr. Comstock.

A.I. 526. Modern Research in Animal Breeding. 0-0-3 Prerequisite: A.I. 402. Review and appraisal of contemporary research in animal breeding.

Review and appraisal of contemporary research in animal breeding. Mr. Stewart.

A.I. 531, 532, 533.	Research in Animal Industry.	1-5, 1-5, 1-5
•		Staff.

#### ARCHITECTURE AND ARCHITECTURAL ENGINEERING

#### Courses for Undergraduates

Arch. 100.	Pencil Sketching.	3 or 3 or 3
		or 1-1-1

Required of seniors in L. A., and sophomores in Ind. Arts. Elective for Engineering and Textile students.

Quick sketching of objects as seen and imagined in perspective: elementary principles of perspective, especially as applied to the visualization of imagined objects, Mimeographed Notes and Problems Sheets.

Messrs, Paulson, Baumgarten,

### Arch. 101, 102, 103. Freehand Drawing 1, 2, and 3,

1. Required of juniors in Arch., and Arch. Eng.

Water color rendering. Nature and qualities of nigments: theory of color and of tone: presentation of decorative and of pictorial subjects in monochrome and in full color, Guptill; Reference to Color,

2. Required of juniors in Arch., Arch. Eng., and L. A.

Sketching in pencil, and pen and ink from models, casts and nature. Emphasis upon tonal value, pattern of darks, character and variety of line, and accenting, Lettering, Watson; Pencil Sketching,

3. Required of juniors in Arch., Arch. Eng., and L. A.

Charcoal Drawing from architectural casts and models: emphasis upon delicacy and gradation of shade and shadow; value sketches of composition projects. Mr. Paulson.

#### Arch. 104s. Art Appreciation for Teachers. 0-0-3

Picture study of the list suggested by the State Board of Education for grade-school use, including paintings, architecture, and sculpture. Paulson: Art Appreciation for Teachers. Mr. Paulson.

#### Arch, 105. Art Principles in Industry.

Elective for Engineering and Textile students, required of sophomores in Industrial Arts.

Line, form, color, and aesthetic principles of practical art applicable to the design of articles for manufacture. Mimeographed Notes, Mr. Paulson,

Arch. 106. Decorative Drawing.

Required of juniors in the Textile School.

Freehand drawing and creative designing of decorative motives adaptable to weaving and cloth printing. Mimeographed Problem Sheets.

Mr. Paulson.

3 or 3 or 3

2.2.9

Arch. 107. Architectural Drawing.

Required of freshmen in Architecture, M. E. 105 and 106 may be substituted for Arch 107

[Drafting Practice.] Use of instruments in drawing plans, elevations, sections: projections: architectural lettering and conventions: tracing and blueprinting; elements of architecture and introduction to design. Pickering; Architectural Design. Messrs, Baumgarten, Grady,

### Arch, 111, 112, 113. Appreciation of Fine Arts, Architecture, Painting, Sculpture,

Elective for students of junior standing.

Principles of art. Study of those qualities which constitute great art. First term, architecture: second term, painting: third term, sculpture and the minor arts. Reinach: Avollo: University Prints: Mimeographed Notes. Gardner: Art Through the Ages. Mr. Paulson.

Arch. 114. Clay Modeling.

Prerequisite: Arch. 100.

Required of seniors in Arch.

Modeling of ornament, reliefs, and full round projects in clay or wax; moulds and plaster casting; small scale building detail models. Lectures, Mr. Grady. laboratory, and critiques.

### Courses for Advanced Undergraduates

Arch. 201, 202, 203. Elements of Architecture I. H. and III. 3-3-3 Prerequisites: M. E. 105, 106, or Arch. 107.

Required of sophomores in Arch., Arch. Eng., and L. A.

Exercises and studies of architectural elements and details, walls, openings, etc. The orders of architecture and their application to simple problems in composition and design. Pickering: Architectural Design; Ramsey and Sleeper: Graphic Standards. Messrs. Shumaker, Grady.

Arch, 205. Shades and Shadows,

Prerequisite: M. E. 107.

Required of sophomores in Arch., Arch. Eng., and juniors in L. A.

The determination of conventional shades and shadows as they occur on rendered drawings. Shelton: Architectural Shades and Shadows.

Messrs, Shumaker, Grady,

2 0-0

1-1-1

3-3-3

Arch. 206. Perspective Drawing.

Prerequisite: M. E. 107.

Required of sophomores in Arch., Arch, Eng., and of juniors in L. A. and Agr. Engr.

Theory of perspective with special applications to illustration and design. Lectures and drawing, Turner: Fundamentals of Architectural Design, Mr. Baumgarten.

Arch, 207. Historic Motives in Textiles.

Elective for students of junior standing.

Chronologic development of ornament motives; the adaptation of historic motives to modern textile design. Hamlin: History of Ornament,

Mr. Paulson.

### Arch. 211, 212, 213. Freehand Drawing 4, 5, and 6. Prerequisite: Arch. 103.

Required of fifth year Arch., elective for others,

The purpose of this course is to give the student a mastery of presentation in his own chosen medium. The first term (Arch. 211) will be devoted principally to still life; the second (Arch. 212) to landscape; the third (Arch. 213) to figure drawing. Personal technique encouraged; sound principles Mr. Paulson. of drawing insisted upon.

Arch, 301, 302, 303. Intermediate Design, B-1, B-2, B-3, 3.3.3 Prerequisites: Arch. 201, 202, 203.

Required of juniors in Arch., and Arch. Eng.

Problems in elementary composition, design, planning and rendering. Library research. Registration with the Beaux Arts Institute of Design may be required. Beaux Arts Institute Problems. Messrs. Baumgarten, Grady.

Arch. 304.	Photographic Practice.	0-0-1
Arch. 504.	i notographie i ractice.	0-0-1

Required of juniors in Arch., and Arch. Eng.

The practical use of photography as an aid in architectural rendition. Lectures, Notes and Assignments. Mr. Paulson.

Arch. 305. Working Drawings.

Prerequisites: Arch. 201, 202, 203.

Required of sophomores in Arch.

The preparation of working drawings of sections and details of construction. Ramsey and Sleeper: Graphic Standards; Knoblock: Good Practice in Construction. Messrs, Shumaker, Grady,

0-0-2

Arch. 321, 322, 323. History of Architecture 1, 2, and 3. Prerequisite: Arch. 203.

Required of juniors in Arch., Arch. Eng., and L. A.

The origin and development of historic styles of architecture from antiquity to the nineteenth century. Illustrated lectures, library references, sketches. Fletcher: History of Architecture; Hamlin: History of Architecture. Mr. Baumgarten.

Arch. 325. History of Sculpture and Mural Decoration. 0-0-2

Prerequisite: Arch. 203.

Required of juniors in Arch.

The development of sculptural and mural art as adjuncts to architecture, ancient to modern; critique of modern decoration supplementary to architecture. Mimeographee notes. library reference and illustrated lectures.

Mr. Grady.

3.3.0

Arch. 351, 352. Architectural Design E-1, E-2.

Prerequisite: Arch. 303.

Required of seniors in Arch. Eng.

Advanced Architectural Design studied especially from the viewpoint of structure; projects developed with wall and spanning sections; rendered presentation of practical constructive programs.

Messrs. Baumgarten, Grady.

Arch. 353, 354, 355. Architectural Design B-4, B-5, and B-6. 6 6-6 Prerequisite: Arch. 303.

Required of seniors in Arch.

Advanced programs in architectural design. Registration with the Beaux Arts Institute of Design may be required. Complete presentation drawings of projects such as Class B-Beaux Arts Institute Problems.

Messrs. Baumgarten, Grady.

Arch. 401, 402, 403. Architectural Design A-I, Λ-II, Λ-III. 6 6-6 Prerequisite: Arch. 355.

Required of fifth year in Arch.

Major problems in advanced planning and research. Registration with the Beaux Arts Institute of Design may be required. Beaux Arts Institute Problems. Messrs. Shumaker, Baumgarten, Grady.

#### 184 [ARCHITECTURE]

#### Arch. 107. Architectural Composition.

Prerequisite: Arch. 323.

Required of fifth year in Arch.

Principles of planning and composition as related to buildings; architectural motives. group planning; library research and sketches. Curtis: Architectural Composition. Mr. Shumaker.

#### Arch. 408. Architectural Estimates.

Prerequisite: Arch. 305.

Required of fifth year in Arch. and seniors in Arch. Engr.

Lectures and problems in taking off quantities and in estimating materials and labor cost in building construction. *Mimeographed Notes*.

Mr. Shumaker.

### Arch. 409. Building Materials I.

Prerequisite: Arch. 303.

Required of seniors in Arch. and Arch. Eng.

Nature and qualities of building materials, especially fabricated materials, and their use in interior and exterior finish and in construction. Sample exhibits, lectures and demonstrations. Manufacturers' Data Sheets.

Mr. Grady.

# Arch. 411, 412. Architectural Office Practice. 0-3-3

Prerequisite: Arch. 305.

Required of juniors in Arch., seniors in Arch. Eng.

The preparation of working drawings from sketches, following office routine. Knoblock: Good Practice in Construction; Ramsey and Sleeper: Graphic Standards. Messrs. Baumgarten, Grady.

Arch, 414. Professional Practice.

Prerequisite: Econ. 307.

Required of fifth year in Arch.

Ethics and procedure in the profession of architecture. Relation of patron and commissionee. Mimeographed Notes. Mr. Shumaker.

Arch. 415. City Planning.

Prerequisite: Arch. 323.

Required in fifth year in Arch.

Origin and development of urban communities; aesthetic. economic, and circulatory problems in city and town planning; zoning and restraining legislation. Messrs. Shumaker, Baumgarten.

0-0-2

3-0-0

- -

0-0-1

0-2-0

Arch. 416. Architectural Specifications.

Prerequisite: Econ. 307.

Required of seniors in Arch, and Arch, Eng.

Execution of specifications for architectural building contracts: identification of material. clarification of terms; protection of patron, contractor, and architect. Mimeographed Notes. Mr. Shumaker.

Arch. 421. History of Architecture 4.

Prerequisite: Arch 323

Required in fourth year in Arch.

Nineteenth century and contemporary architectural styles, with special attention to trends resulting from the use of modern materials: illustrated lectures, discussion assignments, and reports. Fletcher: History of Architecture. Mr. Baumgarten.

#### Arch. 501, 502, 503. Graduate Design I, II, III. 4-4-4

Prerequisites: Arch. 323, 403 (or 352).

Class A .-- Project, Advanced problems in design, Archaeology, Measured Drawings, Registration with the Beaux Arts Institute of Design is required. Beaux Arts Institute Problems. Messrs. Shumaker, Baumgarten, Grady,

Arch. 511, 512, 513. Historic Research I. II. III.

Prerequisites: Arch. 323, 403 (or 352).

Research in Architecture and Art in some important phase of its development. Library work with sketches. Library References.

Messrs. Paulson, Baumgarten, Grady.

### BOTANY

#### Courses for Undergraduates

Bot. 101, 102. General Botany.

Forestry students will follow a 4 4-0 sequence.

The first term: The structure and physiology of the higher plants: the second: a survey of the major lower plant groups with the emphasis upon the economic forms, bacteria and fungi,

Messrs, Wells, Shunk, Whitford, Buell,

Bot. 203. Systematic Botany.

Prerequisites: Bot. 101. 102.

An introduction to the local flora and the classification of the plants included therein. Messrs. Wells, Shunk, Whitford, Buell.

4-4-0 or 0-4-4

0-0-3

0-0-3

0-3-0

4-4-4

186 [BOTANY]	
Bot. 211-213. Dendrology.	3-0-3
Prerequisites: Bot. 101, 102, 203.	
The principal trees of North America.	Mr. Buell.
Courses for Advanced Undergradu	ates
Bot. 301. Diseases of Field Crops.	3-0-0
Prerequisites: Bot. 101, 102, 321.	
The more important diseases of field crops, such as	s cotton, tobacco, corn,
small grains. legumes, and grasses; emphasis on s control.	symptoms, cause, and Mr. Lehman.
Bot. 302. Diseases of Fruit Crops.	0-3-0
Prerequisites: Botany 101, 102, 103.	
Causes, symptoms, and control of the more impo	rtant fruit diseases.
	Mr. Clayton.
Bot. 303. Diseases of Vegetable Crops.	0-0-3
Prerequisites: Botany 101, 102, 321.	

Symptoms, causes, and means of controlling important vegetable diseases. Mr. Jensen.

### Bot. 311. Diseases of Forest Trees. 3-0-0 Prerequisites: Bot. 101, 102, 321.

Lectures and laboratory studies of importance, causes, symptoms, and control of diseases affecting trees and their products. Mr. Ellis.

Bot. 312. General Bacteriology. 0-4 or 4 Prerequisites: Bot. 101, 102, or Zool. 101. An introduction to the principles of bacteriology; laboratory work on

An introduction to the principles of bacteriology; laboratory work on modern cultural methods of handling and studying bacteria. Mr. Shunk.

Bot. 321. Plant Physiology. 5-0 or 5 Prerequisites: Bot. 101, 102. The activities of living plants with special emphasis upon the fundamental

rine activities of living plants with special emphasis upon the fundamental principles concerned. Mr. Anderson.

	[BOTANY] 187
Bot. 331. Plant Microtechnique. Prerequisites: Bot. 101, 102.	3-0-0
Materials and processes involved in the preparation of pla microscopic examination.	nt structures for Mr. Anderson.
Courses for Advanced Undergraduates and Gra	duates
Bot. 402. Crop Geography.	0.3-0
History, distribution and ecology of cultivated plants.	Mr. Wells.
Bot. 411-412. Plant Morphology. Prerequisites: Bot. 101, 102, 203.	3-3-0
An advanced survey of plants; the lower groups are giv the higher (land plants) the second. Messrs. Wells. St	
Bot. 413. Plant Anatomy. Prerequisites: Bot. 411-412.	0.0 3
The microscopic structure of higher plants with partice the economic types.	ular emphasis on Mr. Kerr.
Bot. 421. Systematic Botany of Grasses. Prerequisite: Bot. 203.	3-0 0
Identification and classification of important species.	Mr. Buell.
Bot. 122. Methods in Plant Pathology.	0-4-0
Prerequisites: Bot. 101, 102, 312, 321, and one of the for 303 or 311.	llowing: 301, 302,
Survey of and laboratory exercises in essential meth study of plant pathological problems.	nods used in the Mr. Jensen.
Bot. 423. Systematic Botany of Economic Dicot Families Prerequisite: Bot. 203.	
Identification, classification and economic significance o families as Leguminosae, Rosaceae, and Solanaceae.	f such important Mr. Buell.
Bot. 432, 433. Advanced Plant Physiology. Prerequisites: Bot. 101, 102, 321.	0-3-3
A critical and comprehensive treatment of the various physiology; particular attention given to basic principle developments.	

188 [BOTANY]
--------------

### Rot 411 Plant Ecology. Prerequisites: Bot. 101, 102, 321. Environmental control of plant distribution with emphasis upon the

habitats and vegetation of North Carolina. Mr. Wells.

#### Bot. 112. Microanalysis of Plant Tissue. 0-2-0

Prerequisites: Bot. 101, 102, 321.

The identification in plant tissues of mineral elements and organic connounds and the physiological significance of these materials. Mr. Anderson,

Bot, 443. Soil Microbiology.

Prerequisites: Bot. 101, 102, 321, 312.

The more important microbiological processes that occur in soils: decomposition of organic materials, ammonification, nitrification, and nitrogen fixation Mr. Shunk.

0-3-0 Bot. 452. Advanced Bacteriology. Prerequisites: Bot. 101, 102, 312. Methods used in the bacteriological analysis of water and milk.

Mr. Shunk.

### Bot. 453. Advanced Plant Ecology.

Prerequisites: Bot. 321, 441,

Practice in the use of the instruments necessary in the study of environmental factors; advanced readings and conferences on plant distribution in Mr. Wells. relation to these factors.

#### Bot. 462. Research Methods in Plant Physiology. 0-3-0

Experience in the use of techniques important in physiological research. Mr. Anderson.

Bot. 473. Aquatic Biology.

Prerequisites: Bot. 101, 102.

Identification and control of the aquatic algae and protozoa which give trouble in reservoirs. A survey of the higher water and marsh plants is also included. Mr. Whitford.

0-0-3

0-0-3

0-0-3

[BOTANY] 189 Bot. 491. Principles of Plant Pathology. 0-5-0 Prerequisites: Bot. 101, 102, 321, and one of the following: 301, 302, 303 or 311. An advanced study of the epiphytology and etiology of diseases of plants. Mr. Lehman Bot. 501, 502, 503. Plant Pathology: Special Studies. 3.2.2 Prerequisite: Admittance only w ith permission of instructor. Selected or assigned problems in various phases of phytopathological investigation. Diseases of special crops, current literature and new techniques will be emphasized. Staff. Bot. 511, 512, 513. Bacteriology: Special Studies. 3-3-3 Prerequisites: Bot. 312, 452. Special work on restricted groups of bacteria, such as nitrogen bacteria of the soil, milk organisms, and special groups of bacteria in water. Mr Shunk Bot. 521. Advanced Systematic Botany. 3-0-0 or 0-0-3 Prerequisites: Bot. 203. An advanced survey of restricted groups of plants involving organization and distribution problems. Messrs, Wells, Buell, Bot. 522, 523. Cytogenetics. See F. C. 522, 523. Bot. 531, 532, 533. Plant Physiology. 3-3-3 Prerequisite: Bot. 321, 432. Critical study of some particular problem, involving original investigation together with a survey of pertinent literature. Mr. Anderson. Bot. 541. Plant Ecology. 3-0-0 or 0-0-3 Prerequisites: Bot. 203, 441. Minor investigations in vegetation-habitat problems accompanied by advanced reference reading. Mr. Wells. Bot. 551, 552, 553. Research in Botany. 3-3-3 Prerequisite: 30 hours in 100-300 courses in Botany. Staff. Bot, 561, 562, 563. Seminar. 1 - 1 - 1Attendance by the student upon the weekly seminar together with the presentation of a paper in his major field of research. Mr. Wells.

### CERAMIC ENGINEERING

## Courses for Undergraduates

Cer. E. 202. Ceramic Materials. 0-3-0 Prerequisite: Geol. 220. Required of sophomores in Ceramic Engineering. The origin and occurrence of ceramic raw materials, their chemical and physical properties and system of measuring these. Ries: Clays Occurrence, Mr. Stone. Properties, and Uses. Cer. E. 203. Ceramic and Mining Processes. 0-0-3 Prerequisite: Geol. 220. Required of sophomores in Cer. E. and Geol. E. The winning and preparation of ceramic materials: the equipment and processes used in manufacturing ceramic products. Garve: Factory Design Mr. Greaves-Walker. Properties, and Uses. Courses for Advanced Undergraduates Cer. E. 301. Drying Fundamentals and Practice. 3-0-0 Prerequisites: Phy. 203, Cer. E. 202. Required of Juniors in Cer. E. Theory and practice of drving ceramic products; problems, Greaves-Walker: Drving Ceramic Products. Mr. Greaves-Walker. Cer. E. 302. Firing Fundamentals and Practice. 0-3-0 Prerequisites: Cer. E. 301. Required of juniors in Cer. E. The theory and practice of firing ceramic products. Problems. Wilson: Ceramics; Clay Technology. Messrs. Greaves-Walker, Stone. Cer. E. 303. Ceramic Calculations. 0-0-3 Prerequisites: Chem. 212, Cer. E. 302. Required of juniors in Cer. E. Solution of chemical and physical problems of the ceramic industries. Andrews: Ceramic Tests and Calculations. Mr. Kriegel.

Cer. E. 305. Ceramic Products.

Prerequisite: Cer. E. 202.

Required of juniors in Cer. E.

Physical, chemical, and artistic requirement of ceramic products. Laboratory practice. Mesors. Greaves-Walker, Kriegel.

### Courses for Graduates and Advanced Undergraduates

Cer. E.	401.	Pyrometry.
---------	------	------------

Prerequisite: Cer. E. 302.

Required of seniors in Cer. E.

The theory and use of temperature measuring instruments in industry. Wood and Cork: Pyrometry. Mr. Kriegel.

Cer.	E.	403.	Silicates	I.

Prerequisites: Chem. 331, Cer. E. 303 and Geol. 338.

Required of seniors in Cer. E.

The fundamental principles underlying the composition and production of whitewares, glazes, terra cotta, and abrasives. Hall and Insley:  $A \ Compilionion of Phase Rule Diagrams.$ 

Cer. E. 404. Silicates II.

Prerequisites: Chem. 331, Cer. E. 403 and Geol. 338.

Required of seniors in Cer. E.

The fundamental principles underlying the composition and production of refractories, cements, plasters, classes and porcelain enamels. Itall and Insley: A Compilation of Phase Rule Diagrams; Andrews: Enamels; Scholes: Modern Gloss Practice. Mr. Kriegel.

Cer. E. 405. Refractories.

Prerequisites: Cer. E. 404.

Required of seniors in Cer. E.

Refractory materials and manufacture of refractory products; use of refractory products in industrial furnaces. Norton: Refractories.

Mr. Greaves-Walker.

Cer. E. 411, 412, 413. Ceramic Laboratory.

Prerequisites: Cer. E. 303, 305, Corequisite: Cer. E. 403, 404. Required of seniors in Cer. E.

Advanced practice in producing and determining the chemical and physical properties of ceramic materials and products; thesis.

Messrs. Greaves-Walker, Stone.

3-3-3

0 3-0

0.0.3

1-0-0

3-0-0

0.03

### Cer. E. 411, 115. Ceramic Designing.

Prerequisites: M. E. 213, E. M. 322, Cer. E. 203 and 302.

Required of seniors in Cer. E.

Designing of ceramic equipment and structures. Garve: Factory Design and Equipment. Messrs. Greaves-Walker, Kriegel.

#### Courses for Graduates Only

Cer, E. 501, 502, 503. Designing of Ceramic Equipment and Plants. 3-3-3 Prerequisite: Cer. E. 415.

Advanced study and designing of ceramic machinery, dryers, kilns, and plant structures. Mr. Greaves-Walker.

Cer. E. 505, 506, 507. Advanced Refractories and Furnaces. 3-3-3 Prerequisite: Cer. E. 413, 405.

Advanced study of refractory materials and products, and their use. Mr. Greaves-Walker.

Cer. E. 509, 510, 511. Industrial Adaptability of Ceramic Materials. 3-3-3 Prerequisite: Cer. E. 413.

Laboratory investigations to determine the industrial uses to which various North Carolina ceramic minerals can be put.

Messrs. Greaves-Walker, Kriegel.

Cer. E. 513, 514, 515. Ceramic Research.

Prerequisite: Cer. E. 404, 413.

Research problems in ceramics will be assigned to meet the desire of the student for specialization. Messrs. Greaves-Walker, Kriegel.

Cer. E. 517, 518, 519. Glass Technology. 3-3-3 Prerequisites: Chem. 331, Geol. 338, Cer. E. 405. Advanced study of the manufacture and physical properties of glass. Mr. Greaves-Walker.

Cer. E. 521, 522, 523. Advanced Silicate Technology. 3-3-3 Prerequisite: Cer. E. 404, 413. Advanced laboratory practice in bodies, glazes, glasses and colors. Mr. Kriegel.

### CHEMICAL ENGINEERING

#### Courses for Undergraduates

Chem, E. 201, 202, 203. Introduction to Chemical Engineering. 1-1-2 Prerequisites: Chem. 103: Math. 102.

Required of sophomores in Chem. E.

Reactions in chemical processes, illustrative problems, and control methods: elements of unit processes and unit operations; visits to chemical plants. elementary chemical engineering calculations. Randolph: Introduction to Mr. Randolph. Chemical Engineering.

#### Chem. E. 212, 213. Chemical Nature of Engineering Materials. 0.3.3 Prerequisites: Chem. 103: Math. 103.

Required of seniors in General Engineering; elective for others.

Study of the fundamental facts about the chemical nature of engineering materials as an aid in the proper choice of materials for various engineering purposes under working conditions. Teachers' Manual. Mr. Randolph.

#### Courses for Advanced Undergraduates

### Chem. E. 311, 312, 313. Chemical Engineering I.

Prerequisite: Chem. 213.

Required of juniors in Chem. E.

A study of chemical process principles including heat and weight balances, thermochemistry, thermophysics and their application followed by an introduction to the theory of fluid flow and heat transfer. Staff

### Chem. E. 321, 322, 323. Chemical Engineering I.

Prereouisite or concurrent: Chem. E. 311, 312, 313.

An introduction to standard methods of testing industrial products followed by a laboratory study of measurements of flow of fluids and heat. Staff.

Chem, E. 330. Treatment of Water and Sewage. 3-0 or 3

Prerequisite: Chem. E. 313 or C. E. 215.

Required of juniors in San. E.

Principles involved in the control of municipal water supplies and in sewage treatment; reactions involved; chemical nature of water and sewage treatment; methods for removal of the more objectionable materials in industrial waters, Notes, Messrs, Randolph, Doody,

3-3-3

1-1-1

194 [CHEMICAL ENGINEERING]

Chem, E. 331. Industrial Stoichiometry.

Prerequisite or concurrent: Chem. E. 311. Required of juniors in Chemical Engineering.

Industrial calculations and measurements; heat balances; material balances, fuels and combustion processes; principles of chemical engineering calculations, Hougen and Watson: Chemical Process Principles,

Mr. Bright.

3 credits

#### Courses for Graduates and Advanced Undergraduates

Chem. E. s101. Pilot Plant Practice.

Prerequisites: Chem. E. 312, Chem. E. 323, Chem. 213,

Required of Junior Chemical Engineering students and elective for others. To be given during two weeks immediately preceding the opening of the fall term in September.

Practical application of chemical machinery and chemical testing methods. Pilot plant examination of chemical processes. Cost estimation and process development through pilot plant studies. Reference: current technical journals, lectures and notes. Messrs, Doody, Randolph,

Chem. E. 411, 412, 413. Principles of Chemical Engineering. 3-3-3 Prerequisite: Chem. E. 313; concurrent with Chem. 431.

Fundamental principles of Chemical Engineering; unit operations; Chemical Engineering calculations; design and efficiency of chemical machinery and equipment. Walker, Lewis, McAdams, and Gilliland: Principles of Chemical Engineering; Badger and McCabe: Elements of Chemical Engineering. Messrs, Schoenborn, Doody

Chem, E. 421. Water Treatment.

3 or 3 or 3

Prercouisite: Chem E 311

Required of seniors in Chem. E. Elective for others.

Water supplies; equipment and practice in filter plants; water purification and softening; filters; water examination; treatment of water for domestic and industrial uses. Notes. Mr. Randolph.

Chem. E. 422. Chemistry of Engineering Materials.

3 or 3 or 3

Prerequisite: Chem. E. 311.

Required of seniors in Chem. E.

Technical study of engineering materials for engineering and industrial uses; effects of conditions of extraction, production, and consequent treatment to their suitability for required uses. Leighou: Chemistry of Engineering Materials; White: Engineering Materials. Mr. Bright.

3 or 3 or 3

Chem. E. 423. Electrochemical Engineering.

Prerequisite: Chem. E. 311.

Required of seniors in Chem. E.

Theory and practice of electrochemical industries: principles of electrolysis and other electrochemical processes; electric furnace; electrothermal operations, electrometallurgy, Mantell: Industrial Electrochemistry, Mr. Doody.

Chem. E. 425. Gas Engineering.

Prerequisite: Chem. E. 311.

Elective for seniors or graduates in Chem. E.

Gas engineering: manufacture of industrial fuel gases and their distribution; apparatus and equipment; plant design; general practice in gas plants; by-products, pipe lines, service connections, gas meters,

Mr. Randolph.

Chem. E. 426. Sanitation Processes

Prerequisite: Chem. E. 311, or C. E. 383.

Technical study of the methods of sanitation in industrial plants; equipment and practice in the disposal and treatment of waste materials and sewage; measures necessary in eliminating occupational disease hazards. Notes. Mr. Randolph.

Chem. E. 427. Industrial Application of Physical Chemistry. 3-0-0 Prerequisite: Chem. E. 311, or Chem. 331.

Special phases of physical chemistry studied technically with reference to the practical application of these principles in the chemical industries such as industrial catalysis, evaporation principles, absorption, equilibrium, applications of phase rule, physical metallurgy, colloids, Notes,

Mr. Doody.

### Chem, E. 428. Fuel and Combustion Engineering.

Prerequisite: Chem. E. 311.

Principles and mechanism of the combustion reactions; quantitative application to problems of design or use of equipment for fuel processing and utilization: solid. liquid, and gaseous fuels, with complete methods of analysis. Haslam and Russell: Fuels and Their Combustion. Mr. Bright.

0.0.3

0-3-0

3 or 3 or 3

3 or 3 or 3

#### Chem, E, 431, 432, 433. Chemical Engineering Laboratory and Design II. 2.2.2 Prerequisite or concurrent: Chem. E. 411, 412, 413, Required of seniors in Chem, E.

A laboratory study of measurement of flow of fluids and heat: crushing and grinding, distillation; evaporation; drving; humidity; filtration and mechanical separation: absorption and extraction: calculations: design and construction of equipment for these fundamental unit operations in chemical industry. Staff

### Chem. E. 431. Chemical Engineering Design. Prerequisite: Chem. E. 411, 412,

Location, layout, and complete design of the chemical plant and its process equipment; materials of construction; economic factors controlling the chemical industry, and optimum design from the standpoint of economic return, process development, pilot-plant production studies. Notes,

Mr. Doody.

Chem. E. 135. Industrial Oil, Fats and Waxes. 2 or 2 or 3 Prerequisite: Chem. E. 313.

Elective for juniors or seniors in Chem. E.

Petroleum engineering; manufacture, refining, and conversion of animal and vegetable oils and their by-products; lubricants. Mr. Randolph.

Chem. E. 441. Chemical Engineering Thermodynamics. 3 or 3 or 3 Prerequisite or concurrent: Chem. E. 411, 412, 413.

A study of the thermal properties of matter and energy relationships underlying chemical processes. Fundamental laws of energy as applied to Chemical Engineering problems and processes in industry. Mr. Doody.

# Chem, E. 436. Cellulose and Allied Industries.

Prerequisite or concurrent: Chem. E. 311 or Forestry 206, 207. Elective.

Chemical nature of Cellulose and its compounds. Methods and processes and engineering design for pulp and paper.

## Chem. E. 437. Cellulose and Allied Industries.

0-3-0

3-0-0

Prerequisite or concurrent: Chem. E. 311 or Forestry 206, 207. Elective.

Cellulose chemical conversion products. Methods and processes and engineering design for plastics, rayon, cellophane, explosives, paints, and varnishes.

Chem. E. 438. Corrosion: Causes and Prevention.

Prerequisite: Chem E 313

Theories of corrosion: influences of metal composition and manufacture: chemical corrosion; prevention of corrosion; comparison of corrosive resisting materials for chemical and industrial uses. Speller: Corrosion; Causes and Prevention Mr. Bright.

# Chem. E. 439. Chemical Principles.

Prerequisite or concurrent: Chem. E. 313.

Fundamental principles in chemical manufacture and correlation of these principles in unit processes and operation. Hougen and Watson: Industrial Chemical Calculations. Notes. Mr. Doody.

Chem, E. 440. Metals and Alloys.

Prerequisite: Chem. E. 422 or M. E. 131.

Elective for seniors or graduates.

Relation of chemical composition and crystalline structure to the properties of metals and alloys; technical study of the composition and structure of metals for chemical and industrial uses. Teacher's Manual. Mr. Bright.

Chem. E. 471, 472, 473. Chemical Engineering Projects. 3.2.3 Prerequisite: Chem. E. 313.

An introduction to research tl rough experimental, theoretical, and literature studies of a chemical engineering problem. Staff.

### Courses for Graduates Only

Chem. E. 501. Chemical Technology-Advanced. 3-3-3 Prerequisite: Chem. E. 413.

An advanced course in problems, processes, and methods of chemical manufacture and production; special study in applied inorganic, applied organic chemistry, and research in applied chemistry. Staff.

# Chem. E. 502. Industrial Chemical Research.

Prerequisite: Chem. E. 413.

Chemical research on some industrial problem relating to North Carolina resources; practice in industrial plants, control analyses, estimate of losses, costs, data sheets, technical report. Staff.

0 - 0 - 3

3 or 3 or 3

0-3-0

#### Chem. E. 503. Chemical Engineering Research. Prerequisite: Chem. E. 413.

Some plant problem studied exhaustively by making investigations at the chemical plant, and by supplementary experiments and research in the laboratory; measurements, tabulation, graphs, calculation of some actual plant problem, and Pilot plant research problems. Staff.

### Chem. E. 501. Advanced Chemical Engineering. 3-3-3

Prerequisites: Chem. E. 411, Chem. E. 433.

Advanced study of process equipment, theory, and practice in operation and design for unit operations; Chemical Engineering thermodynamics; coefficients of heat transfer; heat of reactions; evaporators; stills; condensers, and heat exchangers; interrelations between heat transfer and fuid irition. McAdams: *Heat Transmission* and other texts. Staff.

#### CHEMISTRY

#### Courses for Undergraduates

Chem. 101, 102, 103. General Inorganic Chemistry. 4-4-4 Recitations and laboratory work; theories of laws, history, occurrence, preparation, properties, and uses of the more important elements and their compounds; formulae, valence, equations and calculations. Staff.

Chem. 201, 202.	General Inorganic Chemistry.	5-5-0
Subject matte	er same as 101, 102, 103.	Staff.

Chem. 203. Introduction to Organic Chemistry. 0-0-5 Prerequisites: Chem. 201, 202.

Hydrocarbons, alcohols, aldehydes, ketones, acids, ethers, esters, aminoacids, and bezene derivates; carbohydrates, fats, proteins, and related compounds. Mr. Reid.

Chem. 211. Qualitative Analysis. 4-0-0 Prerequisites: Chem. 101, 102, 103 or 201, 202. Identification and separation of more common ions and analysis of mix-

Identification and separation of more common ions and analysis of mixture of salts of commercial products.

Messrs. Wilson, Reid, Loeppert.

[CHEMISTRY] 1	199
Chem. 212. Quantitative Analysis. 0 Prerequisite: Chem. 211. Volumetric Analysis: Alkalinity, acidimetry, oxidation, and iodomet titrations. Messrs. Wilson, Reid, Loeppert	
derations. Messas. Wilson, Kerd, Doeppere	
Chem. 213. Quantitative Analysis. 0- Prerequisite: Chem. 211. Required of sophomores in Chemical Engineering.	0-4
A continuation of Chem. 212. Gravimetric methods. Substances of me difficult nature are analyzed, as minerals, steel, alloys, limestone, Pa green, etc. Messrs. Wilson, Reid, Loeppert	ris
Chem. 223. Quantitative Analysis. 0-	0-4
A continuation of Chem. 212. Substances of more difficult nature a analyzed, as sulphites, sulphides, bleaching powder, Turkey-red oil, soaps Messrs. Wilson, Reid, Loeppert	
Chem. 233. Quantitative Analysis. 0- Continuation of Course 212, along with gravimetric methods used in 1 analysis of magnesium, phosphate rock, fortilizer and insecticide. Messrs. Wilson, Reid, Loeppert	
Chem. 242. Chemical Calculations. 0 3 o. Prerequisites: Chem. 101, 102, 103.	r 3
Chemical problems, especially in analytical work; lectures on principl theories, laws, upon which the problems are based; assigned problems discussion. Mr. White	for
Chem. 331. Physical Chemistry. 5- Prerequisites: Chem. 101, 102, 103.	0-0
Fundamental chemical principles from a physiochemical viewpoint; s cial attention to silicate analysis. colloids, and phase rule. Mr. Sutton	
Courses for Graduates and Advanced Undergraduates	
Chem. 401. Historical Chemistry. 2-	0-0

Prerequisites: Chem. 101, 102, 103.

Development of Chemistry and the history of men instrumental in the progress of Chemistry. Mr. Williams.

Chem. 402, 403. Theoretical Chemistry. Prerequisites: Chem. 101, 102, 103.	0-2-2
Atoms and molecules: chemical reactions and conditions inf electronic conception of valence, radio activity.	luencing them; Mr. Jordan.
Chem. 411. Advanced Qualitative Analysis. Prerequisite: Chem. 211 or its equivalent.	4-0-0
Lectures and laboratory work dealing with the analysis complex mixture.	of alloys and Mr. Wilson.
Chem. 412. Advanced Quantitative Methods. Prerequisite: Chem. 213 or its equivalent.	0-3 or 3
Methods and apparatus in advanced quantitative analysis bustion, colorimetry. complete analysis of ores, special ste ments and alloys.	
Chem. 421, 422, 423. Organic Chemistry. Prerequisites: Chem. 101, 102, 103.	4-4-4
Aliphatic and aromatic compounds; practical application preparation and purification of compounds, and their structu	
м	fr. Williams.
Chem. 424. The Chemistry of Hydrocarbons and Their	
Derivatives.	0-3 or 3
Prerequisites: Chem. 421, 422, 423.	
New developments in solvents, resins, detergents, synthetic fuels.	rubber, motor Mr. Reid.
Chem. 431, 432, 433. Physical Chemistry. Prerequisite: Chem. 213.	4-4-4 or 4-4-0
Principles of Physical Chemistry; laws and theories, appli ous branches of chemistry and to industrial processes.	ication to vari- Mr. Sutton.
Chem. 441. Food Products and Adulterants. Prerequisites: Chem. 221 or 421, 422, 423.	3 or 3-0
Food principles; cereals, starches, sugars, fats; milk and the packing house; food preservation; beverages, spices ar	

Prerequisites: Chem. 221 or 421, 422, 423, Colloidal behavior, osmotic pressures, dialysis, sols and gels, membranes and membrane equilibria, proteins, and Donnan equilibrium. Mr. White. 3-3-0 Chem, 451, 452. Physiological Chemistry. Prerequisites: Chem. 221 or 421, 422, 423.

Essential chemical facts pertaining to life processes; digestion, absorption, metabolism, secretions, and excretions; lectures, laboratory. Mr. Satterfield.

3 or 3 or 3 Chem, 462. Chemistry of Vitamins. Prerequisites: Chem. 221 or 421, 422, 423.

Application of vitamin hypothesis to human nutrition; history, nomenclature, properties, distribution, effects of deficiencies, vitamin values.

Mr. Satterfield.

Chem. 472. Blood Analysis.

Chem. 442. Chemistry of Colloids.

Prerequisites: Chem. 212 and 421, 422, 423.

Hemoglobin, sugar, urea, uric acid, cholesterol, creatine, creatinine, nonprotein, nitrogen, amino-acid nitrogen, calcium. Folin-Wu system is em-Mr. Satterfield. phasized; lectures and laboratory.

#### Chem. 481. Agricultural Chemistry.

Prerequisites: Chem. 101, 102, 103, and 221 or 421, 422, 423.

Feeding the plant; insecticides and fungicides; transforming the plant into human food and animal food; composition of plants; relation between Mr. Satterfield. composition and uses.

### Chem. 482, 483. Food and Nutrition.

Prerequisites: Chem. 221 or 421, 422, 423.

Carbohydrates, fats, proteins, amino acids, minerals, fiber, vitamins, enzymes; nutritive value of food materials; digestion, food idiosyncrasy; Mr. Satterfield. acidosis and alkalosis.

#### Chem. 491, 492, 493. Advanced Physical Chemistry. 3-3-3 Prerequisites: Chem. 431, 432, 433.

An advanced problem course designed for chemical engineers.

Mr. Sutton.

0-3 or 3

[CHEMISTRY] 201

0.3.0

3-0-0

Courses for Graduates Only	
Chem. 501. 502. 503. Organic Chemistry, Advanced. 3-3- Prerequisites: Chem. 421. 422, 423.	3
Principles of organic chemistry; current literature; laboratory work an preparation in quantity. Mr. Williams.	d
Chem. 511. Organic Qualitative Analysis. 3-0- Prerequisites: Chem. 421, 422, 423.	0
Detection of elements and radicals, group characteristics. Mr. Williams.	
Chem. 512. Organic Quantitative Analysis. 0-3- Prerequisites: Chem. 212, 421, 422, 423.	0
Analysis of organic compounds for carbon, hydrogen, nitrogen, the halt gens, sulfur. Mr. Williams.	0-
Chem. 513. Micro-Analysis. 0-0- Prorequisites: Chem. 421, 422, 423.	-3
Tests for compounds, and impurities in quantities too small to be detected by ordinary methods. Mr. Williams.	:d
Chem. 523. Micro-Chemical Analysis. 3 or 3 or Prercoulsite: Chem. 213.	3
Inorganic micro qualitative analysis; fibers, starches, etc. Mr. Wilson.	
Chem, 531, 532, 533. Chemical Research. 3-3-	-3
Prerequisite: 54 term credits in Chemistry. Open to all graduates. Special problems that will furnish material for a thesis. Staff.	
Chem. 541, 542, 543. Seminar. 1-1- Required of graduate students specializing in Chemistry.	-1
Preparation and presentation of abstracts of current publications in th field of Chemistry.	ie
Chem. 552, 553. Biochemistry. 0-3- Prerequisites: Chem. 421, 422, 423, 482, 483.	.3
Special topics in Biochemistry. Mr. Satterfield.	

.

#### CIVIL ENGINEERING

#### Courses for Undergraduates

#### C. E. 101, 102, 103. Drawing.

1-1-1

Required for freshmen in Forestry and Landscape Architecture.

Plain lettering, common symbols, platting of areas from compass-survey notes furnished, filling in contours from notes furnished, tracing, calculation of areas by planimeter; finished maps. Sloane and Montz: *Elementary Topgaraphic Drawing*. Mr. Lambe.

C. E. s200. Surveying."

3 credits

Prerequisite: Math. 102.

Required in the summer immediately following the freshman year in Aero. E., Agr. Eng., A. E., Cer. E., E. E., Gen. E., and M. E.

The use, care and adjustment of surveying instruments; elementary land surveying, traverse lines, leveling, topographical surveying and stadia measurements. Tracy: Plane Surveying. Staff.

C. E. 221, 222, 223. Theoretical Surveying.

Prerequisite: Math. 102.

Required of all sophomores in Civil Engineering. C. E. 221, 222 required in Forestry (0-3-3), in Gool. Eng., Landscape Architecture, and Wildlife Conservation and Management (3-3-0).

Use, care and adjustment of surveying instruments, land surveying, topographical surveying, leveling and theory of stadia measures, plane table, etc.

Third term, railroad surveys, including simple, compound, reverse, and spiral curves, turnouts, etc. Davis and Foote: Surveys. Rubey: Route Surveys. Mr. Lambe.

C. E. 224. Topographic Drawing.

Prerequisites: C. E. 101, 102, 103.

Required of sophomores in Forestry.

Plotting by coördinates; contours and general topography. Notes.

Mr. Lambe.

0-0-1

Note. Two sessions: (a) Full time, 3 weeks immediately following close of College third term; (b) half time, 6 weeks concurrently with College Summer School term in order to allow students to schedule summer school work.

### 204 [CIVIL ENGINEERING]

#### C. E. 225, 227. Field Surveying.

To be taken concurrently with C. E. 221, 223.

Required of all sophomores in Civil Engineering and Landscape Architecture. C. E. 225 required in Geol. E. and Wildlife Conservation and Management (1-0-0), and in Forestry (0-1-0).

Surveying field practice, topographical surveys, railroad and highway curves. Profiles. cross sections. Mr. Lambe.

### C. E. 226. Mapping.

Prerequisites: M. E. 105, 106. To be taken concurrently with C. E. 222.

Required of all sophomores in Civil Engineering, and juniors in Geological Engineering.

Practice in conventional signs and lettering. A complete topographical map and tracing is to be made involving the use of three methods of contour location. Field notes to be furnished. Mr. Lambe.

### C. E. 281. Mill and Mill Village Sanitation.

Prerequisite: Chem. 103.

Mill and mill village water supply and sewage disposal, mosquito and fly control, sanitary milk supply, industrial hygiene. Course for textile students. Ehlers and Steele: *Municipal and Ruval Sanitation*. Mr. Stiemke.

#### Courses for Advanced Undergraduates

#### C. E. s300. Surveying and Mapping.

Prerequisites: C. E. 221. 222; C. E. 224.

Required in summer immediately following sophomore year in Forestry.

Boundary; topographical surveys. and calculations of sections of College Experimental Forestry Lands. Finished section maps. Davis and Foote: Staff.

### C. E. s310. Advanced Surveying.

Prerequisites: C. E. 221, 222, 223; C. E. 226.

Required in the summer immediately following the sophomore year in Civil Engineering and Landscape Architecture.

Plane table practice, special problems in surveying practice; triangulation, railroad and highway spirals; hydrographic surveying with sextant; plane table problems; the use and rating of current meters; measurement of stream flow; drainage problems.

Laying out proposed construction work. Topographic details and special problems. Davis and Foote: Surveying. Staff.

3 credits

3 credits

1-0-1

hway be. 0-1-0

. Dambe.

<sup>\*</sup>Not. Two sensions: a) Full time, 3 weeks immediately following close of College third term: b) half time, 6 weeks concurrently with College Summer School term in order to allow students to schedule summer school work.

C. E. 321. Materials of Construction.

Prerequisite: Junior standing.

Required of all juniors in Civil Engineering, M. E., Aero, E. and A. E., and of seniors in I. E.

The study of materials used in buildings and other engineering strutures, with particular reference to their methods of manufacture and physical properties. Two periods lecture and recitation; one period laboratory. Tacker: Laboratory Manual in the Testing of Materials. Mills: Materials of Construction. Mr. Ray.

C. E. 322, 323. Materials Testing Laboratory. 0-1-1 Prerequisite: C. E. 321.

Required of seniors in General Civil, Sanitary, and Transportation Engineering, and one term only for juniors in Architectural and Ceramic Engineering.

The testing of materials used in construction. Tucker: Manual in the Testing of Materials. Mr. Ray.

C. E. 343. Hydraulic Structures.

Prerequisite: E. M. 330.

Required of juniors in General Civil, Sanitary, and Transportation Engineering.

Application of the fundamentals of Fluid Mechanics to problems in Hydraulic Engineering; flow in pipes, in canals and natural water courses; design of locks and dams for navigation; flood control and power development; theory of design, installation and operation of pumps and hydraulic motors. Mr. Stiemke.

C. E. 362, 363. Construction Engineering 1.

Prerequisite: E. M. 311.

Required of juniors in Construction and Building Materials Engineering. Building codes, zoning ordinances; quantity surveys; timber properties.

grading, identification, use, and preservation; frame construction; timber design. Huntington: Building Construction; Notes and Trade Literature.

Mr. Bramer.

0-0-3

0-3-3

3 or 3 or 3

206 [CIVIL ENGINEERING]

C. E. 365, 366. Sanitary and Mechanical Equipment of Buildings. 3 3-0 Prerequisites: E. M. 311, 312.

First term required of juniors in Construction and Building Materials Engineering. First and second terms required of juniors in Arch. E.

A study of water supply, soil, waste, and vent-pipe systems, principles and practice of heating and ventilating and a discussion of various other mechanical equipment of a building, such as elevators, dust collecting systems, etc. Gay and Faweett: Mechanical and Electrical Equipment of Buildings.

C. E. 367. Specifications.

Prerequisite: C. E. 321.

Required of juniors in Construction and Building Materials Engineering. Preparation of specifications and legal documents for building operations. Kirby: Elements of Specification Wirthing. Mr. Bramer.

C. E. 372, 373. Transportation Engineering I.

Prerequisite: C. E. 221, 222, 223.

Required of juniors in General Civil, Sanitary, and Transportation Engineering.

General design, construction, and maintenance of highways, railroads, and airports. Mr. Babcock.

C. E. 383. Sanitary Engineering.

Prerequisite: Chem. 103.

Required of juniors in San. E.

Water supply and sewage disposal; ventilation; mosquito and fly control; refuse disposal; public health laws and organization. Ehlers and Steele: Municipal and Rural Samilation. Mr. Stiemke.

### Courses for Graduates and Advanced Undergraduates

#### C. E. 421, 422. Reinforced Concrete.

Prerequisites: E. M. 313, 322.

Required of all seniors in Civil Engineering and Architectural Engineering.

Derivation of formulas used in reinforced concrete design, use of diagrams and curves. Illustrative problems in design. Turneaure and Maurer: Principles of Reinforced Concrete Construction. Messrs. Mann, Bramer.

0-0-3

0-3-3

0-0-3

[CIVIL ENGINEERING] 207

C. E. 423, 424, 425. Graphic Statics.

Prerequisite: E. M. 313.

First term required of all seniors in Civil Engineering, First, second, and third terms required of all seniors in Architectural Engineering.

Principles involved in the solution of problems by graphical methods. Moments, shears, Resultant pressure on retaining walls, Stress diagrams, Fairman and Cutshall: Graphic Statics and assigned references.

Mr. Mann.

3-3-0 or 0-3-3

C. E. 426, 427. Structural Design.

Prerequisites: E. M. 322, C. E. 431.

Required of all seniors in Civil Engineering and Architectural Engineering.

Design of beams, columns, tension members, plate girders, trusses and Mr. Mann. structures. Bishop: Structural Design.

C. E. 431, 432. Theory of Structures.

Prerequisite: E. M. 322.

Required of all seniors in Civil Engineering and General Engineering.

Roof trusses; bridge trusses; three hinged arch, lateral bracing and portals; rigid frame, wind stresses in tall buildings, indeterminate trusses, secondary stresses. Spofford: Theory of Structures. Mr. Bramer.

#### C. E. 431a, 432a. Theory of Structures (abridged). 3.3.0

Prerequisite: E. M. 322.

Required in Architectural Engineering, C. E. 431, 432, to be required if less than five students enroll for C. E. 431a, 432a.

Stress analyses and designs of wooden and steel roof trusses; wood, steel, and reinforced concrete floor systems. Theory and design of columns, footings, retaining walls. Theories for wind stress design in tall buildings. Shedd and Vawter: Theory of Simple Structures. Mr. Bramer.

C. E. 435. Soil Mechanics.

Prerequisites: E. M. 321, 322.

Required of seniors in General, Civil, Sanitary, and Transportation Engineering.

The classification of soils, their physical characteristics and tests; the suitability of certain types of soils for foundations; methods of stabilizing soils; general principles involved in selection of soils for foundations.

Messrs, Babcock, Bramer.

0-0 3

1-1-1

### C. E. 449. Hydrology.

Prerequisite: E. M. 330.

Elective for seniors in Engineering.

The study of the science of the occurrence, distribution and use of water upon the earth with particular reference to North Carolina, including precipitation, evaporation, transpiration, seepage, runoff and stream flow. Myer: Elements of Hudvalaan Wr Stiomke

### C. E. 453. Applied Astronomy.

Prerequisite: C. E. s310.

Required of seniors in General Civil and Transportation Engineering.

The application of astronomy in determining latitude, azimuth, longitude and time; astronomical observations with transit and sextant; reduction of observations. One credit given for observations, Hosmer; Applied Astronomy. Messrs. Babcock, Bramer,

C. E. 455. Aerial Surveying.

Prerequisite: C. E. s310.

Required of seniors in General Civil.

A study of various methods of constructing topographical maps from horizontal, vertical, and oblique photographs, and different methods of control of Aerial Surveys. The work covered is confined to the methods of producing maps from photographs and does not take up the technical work of photography or piloting, Eagley: Acrophotography and Acrosurveying, Mr Rahcock

# C. E. 461, 462, 463. Construction Engineering II.

Prerequisite: C. E. 362, 363.

Required of seniors in Construction and Building Materials Engineering. Estimating frame, masonry, and reinforced concrete buildings; design and construction of concrete formwork; study of reinforced concrete and steel-framed structures; cost analysis, organization, and management of construction plants; prefabricated construction. Huntington: Building Construction; Notes and Trade Literature. Mr. Bramer.

#### C. E. 471, 472. Transportation Engineering II. 3-3-0 Prerequisite: C. E. 372, 373. Required of seniors in General Civil and Transportation Engineering. Transportation systems their development, operation, control, and use.

Mr. Babcock.

4-0-0

0-0-3

3.3.3
C. E. 473. Transportation Design. 2-0-0 Prerequisite: C. E. 372, 373. Required of seniors in Transportation Engineering. Design of highways, highway intersections, airports, and allied transportation facilities. Mr. Bahcock C. E. 474, 475. Highway Engineering, 0-3-3 Prerequisite: C. E. 372, 373. Required of seniors in Transportation Engineering. Highway administration and finance: economic location of highways; the motor vehicle and its operation; traffic regulation and control. Mr. Babcock. C. E. 481, 482. Sanitary Engineering Laboratory. Concurrent with C. E. 485, 486. Required of seniors in General Civil and Sanitary Engineering. Laboratory analysis of sewage and sludge. Inspection trips to sewage disposal plants. Laboratory analysis for determining quality and safety of water. Inspection of waterworks in various cities. Notes. Mr. Stiemke. C. E. 483. Financing of Sanitary Utilities. 0-0-3 Prerequisites: Math. 303, C. E. 383. Required of seniors in Sanitary Engineering. Rates and service charges, collections, operating cost control, bond issues, and budgets. Mr. Stiemke. C. E. 485. Waterworks. 3-0-0 Prerequisite: E. M. 330. Required of seniors in General Civil and Sanitary Engineering. Municipal waterworks; quantity; sources of supply; collection; purification: distribution. Babbitt and Doland: Water Supply Engineering. Mr. Stiemke. 0-3-0 C. E. 486. Sewerage. Prerequisite: E. M. 330. Required of seniors in General Civil and Sanitary Engineering. Separate and combined sewer system; principles of design and construc-

tion: sewer appurtenances; disposal plants. Metcalf and Eddy: Sewerage and Sewage Disposal. Mr. Stiemke.

[CIVIL ENGINEERING] 209

1 - 1 - 0

#### 210 [CIVIL ENGINEERING]

### C E 488 Water Purification

Prerequisites: E. M. 330, C. E. 485.

Required of seniors in Sanitary Engineering.

Design and operation of water purification plants; sedimentation, coagulation, filtration, and sterilization of water. Recent treatment processes. Inspection trips to various plants. Babbitt and Doland: Water Supply Engineering. Mr. Stiemke.

#### C. E. 189. Sewage Disposal.

Prerequisite: C. E. 486.

Required of seniors in Sanitary Engineering.

Design and operation of sewage disposal plants: treatment processes and devices; efficiencies and costs of plants; public health, legal and economic problems involved. Inspection trips to disposal plants. Metcalf and Eddy; Sewerage and Sewage Disposal. Mr. Stiemke

#### Courses for Graduates Only

C. E. 525, 526, 527. Advanced Structural Design,

Prerequisites: C. E. 426, 427.

Analysis and design of fixed, hinged and multispan arches. Complete designs of steel and reinforced concrete structures. MacCullough and Thayer: Elastic Arch Bridges. Mr. Bramer

#### C. E. 531, 532, 533. Advanced Structural Theory. 3-3-3 Prerequisites: C. E. 431, 432.

Stress analysis in continuous frames and arches; secondary stresses; wind stresses and space frame-work. Analyses by use of Beggs' Deformeter. Sutherland and Bowman: Advanced Structural Theory.

Mr. Bramer.

#### C. E. 561, 562, 563. Construction Engineering Research. 3.3.3 Prerequisites: C. E. 461, 462, 463,

Study of recent advancement and developments in Construction. Original research Mr. Bramer.

#### C. E. 573, 574, 575. Transportation Engineering Research. 3.3.3

Prerequisite: Eighteen term credits in Transportation Engineering.

A study of the recent developments and advancements in the fields of railway, highway, and air transportation. At least one term is devoted to original research. Mr. Babcock.

0.2.0

0.0.3

2.2.3

#### C. E. 577, 578, 579. Advanced Transportation Engineering. 3-3-3 Prerequisite: Eighteen term credits in Transportation Engineering.

A continuation of the undergraduate subjects in Transportation Engineering with particular emphasis on the operation and regulation of the transportation systems of the United States. Mr. Babcock.

# C. E. 581, 582, 583. Sanitary Engineering Research. 3-3-3

Prerequisites: C. E. 383, 488, 489.

In the first term, a study of recent developments and research in Sanitary Engineering is made from current literature. In the second term, a research problem is selected and data on the problem are compiled from literature. In the third term, individual research is done. Mr. Stiemke.

C. E. 585, 586. Advanced Sewage Disposal.	3-3-0
---	-------

C. E. 588, 589. Advanced Water Purification. 0-3-3

#### DAIRY MANUFACTURING (ANIMAL INDUSTRY)

#### Courses for Undergraduates

D. M. 301. Dairy Technology	5-0-0
Prerequisite: Chem. 201, 202, 203.	
Laboratory tests used for the control of milk and dairy products.	
St	aff.

D. M. 302.	Dai	ry Products ]	II (	Ice Cream)	).		0-3-0
		preparation other frozer			processing,	and	merchandising Staff.

D. M. 303. Dairy Products III (Butter and Cheese). 0-0-4 Principles and practices of creamery buttermaking. Principles and practices in making various roft and hard cheese. Mr. Roberts.

D. M. 313. Dairy Engineering. 0-0-3 Location, construction and arrangement of dairy plants and selection, installation and operation of dairy plant equipment. Mr. Clevenger. 212 [DAIRY MANUFACTURING]

D M 323 Indging Dairy Products. 0-0-1 Milk and dairy products judging according to official standards and Staff. commercial grades, D. M. s301. Dairy Products Laboratory I (Market Milk). 3 modits Laboratory practice in the processing of market milk and related products. Stoff

D. M. s311. Dairy Products Laboratory II (Ice Cream). 2 credits Laboratory practice in the processing of ice cream and other frozen desserts. Staff

D. M. s321. Dairy Products Laboratory III (Butter and Cheese.) 3 credits Laboratory practice in the processing of butter and cheese. Staff.

### Courses for Advanced Undergraduates and Graduates

D. M. 401. Dairy Bacteriology I. 4-0-0 Prerequisite: Bot. 312.

Importance of microorganisms in milk and dairy products. Determination of numbers and types of bacteria in dairy products and their relationship to quality. Staff.

#### D. M. 403. Dairy Bacteriology II. 0-0-3 Prerequisite: D. M. 401.

Investigation of techniques for identifying and culturing microorganisms which are of vital interest in dairy products. Staff.

D. M. 402. Dairy Chemistry.

Prerequisite: D. M. 411.

Study of the chemical and physical properties of milk and its constituents Staff.

D. M. 411.	Dairy	Products	I (Mark	et Milk	).	3-0-0
Market m	ilk and	related	products	from t	he standpoint	t of production,
processing, d	listribut	tion and r	public hea	lth insp	ection.	Mr. Roberts.

0-3-0

[ECONOMICS] 213

0-3-0 D. M. 412. Advanced Dairy Plant Management. Business and factory management practices as used in the dairy plant. Mr. Clevenger.

Courses for Graduates Only

D. M. 501, 502, 503. Topical Problems in Dairy Manufacturing. Mr. Roberts. D. M. 512. Advanced Dairy Bacteriology. 0.4 0 D. M. 513. Advanced Dairy Chemistry. 0 0-4 D. M. 521, 522, 523. Research in Dairy Manufacturing 1-5 1-5 1 5

Mr. Roberts.

#### ECONOMICS

#### Courses

Econ. 201, 202, 203. General Economics. Required of sophomores in E. E., For., juniors in Arch. E., Cer. C., C. E., Gen, E., Ind. Arts Educ., Tex., seniors in Aero E., Arch., Chem. E., Geol. E., M. E. Econ. 201, 2 required of juniors in Agr., and Teachers of Agr. A study of economic institutions and general principles governing pro duction and distribution of wealth under the existing economic organization. Messrs, Brown, Green, Leager, Moen, Shulenberger, and Wood.

3 or 3-0 Econ. 212. Accounting for Engineers. Required of juniors in Transportation Option of C. E., and seniors in L. A., and E. E.

A survey of accounting principles; financial statements, their construc-Mr. Shulenberger. tion, use, and interpretation.

Econ. 301, 302, 303. Principles of Accounting. Required of juniors in Ag. Econ., Ind. E., Tex. Mgt., and seniors in Gen. E. Econ. 301, 302 required of juniors in Const. and Bldg. Materials Option of

C. E., and in Yarn Mfg. Fundamental principles of theory and practice; interpretation of the structure, form, and use of business statements. Mr. Shulenberger.

3-3-3

Econ. 305. Business Organization.

Prerequisites: Econ. 201, 202, 203 or 205.

Required of seniors in Transportation Option of C. E.

Forms of business enterprises; single enterprises, partnerships, joint-stock companies and corporations; principles of business management.

Mr. Green.

3 or 3 or 3

Econ. 307. Business Law.

Prerequisite: Junior standing.

Required of juniors in Cer. E. Transportation. Option of C. E., M. E., Ind. Arts Educ., seniors in Aero. Engr., Animal Production, Architectural Engr., Chemical Engr., junior and senior consolidated curriculum in Civil Engr., General Engr., Geological Engr., Industrial Engr., and fifth year in Architecture.

Sources of law; fields of law; contracts, agency sales; negotiable documents; the law as it controls business transactions.

Messrs. Green and McMillan.

Econ. 308. Advanced Business Law.

Prerequisite: Econ. 307.

A continuation of Economics 307, including bailments, suretyship, real property; corporations; recent developments in State and Federal Law.

Mr. Green.

Econ. 311, 312, 313. Marketing Methods and Sales Management. 3-3-3 Prerequisites: Econ. 201, 202, 203 or 205.

Required of seniors in Tex. Mgt.; Econ. 311, 312 required of juniors in Farm Mkt., and Farm Fin.; Econ. 311, 312 or Econ. 320 and Econ. 331 required of seniors in Const. and Bidg. Materials Option of C. E.

Marketing functions, agencies. systems; retailing; marketing analysis; problems in marketing; elements of sales management. Mr. Moen.

Econ. 315. Advertising. Prerequisites: Econ. 201, 202, 203. Principles of advertising.

0-0-3

Mr. Moen.

#### Econ. 318. Money and Credit.

Prerequisites: Econ. 201, 202, 203 or 205.

The functions, history, and development of money and credit; contemporary policies and relation to prices; interrelations of money and credit in banks and financial institutions Mr. Moen

#### Econ. 319. Modern Banking.

Prerequisites: Econ. 201, 202, 203 or 205.

Origin and development of banking in the United States; functions and operations of the modern bank; banking laws; Federal Reserve System. Mr. Moen.

#### Econ. 320. Corporation Finance. Prerequisites: Econ. 201, 202, 203,

Alternate requirement in Const. and Bldg. Materials Option of C. E.

Raising and spending of funds and standards of control. Mr. Moen.

#### Econ. 325, 326. Industrial Management.

Prerequisites: Econ. 201, 202, 203,

Required of seniors in Aero. E. and Textiles, elective for all others.

Principles and techniques of modern scientific management: relationship of finance, marketing, industrial relations, accounting, and statistics to production; techniques regarding specific problems; analysis of economic, political, and social influences on production. Mr. Wood.

### Econ. 331. Labor Problems.

Prerequisites: Econ. 201, 202, 203 or 205.

Required of juniors in Ind. Educ., and seniors in Ind. Arts Educ. Alternate requirement in Const. and Bldg. Materials Option of C. E.

An economic approach to labor problems, including such topics as insecurity, wages, hours, working conditions, substandard workers, legislation Mr. Wood. aimed at correcting existing evils.

#### Econ. 332. Industrial Relations.

Prerequisites: Econ. 201, 202, 203.

History, organization, activities, and policies of organized labor; legal aspects, recent developments. Mr. Wood.

0-3-0

3-0-0

0-0-3

3-3-0

3-0-0

0-3-0

#### 216 [ECONOMICS]

Econ. 333. Personnel Management.

Prerequisites: Econ. 201, 202, 203 or 205.

Required of seniors in Const. and Bldg. Materials Option of C. E., and Tex.

Emphasis on the human problems of industry. A review of the scientific techniques and results of research regarding the problems of employment; training, promotion, transfer; health and safety; service and welfare; and joint relations. Mr. Wood.

### Econ. 335. Time Study.

Prerequisites: Econ. 201, 202, 203.

Analysis of shop operation into elements, and the determination of the time for each element; emphasis on factors affecting job specification, and wage-rate setting. Mr. Wood.

### Econ. 310. Transportation Problems.

Prerequisites: Econ. 201, 202, 203.

The economic aspects of transportation facilities provided by the railroads, highways, and air- and water transportation agencies; principles and problems of rate making, operation, management, valuation, coördination and government regulation. Mr.

Econ. 401. Advanced Accounting.

Prerequisites: Econ. 301, 302, 303.

Problems of asset valuation, such as depreciation, replacements, amortization, etc., found in all types of business organizations. Mr. Shulenberger.

Econ. 101, 405. Principles of Cost Accounting. 0-3-3
Prerequisites: Econ. 301, 302, 303.
Description: Textile Accounting Textile Accounting

Required of seniors in Textile Management.

Cost finding, material costs, labor costs, overhead costs, etc.

Mr. Shulenberger.

Econ. 408. Survey of Statistical Methods. 3 or 3-0

Prerequisites: Econ. 201, 202, 203 or 205.

Required of juniors in Agricultural Economics, and of seniors in Rural Sociology.

Elective for all others.

Methods of describing quantitative data; collection and methods of analysis of statistical materials; charts and graphs for presenting numerical facts.

#### 3 or 3 or 3

0-3-0

0-0-3

Econ. 409. Statistical Technique 0-3-0 Prerequisite: Econ 408 Required of juniors in Agricultural Economics. The problem of estimation, correlation; simple linear and nonlinear forms; normal curve and probable error; methods of sampling, Mr. Leager. Econ. 414. International Economic Relations. 0-0-3 Prerequisites: Econ. 201, 202, 203 or 205. Backgrounds and some newer developments in international economics. with special emphasis on the position of the United States in world trade. Mr. Green. Econ. 415 Investment Problems and Policies 0-3-0 Prerequisites: Econ. 201, 202, 203 or 205. Different types of investments and methods of judging them. Managing personal finances. Mr. Moon Econ 416 Public Finance and Taxation 0-3-0 Prerequisites: Econ. 201, 202, 203, Classes of income and expenditure; incidence of different classes of taxes. Mr. Moen. Econ. 418. Principles of Insurance. 0-0-3 Prerequisites: Econ. 201. 202, 203. Elective Risk as an element of all agricultural and industrial activity: discussion of such risks as can be covered by insurance with the appropriate form of insurance, e.g., employer's liability, workmen's compensation, fire, life, and Mr. Shulenberger. other forms. Econ. 501. Advanced Economic Theory. 2-3-0 Prerequisite: Eighteen (18) term credits in Economics. Recent and current economic theory; principal schools of economists; theory of prices under the system of free enterprise. Staff. Econ. 502. History of Economic Doctrines. 0-0-3 Prerequisite: Econ. 501. History of economic doctrines from the Mercantilists to the period of Ricardo. Staff.

[ECONOMICS] 217

#### EDUCATION: TEACHER EDUCATION

#### AGRICULTURAL EDUCATION

#### Ed. 308 Visual Aids.

Prerequisite: Junior standing.

Required of students in Education.

Methods and technique of visual instruction; lettering; statistical illustrating; chart, graph, and poster-making; photography; projector operation, care, and use. Designed for teachers and extension workers.

Mr. Armstrong.

#### Courses for Graduates and Advanced Undergraduates

#### Ed. 406. Principles of Teaching.

Prerequisites: Ed. 303 or 304.

Required of seniors in Agr. Ed.

Principles of teaching with applications to vocational agriculture; personal requisites of a teacher; responsibilities; objectives of teaching; school control: motivation; directing study. Mr. Cook.

#### Ed. 407. Methods of Teaching Agriculture. 5-0-0

Prerequisites: Ed. 303, 308, or equivalents, and at least 12 credits in Agriculture.

Required of students in Agricultural Education.

Organization of subject matter; teaching techniques; supervised practice; textbooks and reference material; Future Farmers of America; organization of departments of vocational agriculture; agricultural guidance.

Mr. Cook.

#### 0-5-0 Ed. 408. Observation and Directed Teaching.

Prerequisites: Ed. 406, 407, and at least 12 credits in Agriculture. Required of seniors in Agr. Ed.

Observation and teaching vocational agriculture under supervision; participation in the varied activities of the teacher of vocational agriculture. Staff in Agricultural Education.

#### Ed. 411. Evening Classes and Directed Teaching.

Prerequisites: Ed. 406, 407, and at least 12 credits in Agriculture. Required of seniors in Agr. Ed.

Community activities of teachers of vocational agriculture: organization. method, and directed teaching of evening and part-time classes. Mr. Cook.

#### 0-0-3

3-0-0

0-5-0

Ed. 412. Materials and Methods in Teaching Agriculture. ( Prerequisites: Ed. 406, 407, and 12 credits in Agriculture. Required of seniors in Agr. Ed.

Use of illustrative and actual materials in teaching vocational agriculture; collection and preservation of specimens; chart making; practice in use of materials in directed teaching. Mr. Armstrong.

#### Ed. 426. Secondary Education in Agriculture.

Prerequisites: Ed. 303 or 304, and 6 other credits in Education.

Agricultural education in the United States; school organization; agricultural occupations. Mr. Cook.

Ed. 460. Special Problems in Teaching Agriculture. 3 or 3 or 3 Prerequisites: Ed. 406, 407, or equivalent.

Planning programs of work and courses of study; collecting and preparing materials for teaching; making teaching plans. Mr. Cook and Staff.

Ed. 461 (a-b). Trends in Teaching Vocational Agriculture. 3 or 6 credits Prerequisites: 18 credits in Education, including 5 in Agricultural Education.

Procedures in teaching vocational agriculture; out-of-school farm youth; evening-class instruction and the 1'. F. A.

Staff in Agricultural Education.

Ed. 462 (a-b). Course of Study Problems. 3 or 6 credits Prerequisites: 18 credits in Education, including 5 in Agricultural Education.

Selection and organization of subject matter in vocational agriculture; supervised practice. Staff in Agricultural Education.

Ed. 463 (a-b). Guidance and Individual Instruction. 3 or 6 credits Prerequisites: 18 credits in Education, including 5 in Agricultural Education.

Individualized instruction applied to vocational agriculture; agricultural occupations, guidance, and counseling with special reference to pupils in vocational agriculture. Staff in Agricultural Education.

0-5-0

#### Courses for Graduates Only

Ed 516 Problems in Agricultural Teaching, 3 or 3 or 3 Prerequisites: Ed. 407, and at least 12 other credits in Education and Agriculture Experience in Agricultural Teaching will be accepted in lieu of Ed. 407. Investigations, reports, and a critical evaluation of present practices;

course adapted to individual interests and needs.

#### Staff in Agricultural Education.

Ed. 517. Principles of Agricultural Education. 3 or 3 or 3 Prerequisite: Eighteen credits in Education and Agriculture. Permission to register.

Principles and practices in agricultural education in the light of educational research and of changing rural conditions. Mr. Cook

#### Ed 520 Agricultural Education Seminar

Prerequisite: Eighteen credits in Education.

A critical review of current articles and books of interest to students of agricultural education. Staff.

Ed. 521. Research in Education.

Prerequisite: Eighteen hours in Education and permission to register.

One or more research problems under the guidance of a member of the staff. Stoff

#### INDUSTRIAL EDUCATION

#### AND

#### INDUSTRIAL ARTS.

Ed. (I.A.) 105 a. b. c. Industrial Arts Drawing, 3-3-3

Required of freshmen in Industrial Arts Education.

Fundamentals of pictorial representation, such as layout work, machine. and architectural drawing. Mr. Ludington.

### Ed. (I.A.) 106 a. b. c. Orientation in Industrial Arts.

Required of freshmen in Industrial Arts Education.

Provides initial experiences for students interested in teaching Industrial Arts in the secondary school: emphasizes the importance and relation of Industrial Arts to other areas in the school and to individual development. Mr. Ludington.

2.2.2

3-3-3

1-1-1

[EDUCATION] 221

Ed. (I.A.) 205. Industrial Arts Design. Prerequisite: Ed. (I. A.) 105, a, b, c. Required of sophomores in Industrial Arts Education. Design and construction in a variety of industrial materials; stressing individual expression and appreciation of well designed industrial products. Wr. Ludington

Ed. (I.A.) 206a, b, c. Laboratory Problems in Industrial Arts. 3 3-3 Prerequisites: Ed. (I. A.) 105 a. b. c. and I. A. 106 a. b. c. Required of sophomores in Industrial Arts Education. Explorations in drawing, planning, woodwork, metal work, and electricity. Mr. Ludington.

Ed. (I.A.) 306 a, b, c. Laboratory Problems in Industrial Arts. 3-3-3 Prerequisites: Ed. (I. A.) 105 a, b, c; Ed. (I. A.) 106 a, b, c, and Ed. (I. A.) 206 a. b. c.

Required of all juniors in Industrial Arts Education.

Advanced hand and machine tool techniques in printing, electricity, and metal work; stressing the development of master craftsmanship and an understanding of related social-economic problems. Mr. Ludington.

Ed. 344. Problems in Secondary Education. Prerequisites: Ed. 303, and 6 other credits in Education. Required of juniors preparing to teach industrial subjects. Problems of secondary education, with special reference to the relationships of industrial subjects with the other elements of the school program.

Mr. Ludington.

#### Courses for Graduates and Advanced Undergraduates

Ed. 416.	Local Survey; Planning a Program.	0-3-0
Method	s of surveying local occupations; use of the findings to	plan a
program	of Industrial Education. Mr. S	Smith.

3-0-0

222 [EDUCATION]

Ed. 422. Methods of Teaching Industrial Subjects. Prerequisites: Ed. 304, 344.	3-0-0
Required of seniors in Industrial Arts Education and th teach vocational classes in trades and industries.	ose preparing to
Principles of teaching in the classroom or shop; intende are teaching or preparing to teach shop and drawing course	s.
3	fr. Ludington.
Ed. 427. Philosophy of Industrial Education.	0-3-0
The philosophy of industrial education, a review of Fe legislation pertaining to industrial education; part-time general industrial, and evening schools.	
Ed. 433. Field Work in Secondary Education. Prerequisites: Ed. 344, and 6 credits in Education.	0-3-0
Required of juniors in Industrial Arts Education.	
A study of pupil-teacher-community relationships at the level involving observations, visits, reports, readings, and o	
	Stan.
Ed. 440. Vocational Education. Prerequisites: Ed. 303, 344, and 6 additional credits in E	3 or 3 or 3 ducation.
Elective for students in Industrial Arts and Industrial	Education.
Problems of vocational education; underlying philosop our system of education; the laws governing prevailin administration; agricultural, homemaking, industrial, and tions; deals with all-day, evening, part-time, and general c work.	g practices and commercial voca-

Ed. 444. Observation and Directed Teaching of Industrial Subjects. 3-3-0 or 0-3-3

Prerequisites: Ed. 422, 433.

Required of students who desire an "A" grade certificate to teach industrial subjects.

Observation of and active participation in phases of teacher activity: students will work in actual situations under supervision. Staff.

Ed. S., Ex. 452. Industrial Arts in the Elementary School. 3 credits Prerequisite: 12 credits in education and the consent of the instructor.

For advanced undergraduate and graduate students; organized to help students gain insights into the materials, processes, and products of industry fundamental to an understanding of major problems of living. Staff.

Ed. (I.A.) 470 a. b. c. Laboratory Problems in Industrial Arts 3 or 3 or 3 An elective course for undergraduates and graduates with consent of the instructor

Advanced laboratory conducted on general shop or laboratory of industries basis. Mr. Ludington.

#### Ed. S., Ex. 480. Modern Industries.

Prerequisite: 12 credits in education and consent of the instructor.

Elective course for advanced undergraduate and graduate students in industrial arts. Designed to assist teachers in guiding students to sources of information relative to various modern industries. Staff.

#### Ed. 482. Curriculum Problems in Industrial Arts. 2-0-0

A course for advanced undergraduate and graduate students in Industrial Arts Education.

Planning and organizing of learning experiences in the Industrial Arts area. Mr. Ludington.

### Ed. 483. Instructional Aids and Devices.

Prerequisites: Ed. 304, and 6 other credits in Education.

Required of those intending to teach Industrial Arts or Industrial Education, and those who because of trade experience desire to teach trade subjects.

Analysis of learning units, and the preparation of instructional aids and Mr. Ludington. devices.

#### Ed. 484. Laboratory Planning and Equipment Selection.

A course for advanced undergraduate and graduate students.

The physical planning of school shops and laboratories; selection of tools and equipment. Whenever possible, actual or contemplated school buildings will be used for class work. Mr. Ludington.

#### Ed. 492. Individual Problems in Education. 3 credits

An elective course for graduate students in Industrial Arts Education and Industrial Education, with consent of instructor.

Individual and group studies of one or more major problems in Industrial Arts and Industrial Education. Problems will be approached through the application of research techniques with final reports prepared in a form suitable for publication as a magazine article, technical or professional bulletin. Staff.

3 credits

0-3 0

#### Courses for Graduates Only

Ed. 510. Administration and Supervision of Vocational Education.

Prerequisites: Ed. 304, 344, 420, 440, or equivalent. 3 or 3 or 3 For graduate students majoring in Education.

Administrative and supervisory problems of vocational education; practices and policies of Federal and State offices; organization and administration of city and consolidated systems. Staff.

# Ed. 514. Modern Principles and Practices in Secondary Education.

Required of graduate students in Guidance, Industrial Arts, and Industial Education.

Foundations of modern programs of secondary education; purposes, curriculum, organization, administration, and the place and importance of the high school in the community in relation to contemporary social forces.

Mr. Ludington.

## Ed. 521. Research in Education.

The student will make a study of one or more research problems under the supervision of some member of the staff of the Department of Teacher Education. The course will be selected on the recommendation of the member of the faculty with whom the student plans to carry on the study.

Staff.

3 or 3 or 3

#### Ed. 530. Philosophy of Industrial Arts.

3 or 3 or 3

Required of all graduate students in Industrial Arts Education; elective for others with consent of the instructor.

Current and historical developments in Industrial Arts; philosophical concepts, functions, scope, criteria for the selection and evaluation of learning experiences, laboratory organization, student personnel programs, community relationships, teacher qualifications, and problems confronting the Industrial Arts profession. Mr. Ludington.

### Courses for Graduates and Advanced Undergraduates

Ed. 420. Principles of Guidance.

3 or 3 or 3

Prerequisite: 12 credits in education.

The place of guidance in the school program covering the elementary, junior high, and senior high divisions. It will treat of the development of educational and vocational guidance, the relation of personnel work, principles and practices of guidance in employment. Ed. 424. Occupational Studies.

Prerequisite: 12 credits in Education.

Intended to acquaint teachers with the field of occupations; selection of suitable instructional materials and its presentation to pupils; analyses of leading groups of occupations.

#### Ed. 433. Field Work in Secondary Education. See page 222

### Ed. 481. Character Education.

Prerequisite: 12 credits in Education.

Factors influencing character development; opportunities and responsibilities of the school for the conception and attitudes fundamental to good conduct, trends, materials, and procedures. Mr. Cook.

Ed. 490. Individual Problems in Guidance. 3 or 3 or 3

Elective for advanced undergraduate and graduate students interested in the guidance field.

Intended for individual or group studies of one or more of the major problems in guidance and personnel work. Problems will be selected to meet the interests of individuals of the class and approached through research techniques with the idea of preparing suitable material for distribution in mimeographed or bulletin form. Staff.

#### Courses for Graduates

#### Ed. 512. Problems in Counseling.

Prerequisite: Ed. 420, 432, or equivalent.

Intended for teachers of experience and those interested in the problems of guidance in school and industry; attention to group and individual counseling as applied to the junior and senior high schools, colleges, or placement offices; procedures of conducting interviews and conferences.

Ed. 521. Research in Education. See page 224

#### Educational Psychology

Ed. 303, 304. Educational Psychology.	3-3-0
(For description of course see Psychology 303, 304)	Mr. Moffie.
Ed. 476. Psychology of Adolescence.	0-0-3
(For description of course see Psychology 476)	Mr. Moffie.

0-0-3

0-0-3

#### FLECTRICAL ENGINEERING

#### **Courses** for Undergraduates

E. E. 201, 202, 203. Electrical Engineering Fundamentals. 3-3 3 Prerequisite: Math. 102. Required of sophomores in E. E. Concurrent with Phys. 201, 202, 203,

Fundamental laws of electric, magnetic and dielectric circuits; problem drill. Timbie and Bush: Principles of Electrical Engineering.

Messrs. Brennecke, Fouraker, and Browne.

#### Courses for Advanced Undergraduates

E. E. 301, 302, 303. Electrical Engineering.

4-4-4

Prerequisite: E. E. 202.

Required of juniors in E. E.

Principles, performances and characteristics of direct-current apparatus; theory of periodic currents, alternating-current circuits and systems. Kloeffler, Brennenman and Kerchner: Direct Current Machinery, Bryant and Correll: A. C. Circuits. Messrs, Fouraker and Pearsall,

E. E. 311, 312, 313. Electrical Engineering Laboratory, I. 2-2-2 Required of juniors in E. E. Concurrent with E. E. 301, 302, 303

A laboratory course coordinated with E. E. 301. Ricker and Tucker, Electrical Engineering Laboratory Experiments.

Messrs, Lear, Pearsall, Keever, Glenn, and Nichols,

E. E. 315, 316. Fundamentals of Electronics. 0-4-4 Prerequisite: E. E. 301. Required of Juniors in E. E. The fundamental principles of electron tubes and their associated circuits.

Messrs. Glenn and Carley.

E. E. 320, 321, 322. Elements of Electrical Engineering. 3-3-0 or 3-3-3 Prerequisites: Math. 202, Phys. 203.

Required of juniors in Aero E., Chem. E., C. E., and Geol. E., and of seniors in Cer. E., Gen. E., I. E., and M. E.

Theory and problems in applied electricity; motor characteristics and industrial applications.

Messrs. Lear, Keever, Pearsall, Glenn, and Winkler.

E. E. 325, 3	326, 327.	Electrical	Engineering	Laboratory,	II.	1-1-1
	tory cour	rse coördin	E., I. E., and ated and con , Keever, Pea	current with		
E. E. 343.	Electrica	al Equipme	nt of Buildin	gs.		0-0-3

Prerequisite: Phys. 203. Required of seniors in C. E. in Construction and Building Materials Options and Architectural Engineering. Wiring of buildings for light and power: selection of motors and lighting equipment. Mover and Wostrel: Industrial Electricity and Wiring.

Messrs, Lear and Winkler.

Courses for Graduates and Advanced Undergraduates

E. E. 401, 402. Alternating-Current Machinery. 4-4-0 Prerequisite: E. E. 303. Required of seniors in E. E.

Principles and characteristics of alternating current-machinery. Bryant and Johnson: Alternating-Current Machinery.

Messrs, Fouraker and Keever,

E. E. 403. Electric Transmission. Prerequisite: E. E. 402. Theory and characteristics of electric circuits for transmission of power. Bryant and Correll: Alternating Current Machinery.

Messrs, Fouraker and Keever.

9.9.9 E. E. 411, 412, 413. Electrical Engineering Laboratory. Required of seniors in E. E. Concurrent with E. E. 401, 402, 403. A laboratory course coördinated with classroom work. Ricker and Tucker, Electrical Engineering Laboratory Experiments. Messrs, Keever, Pearsall, Glenn, and Winkler.

E. E. 421, 422, 423. Electric Power Applications (Optional with 3-3-3 E. E. 425, 426, 427). Prerequisites: E. E. 303. Selection of electric equipment for industrial applications, control equipment; electric traction; electric power plants. Mr. Browne.

228 [Engineering Mechanics]

E. E. 425, 426, 427. Electric Communications (Optional v E. E. 421, 422, 423). Concurrent with E. E. 445, 446, 44 Prerequisites: E. E. 303. Circuits and equipment for wire communication; radio a systems. Everitt: Communication Engineering. Messrs. Four.	7. 3-3-3
E. E. 437. Illumination. Prerequisites: E. E. 303. Required of seniors in E. E.	0-0-3
Characteristics of electric lamps; electric lighting s Textbook of Illumination.	ystems. Kunerth: Mr. Lear.
E. E. 441, 442, 443. Electrical Measurements in Industry Prerequisite: E. E. 303 or E. E. 322 or E. E. 333. Theory and practice of electrical measurements in in electrical methods applied to measurement of nonelectric	ndustry, including
	Mr. Brown.
E. E. 145, 146, 447. Ultra High Frequency Techniques. Prerequisites: E. E. 401, 411, with E. E. 425, 426, 427 The production, control and use of ultra high frequency communication and detection. Brainerd, et al: Ultra	radio signals for High Frequency
Techniques.	Mr. Carley.
E. E. 453. Power Network Calculations. Prerequisite: E. E. 403.	0-0-3
The method of symmetrical components applied to fa power system networks.	ult calculation in Mr. Brennecke.
Courses for Graduates Only	
E. E. 501, 502, 503. Fundamental Principles in Electrical Engineering.	3-3-3
Prerequisites: E. E. 402, 403. Review of fundamentals involved in the more complex tered in electrical engineering.	

1-1-1 E. E. 505, 506, 507. Electrical Engineering Seminar. Prerequisite: Graduation in E. E. A series of papers and conferences of junior instructional staff and students who are candidates for advanced degrees in electrical engineering. Messrs, Brennecke, Fouraker, Browne, E. E. 521, 522, 523. Engineering Electronics. 4-4-4 Prerequisite: Graduation in E. E. Electron tubes in industry, including studies of various types of tubes and their associated circuits. Mr. Carley. 2.2.2 E. E. 531, 532, 533. Illumination Engineering. Prerequisite: Graduation in E. E. Advanced principles of Illumination Engineering. Mr. Browne. E. E. 550. Electrical Engineering Research. 3-3-3 Prerequisite: Graduation in E. E. Individual research in the field of Electrical Engineering. Mr. Foursker.

### ENGINEERING MECHANICS

#### Courses for Alvanced Undergraduates

E. M. 311. Engineering Mechanics.

3 or 3 or 3

Prerequisite: Math. 201.

Co-requisites: Math. 202 and Phys. 201.

Required of all students in Engineering.

Statics and Friction: Study of concurrent, parallel and nonconcurrent systems of both coplaner and noncoplaner forces; the application of statics to the solution of fundamental engineering problems, including statical friction. Seely and Ensign: Analytical Mechanics for Engineers.

Messrs. Smith, Conner, Mitchell, and Farlow.

E. M. 312. Engineering Mechanics.

3 or 3 or 3

Prerequisites: E. M. 311 and Math. 202.

Co-requisites: Math. 303.

Required of all students in Engineering.

Kinematics; centroids moments of inertia. Seely and Ensign: Analytical Mechanics for Engineers. Messrs. Smith. Conner. Mitchell, Farlow. 230 [ENGINEERING MECHANICS]

E. M. 313. Engineering Mechanics.

Prerequisites: E. M. 312 and Math. 303. Required of all students in Engineering.

Kinetics: The motions of particles of rigid bodies as they are affected by the action of unbalanced forces. The Newtonian laws of motion; work and energy; power, impulse and momentum; applications to special engineering problem s: Seely and Ensign: Analytical Mechanics for Engineers.

Messrs. Smith, Conner, Mitchell, and Farlow.

E. M. 321. Strength of Materials.

Prerequisites: E. M. 302 or E. M. 312, and Math. 303.

Co-requisite: E. M. 313.

Required of all students in Engineering.

Stresses and strains in engineering materials; tension, compression, shear, and torsion; emphasis on the applications to engineering structures; bending moments and shear in simple beams; fibre stresses in beams and their distribution throughout the cross section. Timoshenko and McCullough: *Elements of Strength of Materials*.

Messrs. Smith, Conner, Mitchell, and Farlow.

E. M. 322. Strength of Materials.

Prerequisite: E. M. 321.

Required of all students in Engineering except Chem. E., E. E., Geol. E., and Ind. E.

A continuation of E. M. 321. Various methods for finding the deflection of beams; determination of stresses in statically indeterminate beams; the study of columns; combined stresses. Timoshenko and McCullough: *Elements of Strength of Materials*. Messrs. Smith, Conner, and Mitchell.

E. M. 330. Fluid Mechanics.

Prerequisites: E. M. 302 or E. M. 313.

Required of students in Aero. E., Ch. E., C. E., E. E., Geol. E., M. E.

A study of the fundamental principles of mechanics of fluids; properties of fluids; intensity of pressure; hydrostatic pressure on areas; applications of hydrostatics; kinematics of fluid flow; dynamics of fluid flow; applications of hydrokinetics; friction losses in pipes; flow through pipes; dynamic forces. Daugherty: Hydraulics. Messrs. Conner, and Mitchell.

3 0 or 3

3 or 3 or 3

3 or 3 or 3

0 3 or 3

E. M. 331. Hydraulic Machinery.

Prerequisite: E. M. 330.

Required of students in E. E. and M. E.

The application of the principles of fluid mechanics to hydraulic pumping and power machinery; impulse and reaction type turbines; turbine laws and factors; water power plants; pumping and machinery, reciprocating and centrifugal pumps; efficiency, capacity, and selection of pumps. Daugherty: Hydraulics, and Notes. Messrs. Conner, and Mitchell.

E. M. 332. Hydraudic Structures

Prerequisite: E. M. 330.

The application of the principles of fluid mechanics to various hydraulic structures and measuring devices; buoyant force and flotation; weirs, orifices, gates; forces exerted by fluids; flow in open channels; models of open channel flow, flow in pipe lines, Daugherty: Hudraulics, and Notes. Messrs. Conner and Mitchell.

#### Courses for Graduates and Advanced Undergraduates

E. M. 401. Advanced Strength of Materials.

Prerequisites: E. M. 320 or E. M. 322

Elective for Engineering seniors and graduate students.

Detailed study of the deflections of beams; special types of beams; statically indeterminate systems. Timoshenko: Strength of Materials. Mr. Smith.

E. M. 402. Advanced Fluid Mechanics. Prerequisite: E. M. 330.

Elective for Engineering seniors and graduates.

A study of more advanced problems than taken up in E. M. 330; kinematics of fluid flow: conformal mapping: laminar and turbulent flow: the boundary layer: flow around immersed bodies: closed conduits. Instructor's notes and selected references. Mr. Conner

E. M. 404. Vibration Problems.

\*Prerequisites: E. M. 320 and 322, Math. 431a, or 431b.

Elective for Engineering seniors and graduate students.

Fundamental vibratory systems of one degree of freedom; balancing of rotating systems: calculation of critical speeds of rotating shafts; vibrating instruments: systems of several degrees of freedom. Den Hartog: Mechanical Vibrations. Mr. Conner.

• Math 411 412 are desirable

3 or 3.0

0 2 or 2

3-0-0

0.3.0

Courses for Graduates Only	
E. M. 501. Advanced Strength of Materials.	3-0-0
Prerequisites: E. M. 401, Math. 431a or 431b.	
A study of more advanced problems than taken up in I 322; energy of strain; Castigliano's Theorem; impact; M Mohr's circle. Timoshenko: Strength of Materials.	
E. M. 502. Applied Elasticity.	0-3-0
*Prerequisites: E. M. 401, Math. 431a or 431b.	14
Stress analysis of machine parts; stress concentration bars; torsion and bending in prismatical bars; stree cylinders; fly wheels; shrink fits. Timoshenko: <i>Strength</i>	s in thick-walled
E. M. 503. Applied Elasticity. *Prerequisites: E. M. 502. Math. 431a or 431b.	0-0-3
Thin bars, plates and slabs in compression, tension, or sion and tension; built-up columns. Timoshenko: Strengt	
E. M. 505. Research in Strength of Materials.	3-3-3
Special problems and investigations.	Mr. Smith.
*E. M. 506. Research in Mechanical Vibrations. Prerequisite: E. M. 404.	3-3-3
Special problems and investigations.	Mr. Conner.
*E. M. 507. Research in Fluid Mechanics. Prerequisite: E. M. 402.	3-3-3
Special problems and investigations.	Mr. Conner.

#### ENGLISH

### Freshman English

Eng. 101, 102,	103. Composition.	3-3-3
Required of	all freshmen.	

Grammar review and intensive practice in composition; reading and analysis of literary types, with emphasis upon both composition and appreciation; directed supplementary reading collateral with class study; exercises and reports; conferences.

Staff.

\* Math. 411, 412 are desirable.

Writing

3 or 3 or 3

Prerequisite: Eng. 101. 102, 103. Practical application of the principles of composition; types of letters;

Eng. 211. Business English.

form, style, and tone of effective correspondence; intensive word study; conferences Messrs, Wilson and Shelley,

#### Eng. 215. Principles of News and Article Writing.

Prerequisite: Eng. 101, 102, 103, (Class limited to twenty students.) Introduction to the writing of simple news articles; class criticism of non-technical newspaper and magazine articles. Vocabulary building: col-

lateral reading. Mr. Wynn.

#### Eng. 216. Advanced Article Writing,

Prerequisite: Eng. 101, 102, 103, and 215 or equivalent.

A continuation of Eng. 215, with intensive practice in writing and criticizing nontechnical articles. Subjects determined by student's interest. Vocabulary building; collateral reading. Mr. Wvnn.

Eng. 222. Advanced Composition.

Prerequisite: Eng. 101, 102, 103,

An analysis of the techniques and aesthetics of prose style plus a study of exposition, the short-story, and other forms of creative writing. Original compositions; conferences. Mr. Shelley.

Eng. 321. Technical Writing I. (For students in Engineering.) 3 or 3 or 3 Prerequisites: Eng. 101, 102, 103, 211, 231, and one term of literature.

Intensive practice in writing engineering reports, articles, and papers for public delivery; readings in essays and in technical periodicals. Term papers in library research and technical-report writing. Mr. Fountain.

Eng. 323. Technical Writing II. (For students in Agriculture and Forestry.)

Prerequisites: Eng. 101, 102, 103, and required sophomore English courses.

Fundamentals of style in professional writing. Reports, articles, papers. Term papers in library research and in professional reports.

Mr. Fountain.

3-0-0

0.3.0

0-0-3

Eng. 231. Public Speaking.

234 [ENGLISH]

Prerequisites: Eng. 101, 102, 103,

Speech organization and effective delivery; extempore speeches; audience motivation and use of motivating process; acquisition of ease before Messrs. Paget, Fountain, Wynne. audience.

Eng. 236. Parliamentary Practice.

Eng. 237. Speech Adjustment.

Prerequisites: Eng. 101, 102, 103,

Prerequisites: Eng. 101, 102, 103.

Not to be counted toward the fulfillment of any requirement in English. Rules and customs of assemblies, including organization, motions; participation in and conduct of meetings; parliamentary strategy.

Mr. Paget.

3 or 3 or 3

0.0.2

Poise and pleasing communicative habits in all group contacts; habits of speech, posture, action, and language. Mr. Paget.

Eng. 331. Persuasion.

Prerequisite: Eng. 231 or equivalent.

Psychological forces, methods of conciliation, securing and holding attention, and winning response; extempore speeches and discussions.

Mr. Paget.

Eng. 332. Argumentation and Extemporaneous Speaking. 0-3-0 Prerequisite: Eng. 231 or equivalent.

Analysis, brief-drawing and evidence, and methods of proof and refutation; fundamentals of conviction; naturalness and forcefulness; extempore speeches, debates, and discussions. Mr. Paget.

Eng. 333. Public Address.

Prerequisite: Eng. 231 or equivalent.

Public speaking for special occasions, including speech of introduction, committee-room speech, after-dinner speech, speech at professional convention, political speech, formal sales talk. Mr. Paget.

0-0-3

3-0-0

0-2-0

ENGLISH | 235 2 or 2 or 2

Eng 334 Radio Speaking

Not to be counted toward the fulfillment of any requirement in English. Prerequisites: English 231, or equivalent: approved admittance by the instructor.

A laboratory practice in the skills of radio speech; the physical properties of voice; diction; tempo; emotion. Mr. Wynne.

#### Literature

#### Eng. 261. English Literature I.

Prerequisites: Eng. 101, 102, 103.

Chief masterpieces of English literature from Beowulf through Shakespeare, with emphasis on social and historical backgrounds. Parallel readings and papers. Messrs. Hartley and Clark.

#### Eng. 262. English Literature II. 3 or 3 - 0

Prerequisites: Eng. 101, 102, 103.

Significant prose and poetry of the seventeenth and eighteenth centuries. with emphasis on the contribution of the two centuries to modern thought. Parallel readings and papers. Messrs, Hartley and Clark,

Eng. 263. English Literature III.

Prerequisites: Eng. 101, 102, 103,

Masterpieces of the nineteenth century, with emphasis on changing literary tastes and ideas; the impact of scientific development on thought and literature. Parallel readings and papers. Messrs. Hartley and Clark.

#### Eng. 265. American Literature I.

Prerequisites: Eng. 101, 102, 103.

A study of chief American literary productions in their historical setting. from the early colonial period to 1840. Mr. Ladu.

#### Eng. 266. American Literature II.

Prerequisites: Eng. 101, 102, 103.

A study of chief American literary productions in their historical setting. from 1840 to 1900. Mr. Ladu.

#### Eng. 267. American Literature III.

Prerequisites: Eng. 101, 102, 103,

A study of the leading American writers of the present century, with a relation of their works to the social background of the period.

Mr. Ladu.

0 - 3 or 3

3-0-0

3-0-0

0-3-0

0 - 0 - 3

#### 236 [ENGLISH]

# Eng. 271. The English Novel.

Prerequisites: Eng. 101, 102, 103,

Analysis of representative novels of England and America, chosen to illustrate the development of the form and to provide a background for appreciating the modern novel. Staff.

#### Eng. 272. Modern Drama

Prerequisites: Eng. 101, 102, 103,

Modern plays, beginning with Ibsen; contemporary English and American productions. Mr. Clark.

Eng. 273. The Development of the Drama. 0-0-3 Prerequisites: Eng. 101, 102, 103,

Origin, progress, and influence: plot, characterization, and interpretation of certain readings. Staff.

Eng. 275. Southern Writers.

Prerequisites: Eng. 101, 102, 103.

An introduction to Southern culture as revealed in poetry from Poe to John Crowe Ransom and in the regional novel and short story; readings in the contemporary Southern essay dealing with social, political, and literary problems. Mr. Kincheloe.

Eng. 276. English Poetry, 1830-1900.

Prerequisites: Eng. 101, 102, 103.

A study of major poets writing in an age of scientific progress and social change. Emphasis on Browning, Tennyson, and Arnold. Parallel readings Mr. Hartley. and papers.

Eng. 281. Literary Masterpieces.

Prerequisites: Eng. 101, 102, 103.

A background for the enjoyment of literature; an introduction to its Staff. appreciation and criteria.

Eng. 282. The Short-Story.

Prerequisites: Eng. 101, 102, 103.

An appreciation of the present-day short-story through examination of development, structure, type, and style; a comprehensive term paper, or its equivalent in original short fiction. Mr. Wynne.

0-3-0

3-0-0

0-0-3

3-0-0

[ETHICS AND RELIGION] 237 Eng. 283. The Bible as Literature. 0-3-0 Prerequisites: Eng. 101, 102, 103. Selected books of the Old and New Testaments (King James Version) as literary and historical documents. Mr. Ladu. Eng. 285. Shakesneare. 3-0-0 Prerequisites: Eng. 101, 102, 103. An analysis of principal plays, Reports on parallel readings, Mr. Clark. Eng. 286. The Romantic Period. 0-3-0 Prerequisites: Eng. 101, 102, 103. English literature from 1790 to 1830, with special emphasis on Wordsworth, Coleridge, Byron, Shelley, and Keats; collateral reading; reports. Mr. Clark. 0.3-0 Eng. 287. Modern Biography. Prerequisites: Eng. 101, 102, 103. A study of short modern biographies by representative American and British writers; collateral reading in longer biographical works; reports and assignments for investigation. Mr. Shelley. Eng. 291. The Eighteenth Century. 0-3-0 Prerequisites: Eng. 101, 102, 103, Chief masterpieces of English literature from Alexander Pope to nineteenth century; collateral reading; reports. Mr. Hartley. Eng. 292. Contemporary British Literature. 0-0-3 Prerequisites: Eng. 101, 102, 103. An introduction to chief figures in contemporary British literature; Kipling, Galsworthy, Wells, Bennett, Conrad, Collateral readings; term paper. Mr. Ladu.

#### ETHICS AND RELIGION

#### Courses

Rel. 301. Introduction to Religion. 3-0-0 Characteristics of the major religious sects of America and brief survey of recent trends in religious thought. Mr. Hicks.

# Rel 302 The Life of Jesus The career of Jesus of Nazarcth as recorded in the Synoptic Gospels and interpreted against the religious, economic, and political background of the age in which Jesus lived Mr. Hicks. Rel. 303. The Teachings of Jesus. The ethical and religious teachings of Jesus as recorded in the Synoptic Gospels, with special emphasis on the contrast between the teachings of Jesus and his contemporaries. Mr. Hicks. Rel. 301. Comparative Religion. Brief history, general characteristics, and social significance of living religions of the world. Mr. Hicks. Rel. 305. Religious Education. 3 credits

Survey of the contemporary educational organization and practice of the major denominations in the United States. Lectures, personal conferences and field assignments. Mr. Hicks

#### Ethics 405. Social Ethics. Prerequisite: Six term credits in Religion or related fields. Review of the ethical codes of the larger professional groups, with analysis of the nature, evolution, and significance of moral values. Mr. Hicks

Rel. 406. Problems of Religion. Prercouisite: Six term credits in Religion or related fields. Religious verities in an age of science and the problems of the church in modern times. Mr. Hicks.

Ethics 407. Ethical Problems of Adolescence. Prerequisite: Six term credits in Religion or related fields. Typical adjustment problems of modern youth, with special consideration to adolescent and pre-adolescent sex instruction and guidance.

Mr. Hicks.

#### 238 [ETHICS AND RELIGION]

3.0.0

0.3.0

0-3-0

0 0-3

0-0-3

3 credits

Rel. 408. Christian Personality in Its Psychological Aspects. 3 credits Prerequisite: Six term credits in Religion or related fields.

An analysis of the psychological validity of the principal ethical teachings of the Sermon on the Mount with emphasis on the relationship of religious attitudes and practices to mental and emotional stability and maturity.

Mr. Hicks.

Ethics 409. Problems of Marital Adjustment. 3 or 3 or 3

Prerequisite: Six term credits in biological or social science. Sections limited to 25 students.

The practical application of pertinent findings of biological and social science to personal problems of premarriage and postmarriage adjustment. Mr. Hicks. Lectures, discussions, and personal conferences.

#### EXPERIMENTAL STATISTICS.

#### Courses for Advanced Undergraduates

#### Stat. 301, 302. Statistical Laboratory,

Use of calculating machines and of punched card tabulation equipment: short cut machine methods: experience in handling large sets of data. Mr. Monroe.

2 0.2 Stat. 311. Introduction to Experimental-Statistics.

Source material, collection, tabulation, presentation and interpretation of survey and experimental data. Charts, graphs and lettering. Miss Cox.

#### Courses for Graduates and Advanced Undergraduates

Stat. 412, 413.	Experimental-Statistics.	5-5-0
	n of statistical techniques such as samp	
analysis of varia	ance and covariance to experimental d	
	Messrs	Rigney, Monroe.

3-3-3 Stat. 421, 422, 423. Applied Mathematical Statistics. Prerequisite: Math. 303 (Calculus).

Theory of probability, statistical inference, least squares with stress on the interpretation of the results in terms of probability.

Mr Anderson

#### Stat. 431. Design of Experiments.

Prerequisite: Stat. 413.

Fundamental principles of designs; randomized blocks, Latin squares, split plot and factorial designs; individual comparisons, components of error and confounding. Designs for specific research problems. Miss Cox.

1-1-0

0.0.2

#### 240 [EXPERIMENTAL STATISTICS]

Stat. 143. Statistical Analysis of Economic Data. 0-0-3 Prerequisite: Stat. 412.

Statistical analysis of economic data distributions, averages, dispersion, correlation and regression, index numbers and tests of significance.

Mr. Anderson.

3-3-0

#### Stat. 451. Statistical Analysis of Social Data. 0-0-3 Prerequisite: Stat. 412.

Sampling social data, rural surveys and testing methods; analysis of variance and relationships; population studies. Application to problems in the fields of sociology, psychology and education. Mr. Hamilton.

#### Stat. 461, 462. Industrial Statistics.

Introduction to industrial sampling and inspection. Use of statistical methods in interpreting tolerances and specifications, and in controlling quality during production. Elements of the theory of significance testing. Reliability of industrial and scientific measurements. Mr. Peach.

#### Courses for Graduates Only

Stat. 511, 512, 513. Special Problems. 1-3, 1-3, 1-3 Development of techniques for specialized cases, particularly in connection with thesis problems. Staff.

# Stat. 515. Research Method in Plant Science. 3-0-0

Prerequisite: Stat. 413.

Techniques of establishing and maintaining field and greenhouse experiments, size, shape and orientation of plots, border effects, estimation of experimental material required for specified accuracy, subsampling plots for yields and laboratory analyses. Mr. Rigney.

#### Stat. 521. Research Method in Animal Science. 3-0-0 Prerequisite: Stat. 431.

Sources of errors in experiments with animals, experimental designs adapted for specific types of animal research, estimation of data required for specified accuracy, factors involved in the increase of accuracy at minimum cost. Mr. Lucas. Stat. 525. Statistical Concepts in Genetics. 0-3-0

Prerequisite: Stat. 412 and Zool. 411.

The composition of phenotypic variance and the estimation of environmental, genetic, and heritable genetic variance. Coefficients of inbreeding and relationship. The effects of various selection procedures and systems of breeding on population means and variances.

#### Stat. 531, 532. Sample Survey Techniques.

Prerequisite: Stat. 413.

Sampling from a homogeneous population; size of sample; structure of sampling investigation. Mr. Cochran.

# Stat. 533. Crop Forecasting and Estimation. 0-3-0

Prerequisite: Stat. 531.

Methods used to select variables related to crop forecasting and estimating; selection techniques. Mr. Hendricks.

Stat. 542, 543. Experimental Designs.

Prerequisite: Stat. 431.

Confounding, quasi-factorial designs, incomplete blocks and lattice squares. Survey of type of designs available. Choice of plans for pasture, field, greenhouse, animal, and human experiments. Miss Cox.

# Stat. 545, 546, 547. Advanced Industrial Statistics.

Prerequisite: Stat. 462.

Theory of industrial sampling. Use of analysis of variance to test for homogeneity. Randomized blocks, Latin squares, factorial and incomplete block designs in factory trouble shooting and industrial research. Industrial applications of correlation and regression methods. Quality control and inspection in exceptional cases.

#### Stat. 552, 553. Econometric Methods.

Prerequisite: Math. 303 (Calculus).

Mathematical formulation and exposition of demand, laws of production, monopoly and taxation, random element, seasonal and cyclical variations; trend, orthogonal polynomials and correlation of time series.

Mr. Anderson.

0 3-3

# 0-3-3

0 3-3

3-3-3

#### 242 [FIELD CROPS]

# Stat. 562. Psychometric Methods. Prerequisite: Stat. 413. Rating scales: mental-test methods; item and factor analysis; standard partial regression coefficients and functional relationships. Stat. 571, 572, 573. Advanced Mathematical Statistics. Prerequisite: Stat. 423.

Theory of errors, maximum likelihood, estimation, least squares and distribution theory.

#### Stat. 575, 576. Advanced Experimental-Statistics. 0.3.3

Prerequisite: Stat. 413 or 423.

More complex applications of chi squares, regression theory and analysis of variance. Transformation of data before analysis. Discriminant function analysis and recently-discovered techniques. Introduction to fundamental ideas in statistical estimation and in testing significance. Mr. Cochran.

Stat. 581, 582, 583.	Seminar.	1-1 1
		Staff.
Stat. 591, 592, 593.	Research.	3-3-3
		Staff.

#### FIELD CROPS (AGRONOMY)

### Courses for Undergraduates

F. C. 101. (	General Field C	rops.			4-0	)-0 or 0-	4-0
A standar	d introductory	course	dealing	with	fundamental	factors	in
production a	nd managemer	t of ci	cops.		Mr		-

### F. C. 303. Southern Field Crops.

Prerequisite: Field Crops 101 and Soils 202.

Production of the major crops (other than forage) grown in North Carolina, with special attention given to recent developments in varietal improvement, crop rotation, the management of crops in different cropping systems and utilization, Staff.

0-5-0

0-3-0

#### F C 403. Pastures and Forage Crops. Prerequisite: F. C. 101.

A study of the production and preservation of the principal forage crops. Special attention is given to the development and maintenance of pastures. Mr. Lovvorn.

F. C. 412. Plant Breeding,

Prerequisite: Zool. 411.

Lectures, field and laboratory exercises, including methods and principles of plant breeding. Mr. Gregory.

#### 0.0.2 F. C. 413. Weeds and Their Control. Physiological principles involved in cultural and chemical control, Practice in identification of plants and seeds. Mr. -

F. C. 421, 422, 423, Special Crops.

For advanced undergraduates only.

Prerequisite: Stat. 412. See Stat. 515 for description.

Designed for special students who wish additional work in the production or handling of any particular crop, such as tobacco, cotton, peanuts, small grain, forage crops, etc. Registration only with consent of instructor.

#### Courses for Graduates Only

F. C. 503. Advanced Plant Breeding and Plant Genetics.	0-0-3
Prerequisites. Good foundation in genetics, cytogenetics, and evolution.	plant morphology
Theory, procedure and technique.	Mr. Gregory.
F. C. 513. Forage Crop Ecology. Prerequisites: F. C. 403 and Botany 441.	0-3-0
Research methods and consideration of the literature.	Mr. Lovvorn.
F. C. 515. Research Methods in Plant Science.	0-3 0

#### 0 - 0 - 5

0-3-0

3-3-3

Staff.

Mr. Rigney.

#### 244 [FORESTRY]

F. C. 522, 523.	Cytogenetics.*	0-5-5
Prerequisites: morphology and	Elementary microtechnique; foundation in genetics evolution.	, plant
Principles of (	rytology, cytogenetics, in theory and practice. Mr.	Smith.

### F. C. 531, 532, 533. Seminar.

Prerequisites: Graduate standing in Field Crops.

Scientific articles, progress reports in research, and special problems of interest to agronomists reviewed and discussed. Staff.

F. C. 541, 542, 543, Research,

Prerequisite: Graduate standing in Field Crons.

#### FORESTRY

#### Courses for Undergraduates

For. 101. Elementary Forestry,

The nature and development of forests of the world, with special study of the forests of the United States; a correlation of all sciences required in forestry; field trips included. Mr. Hofmann.

#### For, 111. Principles of Farm Forestry,

The theory and practice of forestry with special reference to the handling of farm woodlands and the utilization of their products; the place of forestry in farm management and the agricultural economy.

Mr. Chalfant.

#### For. 201. Wood Technology. Microscopic slides of the conifers and broad-leaved trees are studied in order to determine the occurrence, form, and structure of the wood elements. Identification by means of the hand lens is especially emphasized.

Mr. Slocum.

#### For, 203. Timber Physics.

Mechanical properties of wood. Strength tests. Methods of testing. Growth conditions that produce the best timber for specific purpose. Mr. Slocum.

0-0-3

3-0 0

1-1-1

Staff.

3-0-0

0-0.3

<sup>·</sup> Students are expected to confer with instructor in advance of registration.
[FORESTRY] 245 For s204. Silviculture 3 credits Prerequisites: Bot. 211, 213. Sophomore summer camp. Growth and development of forest stands; reproduction counts, type mapping, thinning and weeding; establishment and measurement of sample plots. Messrs, Miller, Slocum, For, s214. Dendrology, 2 credits. Prerequisites: Bot. 211, 213, Sophomore summer camp. Identification and study of trees in Piedmont and Mountain sections of North Carolina. Messrs Slocum Miller. For, s244. Forest Protection, Improvements, and Influences I. 2 credits. Sophomore summer camp. Forest fire prevention and control methods. Road and improvement construction and effect of weather on fire conditions. Mr. Chalfant. For. s274. Mensuration I. 2 credits Prerequisites: C. E. 221, 222. Sophomore summer camp. Collection of field data for stand and vield tables, stem analysis, and timber surveys. Messrs. Slocum, Miller. For, 301. Timber Preservation. 3-0-0 Prerequisite: For. 202. Lumber and timber preservatives and their use; methods of preservation; relation of preservation to forestry and industry. Mr. Slocum. 3-0-0 For. 311. Forest Utilization J. The problems of more complete utilization of forest resources; utiliza-Mr. Wyman. tion of present waste in commercial practice. For. 313. Forest Utilization II. 0-0-3 A continuation of Forest Utilization I in the field with visits to and reports on wood utilization plants. Mr. Wyman.

#### 246 [FORESTRY]

	100 TO
For. 321. Lumber Seasoning and Grading. Prerequisite: For. 201.	3-0-0
Air-seasoning and kiln drying of lumber; kiln construction lumber grading principles.	and operation; Mr. Wyman.
For. 322. Gluing and Plywood.	0-3-0
Prerequisite: For. 201. Methods of manufacturing veneer and assembling plywood uses of glues and resins in plywood and built-up woods.	. Properties and Mr. Wyman.
For. 323. Logging. Prerequisite: For. 362.	0-0-3
Required of seniors in Forestry. The logging industry and transportation methods; logging tion of methods to specific conditions; all forest regions are of ing the problems of each.	
For. 331. Naval Stores.	3-0-0
Methods of turpentining woods practices; factors influe yields; distilling practices; integration with other forest prod	
For. 332. Forest Policy.	0-3-0
State and federal forest legislation; timber law, illustrated	by court cases. Mr. Miller.
For. 333. Methods of Research in Forestry. Methods and procedures, problem outlines, presentation sideration of selected studies by forest research organizatio	
technique.	Mr. Kaufman.

For. 313. Forest Protection. Improvements. and Influences II. 0 0-3 Prerequisite: For. \$242.

Organization and operation of forest fire prevention and control methods. Forest road and telephone line construction and maintenance. Effect of weather on fire conditions. Mr. Chalfant.

For. 353. Dendrology. 0-0-1 Identification and study of trees in the Coastal section of North Carolina. Mr. Slocum. For. 361. Silviculture I. 3-0-0 Factors affecting tree growth and distribution; forest regions, sites, stands, and types; silvical requirements of important tree species. Mr. Miller.

Mr. Miller.

0-0-3

3-0-4

3 0-0

0 - 3 - 0

[FORESTRY] 247

For. 362. Silviculture II. 0-3-0 Production, collection, extraction, storage, and planting of forest-tree seeds. Mr. Slocum.

For. 363. Silviculture III.

Prerequisite: For. 362.

Methods of cutting to secure natural regeneration; intermediate cuttings, and their effect on the stand; slash disposal. Mr. Miller.

For. 371, 373. Mensuration II, III.

Prerequisite: For. s274.

The measurement of timber, both standing and felled; log rules, form factors, stem analysis, and growth.

Methods of making volume, growth, and stand tables; increment and yield studies; development of stand and yield tables from field data.

Mr. Slocum.

#### Courses for Graduates and Advanced Undergraduates

For. 401. Forest Finance.

Forests as investments: interest, carrying charges, financial maturity; relation of intermediate to final and net incomes; forest taxation, hazards in forest investments, and forest insurance. Mr. Chalfant.

For. 403. Timber Appraisal. 0-0-3 Field and office methods of valuing timber lands, with special reference to stumpage appraisal; the evaluation of damages to timber and forest property. Mr. Chalfant.

For. 412. Silviculture IV.

Prerequisite: For. 411.

The application of silvicultural methods in the forests of the United States. Mr. Miller.

# For. 422. Forest Products.

Prerequisite: For. 201.

The source and method of obtaining derived and manufactured forest products other than lumber. Mr. Wyman.

#### For. 431, 432. Forest Management.

Prerequisite: For. 362.

For, 452, Forest Grazing,

Management of timber lands for economic returns; the normal forest taken as the ideal; the application of regulation methods to the forest; a typical working circle as developed by the United States Forest Service studied for each forest region. Mr. Hofmann.

#### For. 433. Advanced Wood Technology. 0-0-3 Prerequisite: For. 202.

Advanced microscopic identification of the commercial woods of the United States; microscopic work in anatomy and identification. Mr. Slocum.

# For. 142. Lumber Manufacturing. 0-3-0

The manufacture and re manufacture, transportation and handling of lumber; grades and grading of lumber. Mr. Wyman.

# 0 0-2

Management of range areas, all grazing regions with special consideration of the southeast. Mr. Kaufman.

For. 153. Aerial Mapping. 0-0-2 Interpretation of aerial photographs, determination of density of timber stands and area mapping. Mr. Chalfant.

# For. 461, 462, 463. Forestry Problems. 3-3-3

Assigned or selected problems in the field of silviculture, logging, lumber manufacturing, or forest management. Staff.

# Courses for Graduates Only

For. 501, 502, 503. Advanced Forest Management Problems. 3-3-3 Complete management program for a specific forest area. Mr. Hofmann.

For. 511, 512, 513.	Advanced Silviculture Problems.	3-3-3
Advanced problem	ms or experiments in silviculture.	Mr. Miller.

0-3-0

3.2.0

[GEOLOGY] 249 For, 521, 522, 523. Advanced Logging Problems. 3.9.9 Selected research logging problems of an advanced nature. Mr. Wyman, For, 531, 532, 533. Advanced Lumber Manufacturing. 3-3-3 Selected advanced problems dealing with the manufacture and seasoning of lumber. Mr. Wyman. For, 541, 542, 543. Advanced Utilization Problems. 2.2.2 Problems of an advanced grade in some phase of forest utilization. Mr. Wyman. For. 551, 552, 553. Forest Valuation. 2.2.2 Planning, organizing, and conducting, under general supervision, an important research project in one of the fields of valuation. Mr. Wyman. For, 561, 562, 563. Problems in Research. 3-3-3 Specific forestry problems that will furnish material for a thesis. Mr. Miller.

# GEOGRAPHY

#### Courses for Undergraduates

Geog. 201,2.	Geograph	ıy.					3-3-0
Elective. A course geography.	covering	the	principal	elements	of	physical Mr. Sh	

#### GEOLOGY

# Courses for Undergraduates

0.3.0 Geol. 101. Earth History. Elective. Not to be taken after Geol. 120, 220, and 222. Introductory course in General Geology; changes in the earth, and underlying physical and life processes. Bradley: The Earth and Its History. Mr. Stuckey.

Geol. 120. Physical Geology.

Required of freshmen in Basic Agriculture and Agricultural Education, and of sophomores in Forestry and Landscape Architecture.

Dynamic processes acting on and within the earth; materials and make-up of the earth's crust. Lectures, laboratories, and field trips. Longwell, Knopf, and Flint: Outlines of Physical Geology, 2nd edition.

Messrs, Stuckey, Miller.

4 or 4 or 4

250 [GEOLOGY]

Geol. 207. Ex. Physical Geography.

A. The processes and forces involved in the development of land forms. B. The physiographic provinces of the United States and their importance: physical geography of North Carolina. Mr. Stuckey.

Geol. 220. Engineering Geology.

Prerequisite: Chem. 101.

Required of sophomores in Agricultural, Ceramic, Civil, Geological, Highway, and Sanitary Engincering.

The principles of general geology and their application to engineering problems, Lectures, laboratories, and field trins, Ries and Watson: Elements of Engincering Geology, 2nd edition. Messrs, Stuckey, Miller,

Geol. 222. Historical Geology.

Prerequisite: Geol. 120 or 220.

Required of sophomores in Geological Engineering.

Major events in the history of North America; rise and development of main animal and plant groups. Lectures, laboratories and field trips, Schuchert: Outlines of Historical Geology. Mr. Miller.

Geol. 223. Geomorphology.

Prerequisite: Geol. 120 or 220.

Required of sophomores in Geological Engineering.

A systematic study of land forms and their relations to processes and stages of development and adjustment of topography to structure. Lectures, map interpretations, and field trips. Lobeck, Geomorphology,

Mr Millor

Geol. 230. Mineralogy.

Prerequisite: Chem. 103.

Required of sophomores in Ceramic and Geological Engineering, and of seniors in Chemical Engineering.

Crystallography, and physical and chemical mineralogy, Lectures and laboratory work. Kraus, Hunt & Ramsdell, 3rd Edition: Mineralogy.

Messrs, Stuckey, Miller.

0-0-3

3-0 or 3

0 - 3 - 0

3-0 or 3

Geol. 325. Geology and Mineral Resources of North Carolina. 3-0-0 Prerequisite: Geol. 222.

Physical geography, general geology, common rocks and minerals, and mines and quarry products of the State. Lectures, laboratories, and field trips. Mr. Stuckey.

# Geol. 332. Advanced Mineralogy.

Prerequisite: Geol. 230. Required in Geological Engineering.

A continuation of Geol. 230. Special attention to chemical and blowpipe properties of a larger group of important minerals. Lectures and laboratory work. Mr. Stuckey.

Geol. 338. Thermal Mineralogy.

Prerequisites: Geol. 230 and Chem. 331.

Required of juniors in Cer. E.

A study of the behavior of ceramic materials as controlled by variations in composition, temperature, and pressure. Mr. Stuckey.

# Geol. 352. Structural Geology.

Prerequisite: Geol. 120 or 220.

Required in Geological Engineering.

The arrangement and deformation of the different rock masses composing the earth's crust. Lectures, laboratories and field trips. Nevin: *Principles* of *Structural Geology*. Mr. Miller.

# Geol. 353. Geophysics.

Prerequisites: Geol. 352, Phys. 203, C. E. 226.

Required of juniors in Geological Engineering.

Discussion of the fundamental principles underlying all geophysical methods; procedure and instruments involved in gravitational, magnetic seismic and electrical methods; study of applications and interpretation of results. Mr. Miller.

# Geol. 361. Stratigraphy and Index Fossils.

Prerequisite: Geol. 222.

Required of juniors in Geological Engineering.

Distribution and conditions of origin of principal geologic formations in Southeastern United States; key fossils characteristic of each period.

Mr. Miller.

0 3-0 wpipe

0-3 0

0-4-0

004

#### Courses for Graduates and Advanced Undergraduates

# Geol. 411, 412, 413. Economic Geology,

Prerequisites: Geol. 120 or 220; Geol. 230; Chemistry 103.

Required of seniors in Geological Engineering.

Mode of occurrence, association, origin, distribution, and uses of economically valuable minerals, Lectures, laboratories, and field trips, Ries; Economic Geology, 7th Edition. Mr. Stuckey.

Geol 431, 132, 433 Ontical Mineralogy

Prerequisites: Geol. 230, and Phys. 203.

Required of seniors in Ceramic and Geological Engineering.

Theory of light as applied to the polarizing microscope; practice in determining minerals in thin sections and by immersion methods. Lectures and laboratory work. Rogers and Kerr: Optical Minerology. Mr. Stuckey.

#### Geol. 113. Petrology.

Prerequisites: Geol. 120 or 220: Geol. 230: and Chemistry 103.

Required of juniors in Geological Engineering.

Materials of the earth's crust: composition, texture, classification, identification, and alterations of the principal igneous, sedimentary, and metamorphic rocks. Lectures, laboratories, and field trip, Grout: Kemp's Handbook of Rocks. Mr. Stuckey.

Geol. 462. Advanced Engineering Geology,

Prerequisite: Geol. 220.

Required of seniors in Geological Engineering.

The application of geologic principles to civil engineering practice; analysis of geologic factors and processes affecting specific engineering projects. Legget: Geology and Engineering. Mr Miller

Geol. 163. Geological Surveying,

Prerequisites: Geol. 352 and 443.

Required of seniors in Geological Engineering.

Methods of field observation and the use of geologic surveying instruments; construction of a complete geologic map of a specific area. Lectures, laboratories, and field trips. Mr. Miller.

0.3.0

0-0-4

3-3-3

0.0.4

3.3.3

Geol. 471, 472, 473. Mining Engineering. Mine Design. Ore Dressing. 3-3 3 Prerequisites: Geol. 230 and 352; C. E. 222 and 225. Required of seniors in Geological Engineering.

Mining methods, both open pit and underground; mine examination and valuation; principles of ore dressing; problems in mine design. Young; Elements of Mining. Mr. Miller.

#### Courses for Graduates Only

Geol. 511, 512. Advanced Economic Geology. 3-3-0 Prerequisites: Geol. 411, 412, 413. Detailed study of the origin and occurrence of specific mineral deposits. Mr. Stuckey.

Geol. 543. Advanced Petrography.

Prerequisites: Geol. 433, 443.

Application of the petrographic microscope to the systematic and descriptive study of rocks. Mr. Stuckey.

Geol. 591, 592, 593. Geological Research.

Prerequisite: Permission of the Instructor.

Lectures, reading assignments, and reports; special work in Geology to meet the needs and interests of the students.

Mr. Stuckey.

#### HISTORY AND POLITICAL SCIENCE

#### Courses in History

Hist. 101, 102, 103. Economic History. Required of sophomores in Industrial Education, Industrial Arts Education, and Textiles.

A survey of the development of economic life in the United States. Messrs, Edsall, Patton, Seecers,

#### Hist, 111, 112, 113, World History,

Required of freshmen in Architecture, and of all other freshmen in the School of Engineering not taking Military Science; and of sophomores in Forestry and Landscape Architecture not taking Military Science.

A general survey of Western civilization from its beginning to the present day. Mr. Barnhardt.

#### 2-2-2

# 0.0 3

3-3-3

254 [HISTORY]

Hist, 121, 122. United States History. Required of all freshmer in the School of Agriculture except those in Forestry; also required of freshmen in Agricultural Education,

A survey of the history of the United States since 1789, emphasizing both political and social development. Staff

#### Hist, 211, 212, 213. History of the United States.

Elective for one, two, or three terms.

A chronological treatment of the political, diplomatic, and constitutional history of the United States in the light of its economic and social significance. Mr. Patton.

Hist. Ex. 216. Medieval History. 3 credits A survey of the political, social, economic, ecclesiastical, and cultural history of Europe from the fourth century to the close of the fifteenth century. Mr. Barnhardt.

#### Hist, 221. History of Modern Europe. 3-0-0 Elective.

A survey of the economic, political, and social developments in Europe from the age of the great discoveries to the close of the eighteenth century. Mr. Barnhardt.

#### Hist. 222. History of Modern Europe. 0 - 3 - 0Elective.

A survey of European history during the nineteenth century, political, economic, and social movements being emphasized in proportion to their international or European importance. Mr. Barnhardt

Hist, 223. Contemporary Europe.

Elective.

A survey of the contemporary history of the principal European states and their international relations in the twentieth century. Mr. Barnhardt.

3-3-0

3-3-3

[HISTORY] 255

Hist. 306. North Carolina History.

A general survey of the political, social, economic, and cultural developments in North Carolina, with special emphasis on the nineteenth and twentieth centuries. Mr. Barnhardt.

Hist. Ex. 310, 311, 312. Economic and Social History of the South. 9 credits A study of the economic and social history of the Southern States. Lectures, readings, and reports. Mr. Patton.

Hist. Ex. 320. American Biography. 3 credits Representative men and women in American politics, law, religion, agriculture, industry, commerce, science, literature, and art. Mr. Barnhardt.

Hist. 333. History of American Agriculture. 0-0-3 Required of juniors in Rural Sociology: elective for others.

Main trends in agriculture in the United States, and the place of agriculture in the economic life of the nation; special emphasis on the period since the Civil War. Mr. Seegers.

Hist. 340. History of Modern England. 3 credits Survey of English political, social, economic, and diplomatic history, with emphasis on the nineteenth and twentieth centuries. Mr. Barnhardt.

Hist. Ex. 350. Hispanic American History. 3 credits A brief account of the colonial period and wars for indpendence, followed by more or less detailed study of the various Hispanic American republics, with emphasis upon their relations with the United States. Mr. Patton.

Hist. Ex. 360. Contemporary History of the United States. 3 credits Significant developments in the United States since 1914, with particular emphasis on post-war problems, foreign affairs, and the New Deal.

Mr. Patton.

#### COURSES IN POLITICAL SCIENCE

Pol. Sc. 211. American Government. 3 or 3 or 3 Meets School of Engineering Citizenship requirement; required of all freshmen in Agriculture and in Agricultural Education. A survey of the origins, structure, and functions of the government of the United States Stoff Pol. Sc. 212. State Government and Administration. 0-3-0 A study of Federal-State relations, and the organization and administration of state and county governments. Special attention will be given to problems of government in North Carolina. Mr Edgall Pol. Sc. 213. Municipal Government and Administration. 0-0-3 A study of the history, organization, and administration of American municipal corporations. Lectures, readings, and reports. Mr. Edsall. Pol. Sc. 221. American Political Parties,

Elective

The origin and development of political parties in the United States: their functions, organization, regulation, campaign methods, and elections. Mr Petton

Pol. Sc. 231. European Governments. 3-0 or 3 Elective. A study of the governments of England, France, Germany, Italy, and Russia. Mr. Barnhardt.

#### HORTICULTURE

#### Courses for Undergraduates

Hort, 101. General Horticulture. 4 or 0 or 4 A course, designed to give a general insight into the field of horticulture. including geographic centers of production, and the elements of culture of fruit. vegetable, and floral crops. Messrs. Gardner, Randall.

Hort. 301. Plant Propagation. 3 or 3 or 3 Study of principles, methods and practice in seedage, cuttage, division, hudding, and grafting, Mr. Randall.

Hort. 302. Vegetable Forcing.

Prerequisite: Hort. 101.

Production of vegetable crops in the greenhouse and other plant-growing Mr. Randall. structures

Hort, 303. Vegetable Growing.

Prerequisite: Hort. 101.

Soil preparation, fertilization, irrigation, and general culture of vegetable Mr. Randall. crops.

Hort. 311. Nursery Practice.

Prerequisite: Hort, 101 and 301.

A course designed to acquaint the student with the principles and practices involved in the production, management, and marketing of nursery plants. Attention will be given to nursery grades for fruits and ornamentals, and inspection laws. Mr. Randall.

Hort, 312. Floral Design and Shop Management. Principles and practices in the art of floral design, including the making

of corsages, wreaths, sprays, baskets, and special arrangements; principles Mr. Randall. of shop management.

Hort, 313. Flower Growing.

Prerequisite: Hort. 101.

Principles and methods of growing outdoor floral crops and house plants, including varieties and their adaptability. Mr. Randall.

Grading, Packing and Judging Horticultural Crops. 2-0-0 Hort. 321. Prerequisite: Hort. 101.

Variety identification, grading, packing, exhibiting, and judging horticul-Messrs. Gardner, Randall, tural crops, Grades and standards.

3-0-0

0-3-0

0-0-3

0-2-0

# Hort. 323. Ornamental Horticulture.

Prerequisites: Hort. 301 and L. A. 402.

The planting, transplanting, pruning, feeding, and protection of ornamental plants used in the construction and maintenance of rural home grouds. Lawn grasses and lawn-making. Mr. Harris.

# Hort. 331. Fruit Growing.

Prerequisite: Hort. 101.

Establishing the orchard, sites, varieties, cultural practices, pruning and training, spraying, harvesting, marketing and storage. Mr. Gardner.

Hort, 311. Fruit and Vegetable Processing and Utilization. 3-0-0 Principles and methods involved in the processing and utilization of horticultural crops; including extraction and preservation of juices, quick-freezing, and other methods concerned with the manufacture of fruit and wegetable products. Mr. Jones.

#### Courses for Graduates and Advanced Undergraduates

Hort. 403, 411, 412, 413. Horticultural Problems I and II. 0-0-1 and 2-2-2 Prerequisite: Twelve credit hours in horticulture.

This is one continuous course through four quarters which consists of a systematic investigation of some phase of horticulture, each student choosing his own subject of study and pursuing it under direction of the instructor.

Hort. 421, 422. Commercial Fruit Growing. 3-3-0 Prereouisite: Hort. 331.

Factors underlying the commercial production of tree fruits, small fruits and grapes. The first term will be devoted to tree fruits and the second to small fruits and grapes. Messrs. Gardner, Morrow, Veerhoff, Williams.

# Hort. 431, 433. Commercial Vegetable Growing. 3-0-3

Prerequisites: Hort. 303.

A study of the production of vegetable crops commonly grown on a commercial scale, including soil and climatic adaptation, and general cultural practices followed by the commercial grower. Mr. Randall.

0-0-2

Hort. 441, 442. Commercial Flower Growing. Prerequisites: Hort. 313.

A study of the commercial production of the principal floral crops in the greenhouse and in other plant growing structures, including soil preparation, planting, fertilization, and general cultural methods. Mr. Randall.

Hort. 451. Systematic Pomology. (Offered in alternate years.) 2-0-0 Prerequisite: Hort. 331.

Fruit varieties: their description, identification, nomenclature, and classi fication; their relationships and adaptations. Mr. Gardner.

Hort. 471. Systematic Olericulture. (Offered in alternate years.) 2 0-0 Prerequisite: Hort. 303.

Vegetable varieties: their description, identification, nomenclature, and classification; their relationships and adaptations. Mr. Randall.

Hort. 481. Systematic Floriculture. (Offered in alternate years.) 2-0 0 Prerconsiste: Hort. 313.

Flower varieties: their description, dientification, nomenclature, and classification; their relationships and adaptations. Mr. Randall.

Hort. 501, 502, 503. Advanced Horticultural Crops. 3-3-3 Prerequisite: Graduate standing in Horticulture.

Special emphasis will be placed upon experimental data and the application of these results. On an option basis the subjects are as follows: 501 fruits; 502 vegetables; 503 floral crops.

Hort. 511. Methods in Horticultural Research.

Prerequisite: Graduate standing in Horticulture.

A study of methods and procedure, outlining problems, assembling and analyzing data, and presenting results; critical review of research work. Staff.

#### Hort. 521, 522, 523. Research.

Prerequisite: Graduate standing in Horticulture.

Graduate students will be required to select problems for original research in fruit growing, vegetable growing, or floriculture. The work and presentation of results should be of such merit as to be worthy of publication. Staff.

#### Hort. 531, 532, 533. Seminar.

Assignment of scientific articles of interest to horticulturists for review and discussion. Staff.

1-1-1

3-0 0

# INDUSTRIAL ENGINEERING

Under supervision of Mechanical Engineering Department until further notice.

#### **Courses** for Undergraduates

I. E. 101, 102, 103. Industrial Organization.	3-3-3
Required of sophomores in I. E.	
Engineering methods in studies of industrial ent	erprises.

# I. E. 201, 202, 203. Management Engineering. 3-3-3

Prerequisite: I. E. 103.

Required of juniors in I. E.

Principles of management, administration, production, and sales; executive control, industrial relations, incentives, normal capacities, standard costs, and pricing; budgeting and planning. Gilman: Analyzing Financial Statements.

# Courses for Advanced Undergraduates

I. E. 301. Engineering Economics.

Prerequisite: Econ. 202 or 205.

Required of seniors in E. E., I. E., and in M. E., Furniture Option, elective for others.

Principles of investments, costs, and utility, with applications to engineering practice; choice of investments and replacements. Grant: *Principles of Engineering Economy*, and *Problems*.

I.	. E. 312, 313. Industrial Engineering Problems.	0-3-3
	Prerequisites or concurrent: I. E. 201, 202, 203.	
	Required of seniors in I. E.	
	Detailed study of problems of moment in this rapidly developing	field.

# I. E. 322. Motion and Time Study.

0 3-0

3 or 3 or 3

Required of juniors in I. E., elective for others.

Prerequisite: I. E. 201 or junior standing.

Fundamentals of methods, involving motion and time, to reduce costs by finding "the one best way." Laboratory: Methods analysis, process and other charts, micromotion and timer techniques. Barnes: Motion and Time Study.

# Courses for Graduates and Advanced Undergraduates

I. E. 402. The Electrical Industry.

Prerequisite: I. E. 301.

Required of seniors in E. E. and I. E.

The operation, practices, management, and performance of electric light and power companies and other electrical industries. Factors, indexes, and comparisons; services and prices; cost analyses and predeterminations.

I. E. 421, 422, 423. Public Utilities.

Prerequisite or concurrent: I. E. 301 or senior standing.

Elective for seniors or graduate students.

Public utilities and their regulation; services, rates, rate bases, returns, leading cases; current problems. Thompson and Smith: Public Utility Economics.

I. E. 433. Investigation and Report. 0-0-3 Prerequisite: I. E. 312. Required of seniors in I. E. Investigation of a selected and approved problem.

#### Courses for Graduates Only

I. E. 501, 502, 503. Industrial Engineering Research. 3-3-3 Prerequisite: Graduation in Engineering.

Investigation of a problem of major importance in the field of Industrial Engineering.

#### LANDSCAPE ARCHITECTURE

# Courses for Undergraduates

L. A. 101, 102, 103. Arboriculture. 1-1-1 Required of freshmen in Landscape Architecture; elective for other students in Agriculture.

Culture of plant materials: their planting, transplanting, training, fertilization, protection from pests; tree surgery, lawn making.

Messrs. Pillsbury, Weaver.

9.9.9

#### Courses for Advanced Undergraduates

L. A. 201, 202, 203. Plant Materials: Woody Plants.

Prerequisite: Bot. 203.

Required of sonhomores in Landscape Architecture and juniors in Floriculture: elective for students in other curricula.

Trees, shrubs, and vines: their distribution, form and habits of growth, size, texture, color, and other characteristics determining use in planting design. Mr. Randall.

#### L. A. 212, 213. Theory of Landscape Design,

Required of sophomores in Landscape Architecture; elective for students in other curricula.

Introduction to the study of landscape design; its theoretical basis; the meaning of taste; historic styles; clements, and landscape composition; planting design, and analyses of typical problems in landscape design.

Mr. Pillsbury.

#### L. A. 303. Plant Materials: Herbaceous Plants. 0-0-2

Required of juniors in Landscape Architecture; elective for students in other curricula, Prerequisite: Bot. 203.

Ornamental perennial and annual plants: height, habit of growth, texture, color, and other characteristics determining use in planting design.

Mr. Randall.

# L. A. 311, 312. History of Landscape Design.

Prerequisites: L. A. 212, 213.

Required of juniors in Landscape Architecture.

History of the art of landscape design from antiquity to modern times: sketching from illustrations of design in important periods. Mr. Pillsbury,

L. A. 321, 322, 323, Landscape Design I. Prerequisites: L. A. 311, 312. Required of juniors in Landscape Architecture.

Problems in presentation, and in constructive design of small properties. gardens, and other special areas and suburban estates. Mr. Pillsbury.

#### 4-4-4

3-3-0

0.3.3

2-2-2

L. A. 402. Ornamental Plants.

Prerequisite: Bot. 203.

Required of seniors in Vegetable Gardening and Pomology; elective for juniors or seniors in other curricula.

Ornamental trees, shrubs, and vines: their characteristics used in the design of planting for home, school, church, and community-center grounds, and farmstead landscapes. Mr Randall

#### L. A. 103, Landscape Gardening,

Prerequisites: L. A. 402, or 201, 202, 203,

Required of seniors in Vegetable Gardening, Floriculture, and Pomology; elective for seniors in all other curricula.

Landscape planning and planting design applied to the improvement of home, school, church, community-center grounds, and farmsteads: practice in methods of making measured surveys, mapping, and designing improvements and planting. Mr. Pillsbury.

L. A. 411, 412, 413. Planting Design.

Prerequisites: L. A. 201, 202, 203, and 303.

Required of seniors in Landscape Architecture.

Problems in composition with plant materials, presentation details, the preparation of planting plans, and cost data. Mr. Pillsbury.

# L. A. 121, 422, 123, Landscape Design II,

Prerequisites: L. A. 321, 322, 323.

Required of seniors in Landscape Architecture.

Problems in presentation, and in the design of small parks and other public grounds, and institutional groups. Mr. Pillsbury.

#### L. A. 432. City Planning.

Required of seniors in Landscape Architecture; elective for seniors in all schools

Origins and types of urban communities; modern city and town planning; legal, economic, social, and aesthetic phases and their interrelationships; fundamental data required; methods of planning and financing; zoning; city and regional planning legislation. Mr. Pillsbury.

# L. A. 142. Suburban Design.

Prerequisite: L. A. 321, 322, 323, and 432.

The subdivision of land as related to suburban development and urban growth. Mr. Pillsbury.

0-4-0

# 0.0.3

0.2.0

4-4-4

3 3.3

264 [MATHEMATICS]

L. A. 451, 452, 453. Landscape Construction.

Required of seniors in Landscape Architecture. Prerequisite: C. E. 224, 225, 226, and 227; and L. A. 321, 322, 323,

Problems in design of ground surface, walks, and drives; preparation of plans for grading and drainage; estimates of materials and costs, and methods of execution of landscape designs. Mr. Pillsbury.

# L. A. 463. Office Practice.

Prerequisite: L. A. 451, 452, 453,

Arrangement of equipment, supplies, data, and illustrative and other material in landscape offices; methods of professional procedure, and professional ethics. Mr. Pillsbury.

#### MATHEMATICS

# Courses for Undergraduates

\*Math. 101. Algebra for Engineers.

Required of freshmen in the School of Engineering, and in the Departments of Industrial Management, Industrial Arts, and Landscape Architecture.

Quadratic equations, the progressions, the binomial theorem, permutations and combinations, logarithms, the general theory of equations, the solution of higher equations, determinants and partial fractions. Fisher: College Algebra. Staff.

#### \*Math. 102. Trigonometry for Engineers.

Prerequisite: Math. 101.

Required of freshmen in the School of Engineering, and in the Departments of Industrial Management, Industrial Arts, and Landscape Architecture.

The trigonometric functions, derivation of formulae, the solution of plane and spherical triangles, with practical applications, slide rule, complex numbers, and hyperbolic functions. Clarkson and Bullock: Plane and Spherical Trigonometru. Staff.

6-0-0

0-0-1

0-6-0

<sup>.</sup> This course will be repeated the following term.

[MATHEMATICS] 265

\*Math. 103. Analytical Geometry.

Prerequisites: Math. 101, 102.

Required of freshmen in the School of Engineering, and in the Departments of Industrial Management, Industrial Arts, and Landscape Architecture.

Loci of equations, the straight line, circle, parabola, ellipse, hyperbola, the general equation of the second degree, polar coördinates, transcendental curves, parametric equations, coördinates in space, planes and surfaces. Smith, Gale and Neelley: Elements of Analyticol Geometry. Staff.

Math. 101. Algebra. Trigonometry. Analytical Geometry for Engineers (Supplementary for Transfer Students) 4 or 4 or 4

A course designed to meet the needs of students who have had algebra, trigonometry, and analytical geometry, but who do not have a sufficient number of credits for engineering. The course will include supplementary topics in algebra, trigonometry, and analytical geometry.

Math. 111, 112. Mathematics for Agriculture and Textile Students. 4-4 0

Fundamentals of algebra, trigonometric functions of acute acles, solutions of right triangles, logarithms, slide-rule, simple and fractional equations, graphs and graphical solutions of equations, percentages, ratio and proportion, areas and volumes of common solids, exponents, radicals and imaginary numbers, quadratic equations, simultaneous equations, progressions, the Binomial Theorem, simple and compound interest, elementary statistics, solutions of general triangles.

# \*Math. 113. Mathematics of Finance.

Prerequisite: Math. 112.

Simple and compound interest, annuities, sinking funds and amortization, and the valuation of bonds and other applications. Smail: Mathematics of Finance. Staff.

#### \*Math. 201. Calculus I.

Prerequisite: Math. 103.

Required of sophomores in Engineering.

A course in the fundamental principles of the calculus, including the formulas for differentiation, and for integration of polynomial functions, with applications to geometry and to problems in rates, maxima and minima, curve tracing, curvature, areas, volumes, work, pressure, velocity and acceleration. Smith, Salkover, Justice: Colculus. Staff.

0-0-6

004

4 0.0

<sup>\*</sup> This course will be repeated the following term.

# \*Math. 202. Calculus II.

Prerequisite: Math. 201.

Required of sophomores in Engineering.

A continuation of Calculus I. Methods of integration, and the study of the definite integral, with applications to problems in areas, volumes, lengths of arcs, surfaces, centroids, moments of inertia, radii of gyration, approximate integration Smith, Salkover, Justice: Calculus, Staff.

#### 'Math. 303. Calculus III.

Prerequisite: Math. 202.

Required of sophomores in Engineering.

A continuation of Calculus II. Indeterminate forms, infinite series, expansion of functions, hyperbolic functions, partial differentiation, double and triple integrals, and differential equations. Smith, Salkover, Justice: Calculus. Stoff

#### Courses for Graduates and Advanced Undergraduates

Math. 431-a. Differential Equations.

Prerequisite: Math. 303.

Required of juniors in Electrical Engineering and elective for others.

Solution of standard types of equations; numerous examples in the field of Electrical Engineering, Kells; Differential Equations, Mr. Bullock.

#### Math, 131-b. Differential Equations,

Prerequisite: Math. 303.

Elective, Principally for students in Chemical Engineering,

A study of the equations that occur in Applied Chemistry, Much emphasis on graphic methods and numerical work. Phillips: Differential Equations. Mr. Winton.

# Math. 432. Advanced Differential Equations for Electrical Engineers, 0-3-0 Prerequisite: Math. 431-a.

Elective.

A continuation of the work given in Math. 431-a. Series solutions, approximate methods. partial differentiatial equations, hyperbolic functions, and other topics will be studied with special emphasis on applications to problems in Electrical Engineering. Students not taking Electrical Engineering may register for the course and will be assigned individual problems in their particular field. Lecture notes. Mr. Bullock.

0-4-0

0-0-4

3-0-0

<sup>.</sup> This course will be repeated the following term.

Math. 402. Graphical and Numerical Methods. 0.3.0 Prerequisite: Math. 303. Elective. Graphical and numerical approximate methods in differentiation, integration and the solution of both ordinary and differential equations. Theory of least squares and empirical curve fitting. Numerous examples in the fields of physics, electricity, mechanics, and engineering will be solved. Mackey: Graphical Solutions. Mr. Cell. .

Math. 403. Vector Analysis I. Prerequisite: Math. 431 (a or b). Elective

Different vector products; the calculus of vectors with applications to geometry and mechanics. Phillips: Vector Analysis. Mr. Clarkson

"Math. 411. Advanced Calculus for Engineers 300 Prerequisite: Math. 431 (a or b). Elective Hyperbolic functions, elliptic integrals and functions, partial differentia-

tion of composite functions, differentiation of integrals, implicit functions. Applications to problems in engineering will be emphasized. Reddick and Miller: Advanced Mathematics for Engineers. Mr. Mumford.

\*\*Math, 112. Advanced Calculus for Engineers. Prerequisite: Math. 431 (a or b). Elective.

Power series, Gamma and Bessel functions, functions of a complex variable, line integrals. Applications to problems in engineering will be emphasized. Reddick and Miller: Advanced Mathematics for Engineers. Mr. Mumford.

\*\* Math. 413. Series for Engineers. Prerequisite: Math. 431 (a or b). Elective.

Fourier series, partial differential equations, with applications to problems in physics and engineering. Reddick and Miller: Advanced Mathe-Mr. Mumford. matics for Engineers.

0-0-3

0.0.3

[MATHEMATICS] 267

0.3.0

<sup>\*\*</sup> Math. 411. 412. 413, may be taken in any order.

Math. 421. Advanced Analytic Geometry.

Prerequisite: Math. 303.

Elective.

The elements of higher plane curves and the geometry of space. Snyder and Sisam: Analytic Geometry. Mr. Bullock.

Math. 422. Theory of Equations.

Prerequisite: Math. 303. Elective.

The usual topics in the theory of equations, the solution of higher equations, exponential equations, logarithmic equations, and determinants. Dickson: First Course in Theory of Equations. Mr. Mumford.

#### Courses for Graduates Only

Math. 501. Applied Mathematics I.

Elective for graduate students only. Prerequisite: Math. 413 or the consent of the instructor.

The course will be arranged to fit the engineering interests of the students enrolled.

Catenary cables, straight-and-curved beam problems, theory of curve fitting, probability and applications, problems in the theory of elasticity, abilistics, vibration theory and problems, electrical circuits, Heaviside operational calculus and applications to electrical engineering and to other engineering problems, calculus of finite differences and applications. Lecture notes. Mr. Cell.

Math. 502. Applied Mathematics II.	0-3-0
Prerequisite: Math. 501.	
Elective. For graduate students only.	
A continuation of Math. 501. Lecture notes.	Mr. Cell.
Math. 503. Applied Mathematics III.	0-0-3
Prerequisite: Math. 502.	
Elective. For graduate students only.	
A continuation of Math. 502. Lecture notes.	Mr. Cell.

0-3-0

# MECHANICAL ENGINEERING

#### Courses for Undergraduates

M. E. 101, 102, 103. Engineering Drawing I.

Required of freshmen in Textiles.

Drawing board work on lettering, projections, technical sketching, sections, pictorial drawings, working drawings, as related to textile machinery; tracing and blueprinting, French & Svenson: Mechanical Drawing, Leonard: Lettering Exercises for Engineers and Draftsmen.

Messrs, Briggs, Adams, Leonard, Hyde, Stinson,

M. E. 105, 106. Engineering Drawing II.

Required of freshmen in Engineering, Agricultural Engineering, and Landscane Architecture.

Drawing board work on lettering, instrument practice, geometrical construction, projections, technical sketching, sections, auxiliary projections, revolutions, pictorial drawings, fasteners, intersection, development, working drawings, tracing and blueprinting. French: Engineering Drawing. Leonard: Lettering Exercises for Engineers and Draftsmen.

Messrs, Briggs, Adams, Leonard, Hyde, Stinson,

M. E. 107. Descriptive Geometry.

Prerequisites: M. E. 105, 106.

Required of freshmen in Engineering, Agricultural Engineering, and Landscape Architecture.

Representation of geometrical magnitudes with points, lines, planes, and solids: concurrent noncoplanar forces; the solutions of problems. Warner: Applied Descriptive Geometry.

Messrs, Briggs, Adams, Leonard, Hyde, Stinson,

#### M E 121 Woodwork

Required of freshmen in Textiles.

Use of bench tools, making cabinet joints, operation and care of woodworking machinery; correct methods of staining, varnishing, filling, and Mr. Mendenhall. gluing various kinds of wood.

# M. E. 122. Foundry.

Required of sophomores in Ch. E., and freshmen in Textiles.

Demonstration and practice in molding and core making; cupola practice. Mr. Maddison. Stimpson, Grey and Grennan: Foundry Work.

1 or 1 or 1

1 or 1 or 1

3-3-0

0.0.3

9.9.9

# 270 [MECHANICAL ENGINEERING]

#### M. E. 123. Forge Work.

Required of sophomores in A. E. and Ch. E., and freshmen in Textiles.

Hand forging of simple exercises, in mild steel, representative of industrial practice; identification and uses of ferrous metals; welding methods. Text: Lecturer's Notes. Mr. Cope.

#### M. E. 124. Pattern Making.

Required fo sophomores in Ae. E., I. E., and M. E.

Elementary joinery, finishing, theory of dry-kilning, wood-turning; lectures, demonstrations, and practice in hand work and machine methods; typical patterns and core boxes constructed, such as solid, split, and loose piece. Turner and Town: *Pattern Maching*. Mr. Mendenhall.

# M. E. 125. Foundry Practice.

Required of sophomores in Ae. E., I. E., and M. E.

Lectures, demonstrations, and practice in molding and core making, cupola operations; melting and casting of ferrous and nonferrous metals and their alloys; instructions and practice in the testing of molding sands. Wendt: *Foundry Work*.

# M. E. 126. Forging and Welding.

Required of sophomores in Ae. E., I. E., and M. E.

A study of the principles and practices of forging: hand forging as correlated with the industrial processes of hammering, rolling, and pressing. Lectures, demonstrations, and practice in forge, oxy-acetylene, and electric welding. Johnson: Forging Practice. Mr. Cope.

# M. E. 128. Forge and Welding Practice.

Required of sophomores in E. E.

Hand forging of exercises in mild and tool steel correlated with the industrial methods of hammering, rolling and pressing; principles and modern practices; identification of ferrous metals; practice in forge, oxy-acetylene and electric welding. Campbell: *The Working, Heat Treating and Welding of Steel*. Mr. Cope.

2 or 2 or 2

3 0 or 3

2 or 2 or 2

2 or 2 or 2

1 or 1 or 1

M. E. 211, 212, 213. Machine Drawing.

Prerequisites: M. E. 105, 106, 107.

Drawing board work on piping drawing and valves; technical sketching; advanced problems in Applied Descriptive Geometry; welding, aircraft, and structural drawings; redesign problems, jigs and fixtures; charts and graphs; exercises in use of engineering tables; spur and bevel gears; cams; working drawings with tracing and blueprinting. French: *Engineer*ing *Drawing*.

M. E. 215, 216, 217. Elementary Mechanism. 1 1 1 Required of juniors in Electrical Engineering.

Drawing board work on linkages, cams, gears, belting, gear trains, and other simple mechanisms; working drawings of simple machines and parts, such as, motor bases and other electrical units. Keown & Faires: Mechanism.

M. E. 224. Factory Layout and Equipment.

Prerequisites: M. E. 124, 125, 126.

Required of juniors in I. E.

To summarize and coördinate all previous shop courses and show their relation to manufacturing processes; the essential principles of machine-tool operation; machine tool selection and application for economic production. Roe and Lytle: Factory Equipment. Mr. Wheeler.

M. E. 225, 226. Machine Shop I.

Prerequisites: M. E. 121, 122, 123.

Required of juniors in Chem. Eng.

Practice in chipping, filing, scraping, and babiliting: general machine work, including straight and taper turning, drilling, shaper work, gear cutting and grinding. Turner: Machine Tool Work. Mr. Wheeler.

M. E. 227, 228, 229. Machine Shop II.

Prerequisites: M. E. 121, 122, 123, or M. E. 124, 125, 126.

Required of juniors in I. E. and M. E., and Yarn manufacturing.

Practice in laying out work, grinding tools, chipping, drilling, tapping, babbitting bearings, and scraping; machine work, including centering, straight and taper turning, chucking, serew cutting, shaper work, planer work, index milling, gear cutting and grinding. Turner: Machine Tool Work. Mr. Wheeler.

0-0-3

1-1 0

------

1-1-1

# M. E. 235, 236. Metal Shop.

Prerequisite: Ed. 106.

Required in Industrial Arts.

Use of hand and machine tools in problems for secondary schools. Kaup: Machine Shop Practice. Mr. Wheeler.

M. E. 241, 242, 243. Oxy-Acetylene and Electric Welding. 1-1-1 Prerequisite: M. E. 123 or equivalent.

Elective.

Fundamental methods and principles of fusion welding: welding symbols, economic and metallurgical considerations, selection of, method and type of welding. Welding Handbook of the American Welding Society. Mr. Cone.

#### M. E. 307, 308, 309. Engineering Thermodynamics I. 3-3-3

Prerequisites: Phys. 201, 202, 203, Math. 303.

Required of juniors in E. E., M. E., I. E., Ae. E., C. E., Cer. E., and Geol. Eng.

The study of heat as an engineering medium; combustion, heat transfer, and the laws governing energy transformations; use of the general energy equation dealing with gases, vapors, and mixtures; application of fundamental principles to design and performance of nozzles, steam engines and turbines, internal-combustion engines, refrigerating machines, and air compressors. Faires: Applied Thermodynamics. Measrs. Hoefer and Lawen.

#### M. E. 313, 314, 315. Mechanical Engineering Laboratory I. 1-1-1 Concurrent with M. E. 307, 308, 309.

Required of juniors in E. E., I. E., Cer. E., and M. E.

Calibrating pressure, temperature, speed, and power-measuring instruments; the testing of fuels, lubricants, pumps, compressors, steam engines and turbines, heating and ventilating equipment, hydraulic machinery, and internal-combustion engines. Rice: *Experimental Engineering*.

Messrs. Bridges, Van Note, and Loewensberg.

M. E. 317, 318, 319. Kinematics and Elementary Design. 3-3-3

Prerequisites: E. M. 312, M. E. 211, 212, 213.

Required of juniors in M. E.

The relative motions, velocities, and accelerations of machine parts, including linkages, cama, gears, and other mechanisms. The elements of machine design, including the determination of design stresses, riveted and welded joints, bearings, belting and tope drives, and the design of basic machine parts. Sloan: Engineering Kinematics. Vallance and Doughtie: Design of Machine Riements. Messrs. Hoefer and Adams.

M. E. 321, 322, 323, Metallurgy,

Prerequisite: Physics 203.

Required of juniors in M. E. and A. E.

The constitution, structure and properties of engineering ferrous and nonferrous metals and alloys; influences of mechanical working and heat treatment; physical testing; corrosion and its prevention. Sisco: Modern Met-Mr. Van Note. allurgy for Engineers.

#### M. E. 350. Advanced Engineering Drawing.

Prerequisites: M. E. 105, 106, 107 and E. M. 302 or 313 or M. E. 101, 102, 103 and one of the following: Tex. 304, 311, 339, 382.

Elective: For advanced undergraduates.

Drawing board work as related to special problems in the various engineering and textile fields. The course will also include lectures, recitations, and nidividual conferences.

Mimeographed problem sheets and handbooks will be used. Mr. Briggs. Messrs, Hoefer and Vaughan, Conditioning Fundamentals.

#### Courses for Graduates and Advanced Undergraduates

#### M. E. 401, 402, 403. Power Plants.

Prerequisites: M. E. 307, 308, 309 and M. E. 313, 314, 315.

Required of seniors in Mechanical Engineering I.

Fuels and combustion; heat balance, steam boilers, prime movers, and auxiliaries, as applied to power generation. Morse: Power Plant Engineer-Mr. Vaughan. ing and Design.

#### M. E. 404. Heating and Air-Conditioning I.

Prerequisites: M. E. 307, 308, 309.

Required of seniors in Mechanical Engineering I.

Principles of heating and ventilation; warm air, steam, and hot-water heating systems: air-conditioning, Severns: Heating, Ventilating, and Air-Conditioning Fundamentals. Messrs, Hoefer and Rice.

# M. E. 405. Refrigeration.

Prerequisites: M. E. 307, 308, 309.

Required of seniors in Mechanical Engineering I.

Theory of refrigeration; types of ice-making and refrigerating machinery; cooling for air conditioning; installation, management, and cost of operation. Sparks: Mechanical Refrigeration.

Messrs. Vaughan and Hoefer.

0-0-3

3.3.3

0.2 or 3

0.2.0

#### M. E. 407, 408, 109. Mechanical Engineering Laboratory II. 1-1-1 Prercouisites: M. E. 313, 314, 315.

Required of seniors in Mechanical Engineering I.

Advanced study and tests in the fields of power plants, air-cooled and liquid cooled internal-combustion engines, heating and ventilation, metallurgy, fluid flow, compressed air, fuels and combustion, and lubrication. Rice: *Experimental Engineering*. Messrs, Bridees and Yan Note.

# M. E. 111, 112, 113. Machine Design.

Prerequisites: M. E. 317, 318, 319, E. M. 322.

Required of seniors in M. E. I.

A continuation of M. E. 319. The design of machine members, including screws, keys, shafts, couplings, clutches, brakes, springs, gearing, frames, flywheels, t.c.; the dynamics of machinery and engines. Mr. Hoefer.

# M. E. 421, 422, 423. Internal-Combustion Engines.

Prerequisites: M. E. 307, 308, 309.

Required of seniors in Aeronautical Engineering.

Thermal and mechanical characteristics of internal-combustion engines; with special reference to the design, construction, operation and performance of automotive, aircraft and Diesel engines and their accessories. Lichty, Internal Combustion Engines; current periodicals.

Messrs. Rice and Lowen.

#### M. E. 425, 426, 427. Internal Combustion Engines Laboratory. 1-1-1 Prerequisites: M. E. 307, 308, 309.

Concurrent with M. E. 401, 402, 403 or M. E. 421, 422, 423.

Advanced study and testing of internal-combustion engines; their auxiliaries, and the materials used in their construction; fuels and lubricants. Rice: Experimental Engineering. Messrs Bridges and Rice.

# M. E. 431, 432, 433. Welding, Theory and Practice. 2-2-2 Prerequisites: M. E. 123 or equivalent.

Required of seniors in Mechanical Engineering III.

A study of the fundamental gas and electric welding processes including equipment, materials and procedure. Special attention will be paid to the factors affecting welding and welds including control of residual stresses, shrinkage and warpage, and weldability of metals. Fundamentals in the techniques of gas. D. C. and A. C. Welding. *Handbook of the American Welding Society.* Mr. Cope.

3-3-3

9 9.9

M. E. 441, 442, 443. Physical Metallurgy.

Prerequisites: M. E. 322, 323.

Required of seniors in Mechanical Engineering III.

Phase rule and its industrial applications; hardenability, carburizing; grain size control; reactions in the solid state; surface reaction processes; significance and inter-relation of static and dynamic properties; effects of temperature upon physical properties; current technical literature.

Mr. Van Note.

# M. E. 451, 452, 453. Heating and Air-Conditioning II. 3-3-3

Prerequisites: M. E. 307, 308, 309 and M. E. 313, 314, 315.

Required of seniors in Mechanical Engineering II.

Principles of heating, ventilation, and refrigeration as applied to air-conditioning; design and operation of air-conditioning systems. Allen and Walker: Heating and Air Conditioning. Messrs. Rice and Vaughan.

# M. E. 455, 456, 157. Heating and Air-Conditioning Lab.

Prerequisites: M. E. 313, 314, 315.

Required of seniors in Mechanical Engineering II.

Testing heating and air-conditioning units, systems and controls; testing refrigerating equipment, ducts, methods of air distribution, fuel-burning equipment, dust-control equipment, heat-resisting materials. American Society of Heating and Veriliating Engineers' Guide. Mr. Rice.

#### M. E. 458, 459. Heating and Air-Conditioning Design.

Prerequisites: M. E. 307, 308, 309 and M. E. 313, 314, 315.

Required of seniors in Mechanical Engineering II.

Design calculations from given conditions for a heating plant and an air-conditioning system; materials listed and cost of installation estimated. American Society of Heating and Ventilating Engineers' Guide.

Messrs. Rice and Vaughan.

# M. E. 461, 462, 463. Experimental Engineering.

Prerequisites: M. E. 313, 314, 315 or equivalent as approved by faculty group.

Advanced engineering principles applied to a specific project dealing with heat, power, hydraulic machinery, metallography, aerodynamics, or general experimental work. A seminar period provided, and a written report reoured. Messers. Rice, Van Note, Vaughan, and Wheeler.

3 3-3

1.1.1

0 3-3

#### Courses for Graduates Only

M. E. 501, 502, 503. Advanced Engineering Thermodynamics. 3-3-3 Prerequisites: M. E. 307, 308, 309 and M. E. 407, 408, 409.

Development of the thermodynamic equations and their application to advanced engineering problems. Messrs, Hoefer and Rice.

#### M. E. 505, 506, 507. Internal-Combustion Engine Design. Prerequisites: M. E. 421, 422, 423 and 407, 408, 409.

A thorough study of the field of internal-combustion engines; design of an engine to meet specific requirements. Pye: Internal-Combustion Engines Vol. I and II. Mr. Rice.

\*M. E. 513, 514, 515. Power Plant Design. Prerequisites: M. E. 401, 402, 403 and M. E. 307, 308, 309. The design of a plant to fulfill conditions obtained by investigation and research; specifications for design and installation.

Messrs, Hoefer and Vaughan,

\*M. E. 517, 518, 519. Design of Heating and Ventilating System. 3.3.3 Prerequisites: M. E. 404 or M. E. 451, 452, 453 and M. E. 407, 408, 409, The design of a heating system for specific conditions; specifications for installation; performance tests of heating equipment.

Messrs. Hoefer and Vaughan.

M. E. 521, 522, 523. Mechanical Engineering Research. 3-3-3 Prerequisites: M. E. 401, 402, 403 and M. E. 404.

Research and thesis in connection with M. E. 5'3, 514, 515 or M. E. 517, 518, 519 or M. E. 505, 506, 507. Graduate Staff.

#### M. E. 525, 526, 527. Mechanical Engineering Seminar. 1-1-1 Faculty and graduate student discussions centered around current re-

search problems and advanced engineering theories and developments. Graduate Staff.

3-3-3

<sup>.</sup> Only one of these courses to be offered during any College year.

#### MILITARY SCIENCE AND TACTICS

# Military 101, 102, 103.

Military Science I. (Branch Immaterial.)

This, the first year basic course, is required of all physically fit male freshmen. Details of course not yet announced by the War Department.

# Military 201, 202, 203.

Military Science II. (Branch Immaterial.)

This, the second year basic course, required of all physically fit male sophomores who have completed Military Science I. Details of course not yet announced by the War Department.

#### Military 301, 302, 303.

Military Science III. (Infantry.)

This, the first year advanced course, is open to selected juniors who have satisfactorily completed Military Science II, and to selected veterans who have had a year or more of active service and who have not less than two complete school years remaining before graduation. Details of course not yet announced by the War Department.

# Military 311, 312, 313.

Military Science III. (Signal Corps.)

This first year advanced course is open to selected students who are enrolled in the School of Electrical Engineering, and who meet the require ments of 301, 302, 303. Details of course not yet announced by the War Department.

#### Military Science 401, 402, 403.

Military Science IV. (Infantiy.)

Prerequisite: Military Science III.

This, the second year advanced course, is required of all students who have satisfactorily completed Military Science III, and who are not taking Military Science IV Signal Corps. Details of course not yet announced by the War Department.

#### Military 411, 412, 413.

Military Science IV. (Signal Corps.)

Prerequisite: Military Science III (Signal Corps).

To enroll in this, the second year advanced course (Signal Corps), the student must be enrolled in the School of Electrical Engineering. Details of course not yet announced by the War Department.

# MODERN LANGUAGES

#### Basic Courses

#### French

\*M. L. 101, 102. Elementary French.

Lectures on the structure, diction, pronunciation; and other matters of technique of the language, supplemented by easy readings and translations. Individual reports and conferences. No previous training in the language necessary. Mrs. Hall.

\*M. L. 201. Elementary French Prose,

Prerequisites: M. L. 101, 102 or equivalent.

Reading and translation of easy French: lectures on structure of the language, diction, and pronunciation; choice in parallel reading material, a matter of individual need. Individual reports and conferences,

Mr. Ballonger and Mrs. Hall

M. L. 202. Intermediate French Prose.

Prerequisite: M. L. 201 or equivalent.

A study of prose reading material, largely historical in nature. Attention given to the acquisition and extension of the student's basic vocabulary. Individual translation, parallel readings, and reports. Mr. Ballenger.

German \*M. L. 103, 104. Elementary German. 3-3-0 or 0-3-3 Lectures on the structure and technique of the language, supplemented by easy readings and translations. Individual reports and conferences.

Mr. Hinkle.

\*M. L. 203. Elementary German Prose. Prerequisites: M. L. 103, 104 or equivalent.

Reading and translation of easy German, supplemented with lectures on the structure and idiom of the language. The student's choice of parallel reading material, a matter of individual need. Individual reports and conferences. Mr. Hinkle and Mrs. Hall.

3 3-0 or 0-3-3

3 or 3 or 3

3-0-0

3 or 3 or 3

Two years of high-school work will ordinarily be considered the equivalent of M. L. 101, 102, and 201; and of 103, 104, and 203.

M. L. 204. Intermediate German Prose.

Prerequisites: M. L. 203 or equivalent.

A study of prose reading material, largely historical in nature. Attention given to the acquisition and extension of the student's basic vocabulary. Individual translations, parallel readings and reports. Mr. Hinkle.

#### Spanish

"M. L. 105, 106. Elementary Spanish.

Lectures on the structure, diction, pronunciation, and other matters of technique of the language, supplemented by easy readings and translations. Individual reports and conferences. No previous training in the language necessary. Messrs. Ballenger and Hinkle.

#### "M. L. 205. Elementary Spanish Prose.

Prerequisites: M. L. 105, 105, or equivalent.

Reading and translation of essay Spanish; lectures on the structure of the language, diction and pronunciation. The student's choice of parallel reading material, a matter of individual need. Individual reports and conferences. Mr. Ballenger and Mr. Hinkle.

# M. L. 206. Intermediate Spanish Prose.

Prerequisite: M. L. 205 of equivalent.

A study of prose reading material, largely historical in nature. Attention given to the acquisition and extension of the student's basic vocabulary. Individual translations, parallel readings, and reports. Mr. Ballenger.

#### ENGLISH FOR FOREIGN STUDENTS

#### M. L. 107, 108, 109. Elementary English.

In this course special emphasis is placed upon the acquisition o a practical knowledge of English grammar, including idiomatic expressions, spelling, and vocabulary; practice is given in accurate pronunciation and enunciation. In the written work required, particular emphasis is placed upon punctuation, choice of words, paragraphing, and the organization of simple and practical material.

#### M. L. S-1. Oral Composition.

The principal objective of this course is that of broadening the student's vocabulary and improving his pronunciation and enunciation. Practice in speaking is emphasized and individual oral reports are required. Much time is spent on English sounds which present especial difficulty to foreigners. Mastery of such sounds before the end of the course is the ideal of attainment.

0-0 0

3-3-3

3 3 0 or 0-3-3

3 or 3 or 3

3-0-0

3 0-0

#### M. L. S-2. Reading for Comprehension.

The basis for this course is the reading of classic and current literature which will give the student an insight into and a clear understanding of the cultural background of the United tSates, including its traditions, history, educational system, and political practices. Emphasis is placed on dially oral or written reports paraphrasing the material read. Oral reading exercises are given in which the student is required to reproduce the written page in an understandable and expressive manner.

Mr. Hinkle and Mrs. Hall.

#### \*\*Technical and Scientific Courses

Translation Service. A special feature of the work of the Modern Language department is that of the Translation Service. This work is conducted as an aid to research, on the one hand, and a means to the acquisition of a reading knowledge of the respective language, on the other. Through this service advanced undergraduate students and graduate students registered in technical and scientific courses are given the opportunity of working a translation project in connection with their field of major interest. When such project is satisfactorily completed, it is accepted in lieu of an examination as evidence of reading ability. This procedure is projects are deposited in our local library and made available to investigators in other institutions through the medium of the American Documentation Institute.

M. L. 301. Technical French.

Prerequisite: M. L. 202 or equivalent.

Readings and translations of relatively simple technical material, supplemented by lectures on terminology, vocabulary analysis, and other linguistic technique. Designed to meet the needs of students whose interest in the language is primarily that of reading ability. Choice of reading material adjusted to individual needs; may be taken by students of varying degrees of previous linguistic training. Mr. Ballenger.

#### M. L. 302. Introductory Scientific French.

Prerequisite: M. L. 202 or equivalent.

A study of scientific French of intermediate difficulty, supplemented with lectures on terminology and other linguistic technique. The needs of students whose interest is that of the acquisition of a reading knowledge of the language, constantly kept in view. Basic technique of translation explained and demonstrated by means of personal conferences.

Mr. Ballenger and Mrs. Hall.

0 0-0

0.3.0

0 - 0 - 3

<sup>\*</sup>Students registered in advanced technical and scientific courses are given the opportunity of doing a translation project in connection with the Translation Service of the department. When such prospect is satisfactorily completed and accepted. It may be ababited to the service of the as the preferable method of preparation for the acquisition of a reading knowledge of the language concerned.
#### M. L. 303. Technical German.

Prerequisite: M. L. 204 or equivalent.

Reading and translations of relatively simple technical German, supplemented by lectures on terminology, word order, vocabulary analysis and other linguistic technique. Designed to meet the needs of students whose interest in the language is primarily that of reading ability. Choice of reading material adjusted to individual needs; may be taken by students of varying degrees of previous linguistic training. Mr. Hinkle.

#### M. L. 304. Introductory Scientific German.

A study of scientific German of intermediate difficulty supplemented with lectures on terminology and other linguistic technique. The needs of students whose interest is that of the acquisition of a reading knowledge of the language, constantly kept in view. Basic technique of translation explained and demonstrated by means of personal conferences.

Mr. Hinkle and Mrs. Hall.

#### M. L. 305. Technical and Industrial Spanish.

· Prerequisite: M. L. 206 or equivalent.

A study of technical and industrial literature. Particular attention given to the special terminology characteristic of such literature with a view to the acquisition of a practical vocabulary. Individual conferences and reports. Mr. Ballenger.

#### M. L. 306. Introductory Scientific Spanish.

Prerequisite: M. L. 206 or equivalent.

Readings and translations of relatively simple scientific Spanish, supplemented by lectures on terminology, vocabulary analysis, and other linguistic technique. Designed to meet the needs of students whose interest in the language is primarily that of reading ability. Choice of reading material adjusted to individual needs; may be taken by students of varying degrees of previous linguistic training. Mr. Ballenger.

#### M. L. 401, 402, 103. Advanced Scientific French. 3.3

Prerequisite: M. L. 301 or 302 or equivalent.

A study of scientific literature appearing in current hulletins, mazainee and technical journals. Students given the opportunity of working a translation project in connection with their subject of major interest. Special attention given to the comprehension of the thought of the article under consideration and its accurate rendition into English. Parallel readings, reports and conferences. Messrs. Hinkle and Ballenger.

0-3-0

0-0-3

0-0-3

282 IMODERN LANGUAGES!

#### M. L. 101, 405, 106. Advanced Scientific German.

Prerequisite: M. L. 303 or 304 or equivalent.

A study of scientific literature annearing in current bulletins, magazines, and technical journals. Students given the opportunity of working a translation project in connection with their subject of major interest. Special attention given to the comprehension of the thought of the article under consideration and its accurate rendition into English. Parallel readings, Mr. Hinkle and Mrs. Hall. reports, and conferences.

# M. L. 107, 408, 109. Advanced Scientific Spanish,

Prerequisite: M. L. 305 or 306 or equivalent.

A study of scientific literature appearing in current bulletins, magazines, and technical journals. Students given the opportunity of working a translation project in connection with their subject of major interest. Special attention given to the comprehension of the thought of the article under consideration and its accurate rendition into English. Parallel readings. Mr. Ballenger and Mrs. Hall. reports, and conferences.

#### **General Courses**

# M. L. 410. Masterpieces of French Literature.

Prerequisite: Jun jor or Senior Standing,

The study of outstanding masterpieces of French literature. A brief outline of French literary development. Parallel reading either in translation or in French. An open elective, No language prerequisites.

Mr. Hinkle.

#### 0 3-0 M. L. 111. Masterpieces of German Literature.

Prerequisite: Junior or Senior Standing.

The study of outstanding masterpieces of German literature. A brief outline of German literary development. Parallel readings either in translation or in German. An open elective. No language prerequisites.

Mr. Hinkle.

#### M. L. 412, 413. Masterpieces of Spanish Literature.

Prerequisite: Junior or Senior Standing.

The study of outstanding masterpieces of Spanish literature. A brief outline of Spanish literary development. Parallel readings either in translation or in Spanish. An open elective, No language prerequisites.

Mr. Hinkle.

3 0.0

0-3-3

#### M. L. 414, 415. French, German and Spanish Civilization. 3-0 3 Prerequisite: Junior or Senior Standing.

Lectures and reports on the manners and customs of the respective cultures under consideration. Fail Term devoted to their development in Europe; Spring Term devoted to Latin America. Topics, such as racial stocks, people, social classes, governments, politics and education given special consideration. Parallel readings. reports, and conferences. An open elective. No language purerequisites.

M. L. 416. The Development of Language.

Prerequisite: Junior or Senior Standing.

The various phases of linguistic growth as a basis for intelligent language appreciation. Origin of language, linguistic change, grammatical categories, dialects, standard language, word order, inflection, isolation, agglutination, etymology, and other linguistic processes given special consideration. Parallel readings, reports, and conferences. An open elective. No language precequisites.

M. L. 417. Masterpiece of Foreign Literature.

Prerequisite: Junior or Senior Standing. A study of outstanding literary productions in each of the various types of literature, and lectures on their cultural background. Designed primarily to meet the needs of students who wish to supplement their knowledge of their own literature with a survey of the literature of other civilizations. Special attention is given to the literary monuments of France, Germany,

Special attention is given to the literary monuments of France, Germany, Spain, and Italy. No foreign language prerequisites are necessary. Daily reports and conferences. Mr. Hinkle.

#### PHYSICAL EDUCATION AND ATHLETICS

#### Courses and Activities

P. E. 101, 102, 103. Physical Education and Hygiene. 111

Required of all freshmen except those excused on the recommendation of the College physician.

Individual health and physical efficiency of each student based on stand ardized athletic, gymnastic, and efficiency tests. Lectures on personal hygiene required in one term only. Mr. Miller and Staff.

3-0 or 3

3 or 3 0

P. E. 201, 202, 203. Physical Education. Prerequisites: P. E. 101, 102, 103. Required of all sophomores except those excused upon recommendation of the College physician. Election is permitted in popular sports for healthful exercise and a fair degree of skill in them. Mr. Miller and Staff.

P. E. 111, 112, 113. Physical Education.

Required of all freshmen excused from P. E. 101, 102, 103.

Special activities for those students who cannot meet the requirements of the regular course because of physical handicap. Mr. Miller and Staff.

P. E. 211, 212, 213. Physical Education.

Required of all sophomores excused from P. E. 201, 202, 203.

Special activities for those students who cannot meet the requirements of the regular course because of physical handicap. Mr. Miller and Staff.

P. E. 301, 302, 303. Theory and Practice of First Aid. 1 or 1 or 1

Elective for juniors and seniors.

Hours by arrangement.

Anatomy and physiology sufficiently to proceed with bandages, dressings, wounds, shock, injuries to bones, joints, muscles, poisons, unconsciousness, artificial respiration, and common emergencies. Students completing the course are awarded the American Red Cross Certificate. Staff

P. E. 401. Social Recreation.

Elective for juniors and seniors in Agr. Educ.

Purpose: To prepare teachers of agriculture to assume leadership in social and recreational activities. The organization, supervision, and practice work in athletic and social activities for parties, picnics, campus banquets, and similar occasions. Mr. Miller.

PHYSICS

#### Courses for Undergraduates

Phys. 111, 112, 113. Physics for Textile Students. 4-4-4 Required of freshmen in Textiles.

Industrial Physics, with emphasis on practical applications to the textile industry, Black: College Physics. Messrs. Hopkins, Lynn and Lancaster.

1-1-1

1.1.1

1-1-1

Phys. 115. Physics for Agricultural Students. Required of sophomores in Agriculture.

Elements of machines: physics of heat and weather: applications of light and electricity on the farm, Henderson: The New Physics of Everyday Life, Messrs, Heck, Bartlett,

Phys. 123. Descriptive Astronomy. Elective

An elementary nonmathematical survey of the sun, planets, and stars: observations with telescope. Baker: Introduction to Astronomy.

Mr. Heck

Phys. 201, 202, 203. Physics for Engineers. 4-4-4 Prerequisite: Math. 103. Required of sophomores in Engineering.

General Physics, with emphasis on problems and engineering applications. Hausman and Slack: Physics.

Messrs, Heck, Derieux, Meares, Lancaster, Bartlett, Hopkins, Brown, Lynn,

Phys. 306. Electron Tubes and Their Application to Industry.

Prerequisites: Phys. 113 or 203, Math. 103,

Elective

Properties of electrons and electron emitters; gaseous conduction; thermionic and photoelectric tubes, theory and applications. Mr. Hopkins.

Phys. 311. Light in Industry. Prerequisite: Phys. 113 or Equivalent. Required of Textile students; elective for other students. Fundamentals of light, illumination, and color; psychology of color; standardized color theory; pigments, contrast, and harmony.

Mr. Lancaster. Text: Light and Color in Industry.

Phys. 322. Meterology.

Required of juniors in Forestry; elective for other students.

Causes of weather change; methods of forecasting; peculiarities of the weather of North Carolina, Blair: Weather Elements. Mr. Heck.

0-3-0

[PHYSICS] 285

3 0 or 3

5 or 5 or 5

0.0.3

286 [Physics]

Phys. 332. Photography. Prerequisite: Phys. 113 or equivalent. Elective.

A general study of cameras, lenses, exposure, development, printing, types of emulsion, color sensitivity and color filters. Boucher: Fundamentals Messrs, Meares and Bartlett, of Photography.

Phys. 402, 403. Mechanics. Prerequisites Phys 203 Math 303 Elective

The physical principles of mechanics, Edser: Physics for Students, Mr. Meares.

Phys. 405, 406. Electricity and Magnetism. 3-3-0 or 4-4-0 Prerequisites: Phys. 203, Math. 303. Elective.

Fundamental principles in a more specialized but intermediate manner. Laboratory, if taken, increases the course to 4 credits. Gilbert: Electricity and Magnetism. Mr. Lancaster.

Phys. 407. Elementary Modern Physics.

Prerequisites: Phys. 203, Math. 303, Chem. 211.

Required of juniors in E. E. and seniors in Ch. E.

New theories and discoveries in Physics, such as: the electron, atomic structure, spectra, X-rays, crystal structure, quantum theory, radiation, radio-activity, isotopes and cosmic rays. Brown: Foundations of Modern Phusics. Mr Derieux

Phys. 413. Acoustics.

Prerequisites: Phys. 203, Math. 303. Elective.

Production, propagation, transmission, and reception of sound, with special applications to architectural and electrical transmission problems. Olson: Elements of Acoustical Engineering. Mr. Lynn.

Phys. 415, 416. Light.

Prerequisites: Phys. 203 or 207. Math. 303. Elective

Introduction to principles of geometrical and physical optics. Edser: Light for Students. Mr. Derieux.

3 or 3 or 3

0-3-3 or 0-4-4

0.3.0

3 02 3 02 3

0-3-3 or 0-4-4

Phys. 417. Heat.

Prerequisites: Phys. 203 or 207, Math. 303. Elective.

Temperature measurement specific heats thermal expansion, conduction, radiation, kinetic theory, change of state, thermodynamics, low temperatures, high temperatures, Cork: Heat, Mr. Bartlett.

Phys. 426. Spectroscopy in Industry.

Prerequisites: Phys. 203, Chem. 212.

Fundamental principles of light; spectroscopic equipment; spectra; qualitative analysis of composition by emission spectra : detection of impurities : quantitative analysis; absorption spectra; industrial applications, lectures, demonstrations, and laboratory. Lewis: Spectroscopy in Science and Industry; Brode: Chemical Spectroscopy. Mr. Derieux.

Phys. 427, 428, 429. Optics. 3-3-3 or 4 4-4 Prerequisite: Phys. 203, Math. 303. Lenses and lens system, optical instruments, gratings, interferometers,

spectra. Laboratory if taken gives 4 credits. Mr. Derieux.

Phys. 443. History of Physics. Prerequisite: One course in College Physics. Elective Development of Physics from its beginnings to the present time. Crew: Rise of Modern Physics. Mr. Heck.

Phys. 445, 446, 447. Research. 3-3-3 Prerequisite: Phys. 203 or 207 or 213. Elective Undergraduate research given according to the student's ability. Mr. Heck.

Phys. 451, 452, 453. Physics Colloquium, 3-3-3 Current research reviewed by department and advanced students; meets weekly at night throughout the year. Mr. Heck.

3-0-0

0-3-0 or 0-4-0

003

288 [PHYSICS]

Phys. 463. Industrial X-Rays.

Prerequisites: Phys. 203, Math. 303.

Theory and practice of X-rays in industry; X-ray equipment; photographic procedure; detection of defects in welds, castings, assemblies, stresses in members and fibers and crystal analysis demonstrations and student manipulation in each phase. Clark: Applied X-rays. St. John: Industrial Radiography. Staff.

Phys. 514, 515, 517. Advanced Theory of Electricity and Magnetism. 3-3-3 Prerequisites: Phys. 203, Math. 301.

Theorem of Gauss, energy in media, boundary conditions, condensers, electrometers, dielectric constants, migration of ions, thermodynamics of reversible cells, thermoelectricity, magnetic circuits, growth and decay of currents, oscillatory discharge. Starling: Advanced Theory of Electricity and Magnetism. Staff.

Phys. 522. Discharge of Electricity in Gases.

Prerequisites: Phys. 213, Math. 203.

Production of ions in gases, motion of ions, velocity in an electric field, diffusion, recombination, determination of atomic charge, ionization by collision, discharge tubes, cathode rays, positive rays, and X-rays. Crowther: Ions, Electrons, and Ionizing Radiations. Mr. Derieux.

Phys. 525. Atomic Structures.

Prerequisite: Phys. 312.

Elective.

Bohr's model, spectral formula, elliptical orbits, fine structure of spectral lines, Stark effect, Zeeman effect, Roentgen rays, Moseley's law, periodic system, isotopes, radioactivity, atomic nuclei, ionization, spectra and atomic structure, fluoroscence, atomic magnetism. White: Atomic Spectra. Haas: Atomic Structures. Staff.

Phys. 531, 532, 533. Research.

Graduate students sufficiently prepared may undertake research in some particular field of Physics. At least six laboratory hours a week must be devoted to such research. Messrs. Heck and Derieux.

3-3-3

0-3-0

# POULTRY

Courses for	Undergrad	uates
-------------	-----------	-------

Poul. 101. General Poultry. Fundamental principles of poultry production.	4 or 4 Staff.
Tunumentai principito di postelo productioni	
Poul. 301. Poultry Judging.	4-0-0
Prerequisite: Poul. 101. Required of juniors in Poultry Production; elective fo	r others. Mr. Williams.
Poul. 303. Incubation and Brooding.	0-0-4
Prerequisites: Phys. 115, Poul. 101.	
Required of juniors in Poultry Production; elective for Principles of incubation and brooding; feeding, housing,	
chicks.	Mr. Williams.
Poul, 311, Poultry Anatomy and Physiology.	3-0 0
A foundation for courses in poultry diseases and nutrit	ion.
Mr.	
Poul. 322. Poultry Production.	0-4-0
Prerequisite: Poul. 101.	
Developed for vocational teachers of agriculture. Electi	
Poultry disease problems; nutritional problems; judgin Messrs. Dearstyne	
Poul. 332. Preparation and Grading of Poultry Products.	0-3-0
Prerequisite: Poul. 101.	
Commercial fattening; grading and marketing eggs;	refrigerating and Mr. Williams.
storage; markets.	Mr. withams.
Poul. 333. Poultry Nutrition.	0-0-4
Prerequisites: Chem. 201, Zool. 101 and 102, Poul. 101. Feeds and feeding: Physiology of digestion, absorption,	and elimination:
mineral and vitamin requirements. Mr	

#### 290 [POULTRY]

#### Poul. 342. Turkey Production. Prerequisites: Poul. 101. Zool. 411.

Selection and mating; incubation: brooding poults; nutrition; grading and marketing. Mr. Neshit

#### Courses for Advanced Undergraduates

Poul, 101, 102. Poultry Diseases. 4-4-0 Prerequisites: Poul. 101, Zool. 102, Poul. 401 prerequisite to Poul. 402. Sanitation, parasite infestations and control, contagious and noncontagious diseases. Mr. Dearstyne. Poul. 403. Sero-Diagnosis in Poultry Diseases. 0 0-3 Prerequisites: Poul. 401, 402, Bot. 402. Basic immunological theory and technique; its application in the therapy and diagnosis of poultry disease. Mr Poul. 412. Commercial Poultry Production. 0-3-0 Prerequisite: Poul. 201. Development and maintenance of a commercial plant; custom hatching, and commercial incubation; cost of production. Mr. Williams. Poul. 113. Poultry Breeding, 0-0-3

Prerequisites: Poul. 201, Genetics, Zool. 411.

Methods of recognition and selection for mating from both standard and utility standpoints; study of progeny performance. Mr. Dearstyne.

Poul. 423.	Senior Seminar.	0-0-4
Required	of seniors in Poultry.	Staff.

#### Courses for Graduates Only

Poul. 501, 502, 503. Poultry Histology.	3-3-3
Prerequisites: Poul. 311, 312, 401, 402, Zool. 461.	
General histology of the tissues, special histology	of the various systems
of the body M	P

#### 0-3-0

	[PSYCHOLOGY] 291
Poul. 511, 512, 513. Poultry Pathology.	3-3-3
Prerequisites: Poul. 311, 312, 401, 501, 502, 503.	
Various disease processes. Mr.	
Poul. 521. Poultry Physiology.	3-0-0
Prerequisites: Poul. 311, 312, 401, 402, 501, 502.	
Histology and pathology, emphasizing the effects of physiology, Mr.	diseases on normal
	-
Poul. 531, 532, 533. Poultry Research.	3-3-3
Prerequisite: Eighteen term credits in Poultry.	
Problems in Poultry nutrition, diseases, marketing,	and breeding to be
conducted as definitely outlined by the Department.	Staff.
Poul. 541, 542, 543. Seminar.	3-3-3
Prerequisite: Eighteen credit hours in Poultry.	Staff.
Poul. 551, 552, 553. Production Studies and Experiment	ts. 3-3-3
Prerequisites: Poul. 201, 333, 401, 402.	
Problems in poultry nutrition, and breeding, and in	
production and marketing.	Staff.

[Damas and 001

#### PSICHOLOGY

# Courses for Undergraduates

Psychol. 200. Intro	duction to Psychology.	3 or 3 or 3
	general characteristics and developmer g the problems of motivation, emotio	
Psychol. 201. Elem	entary Experimental Psychology.	3-0-0

Introduction to experimental psychology. One lecture and two laboratory periods per week. Mr. Moffie.

Psychol. 202. Psychology of Personality and Adjustment. 0 3-0 Prerequisite: Psychology 200.

A study of the factors involved in the development of the normal personality. Mr. Moffie.

#### 292 [Psychology]

# Psychol, 303, 304. Educational Psychology.

Required of students in Education: elective for others.

Applications of psychology to education; problems of learning, motivation, interests; the measurement of educational efficiency; mental hygiene. Mr. Moffie.

Psychol. 337, 338. Industrial Psychology, 0-3-3

Prerequisite: Psychology 200.

The application of psychological principles to the problems of modern workers, industrial learning, methods of work, monotony, fatigue, illuminaindustry; psychological factors involved in the selection and placement of tion, accidents, morale of workers, Mr. McGeehee.

Psychol, 390. Social Psychology.

Prerequisite: Psychology 200

Social applications of psychology: social stimulation, response, and attitudes. Mr. McGehee.

#### Courses for Advanced Undergraduates and Graduates

Psychol. 411.	Rural Social Psycholog	gy.	3-0-0
For descrip	tion of this course, see	Rural Sociology 411.	Mr. McGehee.

Psychol. 470, 471, 472. Psychodiagnostic Techniques. 3-3-3 Prerequisite: Six hours in Psychology.

Techniques of measuring intelligence, personality, aptitudes, and achievement. Practice in administration and interpretation of psychological tests. Messrs, McGehee, Moffie,

Psychol, 476. Psychology of Adolescence, Prerequisites: Ed. 303, 304, or six credits in Psychology. Mental growth, social development, and interests of adolescent hovs and

girls. Mr. Moffie.

Psychol, 478. Individual Differences.

Prerequisite: Six hours in Psychology,

Nature, extent, and practical implications of individual differences and individual variation. Mr. McGehee.

3-3-0

0.0.3

0-0-3

0-3-0

#### Courses for Graduates Only

Psychol. 512, 513, 514. Problems in Applied Psychology. 3 3-3 Prerequisite: Twelve hours in Psychology.

Individual and group research problems in educational, industrial, and social psychology. Messrs. McGehee, Moffie.

#### RELIGION

(Sec Ethics, page 237)

#### RURAL SOCIOLOGY

#### Courses for Undergraduates

Rural Soc, 201. Rural Sociology. 3 or 3 or 3 The culture. social organization, and social problems of rural people with special reference to Southern rural life and proposed programs of development. Staff.

Rural Soc. 401. Rural Leadership.

Social role of leadership: types and numbers of leaders; sources and backgrounds; motivation and personal traits; experience, training, and education; how leaders gain and hold power; adjustment of leadership to the changing environment; biographies of different types of leaders; and new opportunities for rural leadership.

#### Courses for Graduates and Advanced Undergraduates

Rural Soc. 402. Farmers' Movements.

The orgin, growth, and the present status of such national farmers' organizations and movements as: The Grange, the Farmers' Alliance, the Populist Revolt, the Agricultural Wheel, the Farmers' Juion, the Society of the Equity, the Nonpartisan League, the Farm Bureau, the Farm Labor Union, the Cooperative Marketing Movement. Mr. Seegres.

#### Rural Soc. 111. Rural Population Problems.

The number and distribution in relation to natural resources; physical and demographic characteristics; marriage rates; natural increase; migration; morbidity; mortality; occupations; rural urban comparisons; trends; and national policies. Mr. Hamilton.

3-0-0

0-3-0

3 0-0

#### 294 [RURAL SOCIOLOGY]

Rural Soc 121 Rural Social Psychology

#### Rural Soc. 413. Community Organization. Community organization in North Carolina and other States: structure and size; institutions and service agencies; disorganization; techniques and methods of organization; leadership and the relation of organizations to State and National agencies. Mr. Mavo.

#### Characteristic mental traits and attitudes of rural people in relation to social organization and social change. Mr. McGeehce.

#### Rural Soc. 122. Social Aspects of Land Tenure, 0.2.0

Character and history of different types of land tenure; origins and growth of farm tenancy in the United States: social correlatives of land tenure; landlord tenant relationships; the farm leases; problem of ownership; farm mortgages; reform programs, Mr. Hamilton.

#### Rural Soc. 132. Social Security of Rural People. 0-3 0

Origin, extent, and character of rural poverty: types and extent of relief: problems of prevention: public policies and programs. Mr. Mavo.

#### Rural Soc. 151. Statistical Analysis of Social Data. 3-0 or 3

Sampling social data, rural surveys and testing methods; analysis of variance and relationships; population studies. Application to problems in the fields of sociology, psychology and education. Mr. Hamilton.

#### Rural Soc. 153. Agricultural Extension and Education. 0.0.3

Provides opportunity f or interested students to gain an insight into rural educational agencies with major emphasis on agricultural Extension. including what the Extension Service is, its development, objectives, organization and scope; how it operates, principles of operation, educational methods and techniques employed. Agriculture Faculty.

#### Courses for Graduates Only

Rural Soc. 531. Rural Standards of Living. 3-0-0 Theories and surveys of rural standards of living. Forces and programs affecting present day standards. Mr. Hamilton.

#### Rural Soc. 532. The Rural Family. 0 - 3 - 0Historical forms and functions of rural family life; family activities and relationships; stages of family growth; the family-sized farm; effects of technical and economic changes on the rural family; national policies,

Messrs, Hamilton, Winston,

0.0.3

3.0.0

Rural Soc. 533. The Rural Community. 0-0-3 Human ecology; types of communities; historical trends; economic, cultural and psychological factors; solidarity and disorganization; special interest groups; service agencics; state and national relations; "Utopian" Mr. Mavo. experiments; planning.

Rural Soc. 541, 512, 543. Research in Rural Sociology. 3-3-3 Objectives of research: the scientific method: planning; organization, and direction of rural studies; preparation of schedules, interviewing, editing, tabulation, and analysis; field experience; preparation of research reports. Credit for 543 involves at least 6 weeks' field and laboratory experience. Staff.

#### SOCIOLOGY

#### Courses for Undergraduates

Soc. 101, 102, 103. Human Relations. 2.2.9 Designed for students who do not take Military Science. Elective for others

An orientation course to introduce the student to the social problems of Staff. our time

Soc. 201. Introductory Sociology. The basic principles underlying social life and the factors connected with

it. (Identical with the first term of General Sociology.) Mr. Winston.

#### Soc. 202, 203. General Sociology.

First term: an analysis of the fundamental factors affecting life in modern society; second term: practical social problems, using the tools developed in the first term. Mr. Winston.

Soc. 210. General Anthropology, An introduction to the study of man: a consideration of his development from earliest forms to the present. Mr. Winston.

Soc. 301. Human Behavior. 3 credits An analysis of the social and cultural factors which affect the behavior of persons in their social life. Mr. Winston.

[SOCIOLOGY] 295

3 or 3 or 3

3-3-0

#### 3 credits

## 296 [Sociology]

#### Courses for Graduates and Advanced Undergraduates

Soc. Ex. 400. Criminology. 3 credits Prerequisite: Soc. 202, supplemented by credits in related fields. Causes and conditions leading to crime; methods of handling criminals; various factors producing criminal behavior. Mr. Winston.

# Soc. 401. Social Pathology.

Prerequisite: Soc. 202, supplemented by credits in related fields.

Pathological problems arising from social life; social and individual adiustments. Mr. Winston.

#### Soc. 102. Sociology of City Life.

Prerequisite: Soc. 202, supplemented by credits in related fields. Elective.

Problems arising from growth of modern town and city life; city planning in regard to social and industrial progress. Mr Winston

# Soc. 403. Leadership.

Prerequisite: nine term credits in Sociology, including Sociology 202.

A study of leadership in various fields of American life; analysis of the various factors, inherent or acquired, that are associated with leadership, Mr. Winston. past and present.

#### Soc. Ex. 401. Educational Sociology.

Prerequisite: nine term credits in the Social Sciences.

Application of the principles of Sociology to the practical problems of education with emphasis placed on the relation between adjustment processes in the school and in the larger social world. Mr. Winston.

#### Soc. 406. The American Family.

Prerequisite: Soc. 202. supplemented by credits in related fields.

Promarital, marital, and family relations; effects of present-day social changes; various efforts to stabilize the family. Messrs. Winston, Hamilton.

Soc. 407. Race Relations.

Prerequisite: Soc. 202, supplemented by credits in related fields. Elective

Race problems in America and in other countries; social, economic, and educational status of racial groups; international relations.

Mr. Winston

3-0-0

3 credits

3-0-0

3 credits

0.3.0

[Sons] 297

Soc. 108. American Culture. 3 credits Prerequisites: Soc. 202 or Soc. 210, supplemented by credits in related fields.

Analysis of present-day culture, with particular reference to the United States and its regional variations. Mr Winston

# Soc. 410 Industrial Sociology

Prerequisite: Soc. 202, supplemented by credits in related fields.

Influence of industrial life: occupations as social and industrial factors; problems arising from our industrial era. Mr. Winston

#### Soc. 411. The American People.

Prerequisite: Soc. 202, supplemented by credits in related fields,

Analyses of crucial problems connected with the growth and decline of nonulations in the United States: factors connected with birth and death rates; marriage rates; discussion of the changing quality of population Mr. Winston. groups.

#### Soc. 415, 416, 417. Research in Applied Sociology. 3-3 3

Prerequisite: nine hours of Sociology, and permission of the instructor.

Individual research problems in applied fields of sociology, such as problems of the family, of population, of social work; rural-urban relations; student success; American leadership, Mr. Winston.

#### SOILS (AGRONOMY)

#### **Courses** for Undergraduates

Soils 202. Soils. 0-5 or 5 Prerequisites: Geol. 120 and Chem. 101, 102, 103. The makeup, origin and classification of soils; the soil as a medium for Mr. Lutz. plant growth.

#### 5-0-0 Soils 301. Soil Fertility and Fertilizers.

Prerequisite: Soils 202.

Sources, manufacture, and utilization of fertilizer materials and mixed fertilizers; practical and soil management for North Carolina soils and cropping systems. Mr. Collins.

Soils 312. Soil Classification.

Prerequisite: Soils 202.

The origin, characteristics, and classification of North Carolina soils: field trips. Mr. Lec.

0-3 0

0-0-3

3.0.0

Courses for Advanced Undergraduates and Graduates	
Soils 101. Soil Fertility Evaluation. 3-0	-0
Prerequisites: Soils 301 and Chem. 213.	
Analysis for total and available elements in the soil; the use of soil a	
plant analyses it soil diagrosis, Mr. Piland,	
Soils 103. Soil Conservation. 0-3	0
Prerequisite: Soils 202.	
Factors affecting soil deterioration; soil conservation and land use. Messrs. Lutz, Lee.	
Soils 113. Advanced Soil Fertility. 0-0	1-3
Prerequisite: Soils 301.	
Soil conditions affecting crop growth: the chemistry of soil and plant into relationships; theoretical and applied aspects of fertilizer usage in rel- tion to plant nutrition. Mr. Cummings.	la-
Soils 113, Soil Microbiology, 0-0	i.a
Suris (13, Suri arctionology, Sce Botary 443, Mr. Shunk,	
Dee Jonny 117.	
Soils 191, 192, 193, Special Problems, 3-3	
Soils 191, 192, 193. Special Problems. 5-3 Prerequisite: Admitted only with consent of the instructor.	e0
Problems involving special library, laboratory or field studies of soi Staff.	
Courses for Graduates Only	
Soils 501. Soil Development. 30	0 0
Prerequisites: Graduate standing in Soils.	
Genesis, morphology, and development of the great soil groups of t	
world. Mr. Lutz.	
Soils 502. Advanced Fertilizers. 0.2	-0
Prerequisite: Graduate standing in Soils.	
Recent trends in the manufacture, characteristics and utilization of fe tilizers; new developments in fertilizer experimentation.	r-
Offered in alternate years. Mr. Collins.	

Soils 512. Physical and Colloidal Chemistry of Soils. 0-5-0 Prerequisite: Graduate stuading in Soils.

The origin and nature of inorganic and organic soil colloids: their hehavior with respect to soil acidity, base exchange, absorption; and plant nutrition. Offered in alternate years. Staff.

#### Soils 522. Soil Physics.

Prerequisite: Graduate standing in Soils.

Physical constitution of soils, mechanical analysis, consistency and plasticity, structure, water relations, soil air and temperature. Offered in alternate years. Mr. Lutz.

Soils 531, 532, 533.	Seminar.	1-1-
Prerequisite: Gradu	uate standing in Soils.	
Reports and discuss	ions of problems in Soil Science.	Staff.

# Soils 541, 542, 543. Soils Research.

Prerequisite: Graduate standing in Soils. Research in specialized phases of Soil Science. By Arrangement.

Staff.

#### TEXTILES

#### Courses for Undergraduates

Tex. 101. Textile Principles.

This course is an introduction to textile manufacturing. It covers briefly the processes common to yarn manufacturing, and in a broader sense the types of mechanisms common to all textile machines, calculations involving speeds, productions, and twists that are associated with these mechanisms, and the theory and application of cotton numbering system. The lecture and recitation work is supplemented by laboratory application, which covers in detail the work of the classroom. Messrs. Grover and Bogdan.

Tex. 131. Cloth Calculations.

Required of freshmen in all Textile curricula.

Harness, reed and fabric calculations; loom production problems; opera tion of plain and automatic looms. Messrs, Porter, Moser,

0-3-0

0-0-3

0.5.0

#### Tex 205 Varn Manufacture I 2 0 or 2

and

#### Tex. 201. 202. Yarn Manufacture Laboratory L. 1-1-0 or 0 1-1

Required of sophomores in all Textile curricula.

Mixing of cotton; description and setting of openers, pickers, cards and draw frames; production, speed and draft calculations; operation and fixing of machines; grinding and setting of cards; setting of draw frame rolls and construction of draw frames; weighting of rolls and types of roll Messrs, Hilton, Culberson, covering.

Tex. 211. Anitting L.

#### Tex, 207, 208, 209. Knitting Laboratory I.

Required of sonhomores in all textile currucula, Selection and preparation of knitting varus, knitting mechanisms, structure of basic types of spring and latch needle fabrics; operation and adjustment of the basic types of knitting machines. Messrs. Shinn, Lewis.

Tex. 231. Power Weaving,

and

Tex, 231, 232. Power Weaving Laboratory.

Required of sophomores in all Textile curricula.

Construction of auxiliary motions on plain looms; cams and their construction: drop box loom construction; methods of pattern chain building; construction and value of pattern multipliers; timing of drop-box motion. and other motions.

Operation and fixing of plain, automatic and drop-box looms; pattern chain building for drop box looms. Messrs, Nelson, Moser, Porter.

## Tex, 235, 236. Fabric Structure and Analysis.

Required of sophomores in all Textile curricula.

Systems of numbering woolen, worsted, silk, linen, rayon, and cotton varn; plain, twill, and sateen weaves; ornamentation of plain weaves; wave designs; pointed twills; diamond effects; plain and fancy basket weaves; warp and filling rib weaves.

Analyzing plain, twill, sateen, and other fabrics made from simple weaves, ascertaining the number of ends and picks per inch in sample; fabric analysis calculations. Messrs. Porter. Moser.

2-2-0 or 0-2-2

0-2-0

1 1 0 or 0-1-1

2-0 or 2

[TEXTIL	es] :	301
Courses for Advanced Undergraduates		
Tex. 304. Yarn Manufacture II. and.	0-	3-0
Tex. 301, 302, 303. Yarn Manufacture Laboratory II. Prerequisites: Yarn Manufacture I, Tex. 201, 202, 205. Required of juniors in Textile Manufacturing. Elective for other		1-1
Tex. 310, 311. Yarn Manufacture III. and	0-	3-3
Tex. 307, 308, 309. Yarn Manufacture Laboratory III. Prerequisites: Yarn Manufacture I, Tex. 201, 202, 205. Required of juniors in Yarn Manufacture.	2-	2 2
Construction of sliver lappers; ribbon lappers; combers; mechan electrical stop motions; description and setting of the different par of machines; fly-frame builder and differential motions.	rts; c	are
Operation and fixing of sliver lappers; ribbon lappers; combers frames; changing of hank roving, draft and twist; setting of and speeder motions. Messrs. Hilton, Call	draft	ing
Tex. 419. Knitted Garment Manufacture.	0	0-3
Tex. 313, 314, 315. Knitting Laboratory II. Prerequisite: Tex. 207, 208, 209, 211. Required of juniors in Knitting. Elective for others.	2	2-2
A study of circular latch needle and spring needle body mach knit fabric production; style cutting and seaming of the basic types for underwear at doutcrwear; standard seam types; his sewing machines. Messrs. Shinn,	garm h sp	ent eed
Tex. 335. Dobby Weaving.	3-0 c	or 3
and		
Tex. 331, 332, 333. Dobby Weaving Laboratory I. Required of juniors in Textile Manufacturing and Yarn Manuf.	5.	1-1 ng.
Elective for others. Mr.	Hart	t.

#### Tex. 337, 338, 339. Dobby Weaving Laboratory II.

Prerequisites: Power Weaving, Tex. 231, 232, 234.

Required of juniors in Weaving and Designing.

Methods of drawing in and starting up cotton and rayon warps; setting of harness shafts; selection of springs or spring jacks. Construction and methods of fixing single and double index dobbies; methods of patternchain building.

Preparation of warps for weaving cotton and rayon fabrics on dobby looms; starting up warps in looms; fixing single and double index dobbies; pattern-chain buildin ;; operation of dolby looms. Mr. Hart.

Tex. 341, 342.	Fabric Design and Analysis I.	3-3-0 or 0-3-3
----------------	-------------------------------	----------------

Prerequisites: Fabric Structure and Analysis, Tex. 235, 236.

Required of juniors in Textile Manufacturing and Weaving and Designing. Elective for others.

Construction of fancy weaves, such as broken twills, curved twills, entwining twills; granite weaves; imitation leno; honeycomb weaves; fabrics backed with warp or filling; fabrics ornamented with extra warp or filling; combining weaves together to produce new patterns.

Analyzing samples of fancy fabrics for design, drawing in draft, reed, and chain plan; calculating particulars to reproduce fabrics from data obtained from sample. Mr. Hart.

#### Tex. 313. Textile Testing I.

Required of juniors in Textile Manufacturing, Textile Chemistry and Dycing, Weaving and Designing and Knitting.

Quality control methods for textile processing, with emphasis on the measurement by laboratory instruments and techniques, and including a study of the mechanical and natural influences involved. Mr. Grover.

#### Tex. 345. Textile Calculations I.

Prerequisites: Fabric Structure and Analysis, Tex. 235, 236.

Required of juniors in Textile Manufacturing and Weaving and Designing. Elective for others.

An intensive course in calculations for designing, weaving, and analyzing cotton, rayon, silk, wool, worsted and linen yarns and fabrics; weight of fabrics, ends and picks per inch; costing of fabrics; reed and harness calculations; loom speed and production. Mr. Hart.

#### Tex. 410. Knitting Calculations.

Prerequisites: Tex. 211.

Mathematics of flat and rib knitting.

Inter-relation of yarn number, yarn diameter, gauge, cut, stitch, length, fabric structure, and weight; proportions of yarns in multiple thread work; production problems, etc.

0-0-3

0 0-1

Tex, 351, 352. Knitted Fabric Design and Analysis.

Prerequisite: Tex. 207, 208, 209, 211,

Required of juniors in knitting. Elective for others.

Stitch formation for the more intricate knitted fabries: control mechanisms for pattern work; designing methods; analysis of fabrics for reproduction and costing; color ni knit goods. Mr. Shinn,

#### Tex. 355, 356. Textile Cost Methods. 0-3.3

Prerequisites: Tex. 205, 236, 237.

A survey of cost methods applicable to textile mills with emphasis on calculations, the preparation of cost reports and their use in cost control. Mr. Shinn.

Tex. 375. Dyeing I. and Tex. 371, 372, 373. Dyeing Laboratory I. 1-1-1 Prerequisites: Chemistry 103.

Required of juniors in Textile Manufacturing, Elective for others.

Physical and chemical properties of textile fibres: chemicals used in preparing fibres for dveing; methods of applying substantive, sulphur, basic, developed, acid, acid chrome, mordant and vat dyes; effect of changes in temperature and volume of the dye bath; theory of dyeing mixed fabrics theory of mercerizing; tests for the chemical constituents of the fibres; dveing experiments using all the different classes of dves on the various fibres: tests showing effect of varying such factors as bath, temperature and time: test for fastness to light, washing, cross-dveing, and so forth; mercerizing experiment. Messrs. Grimshaw, Hayes.

Tex. 381, 382. Dyeing II. 3-3-0 and

Tex, 377, 378, 379. Dyeing Laboratory II. 2 - 2 - 2

Prerequisite: Chemistry 103.

Required of juniors in Textile Chemistry and Dyeing.

Physical and chemical properties of textile fibres; lectures on wool, silk, rayon, and cotton: hydrometers and chemicals used in dyeing and finishing; application of dvestuffs to different fibres; effect of changing bath, temperature, or time factor; money value and strength tests of dyes; theory of dveing mixed fabrics; mercerizing.

Microscopic examination of textile fibres; dveing experiments using different classes of dyes on textile fibres; tests showing the effects of varying such factors as bath, temperature, and time; fastness to light, washing, and cross dyeing; money value and strength of various dyes; mercerizing. Messrs. Grimshaw, Hayes.

3 0 or 3

Courses for Graduates and Advanced Undergraduates

Tex. 405.	Yarn Manufacture IV.	3-0 or 3
and		

Tex. 401, 402, 403. Yarn Manufacture Laboratory IV. 1-1-1 Prerequisites: Yarn Manufacture, Tex, 301, 302, 303, 304, Required of seniors in Textile Manufacturing, Elective for others,

Messrs, Hilton and Culberson,

Tex, 411, 412. Yarn Manufacture V. 3-:	3	-	1	ð
--	---	---	---	---

and

#### Tex. 407, 408, 409. Yarn Manufacture Laboratory V. 2-2-2

Prerequisites: Yarn Manufacture, Tex. 307, 308, 309, 310, 311,

Required of seniors in Yarn Manufacturing.

Spinning; spooling; warping; twisting; description and setting of different parts; builder motions for warp and filling; bobbin holders, thread guides, traverse motions; ply yarns; calculations for twist, speed, and production.

Practical methods of spinning, warping, spooling, winding and twisting; setting of spinning rolls, spinning frame builder motions for warp, filling, and combination build; the practical application of all machines in Yarn Manufacture Messrs, Hilton, Culberson,

## Tex, 413. Textile Calculations II.

Prerequisites: Yarn Manufacture II or III, Tex. 304 or 310, 311.

Required of seniors in Yarn Manufacturing. Elective for others.

Principles underlying the calculation of draft, twist, speed, and production; systems of numbering yarns; doubling and twisting yarns; lay, tension, differential, and cone drum calculations; practice in solving practical mill problems. Mr. Hilton.

#### Tex. 415. Manufacturing Problems.

Prerequisites: Yarn Manufacture II or III, Tex. 304 or 310, 311.

Required of seniors in Yarn Manufacturing. Elective for others.

Mill organization and administration; machine layout for long and regular draft spinning; production control and costs; making of novelty yarns; making of daily and weekly reports; breaking of single and ply yarns; regular and reverse twisted yarns. Mr. Hilton.

0 - 0 - 3

#### Tex, 416. Wool Manufacture I.

and

#### Tex, 417, 418. Wool Manufacture Laboratory I.

Prerequisites: Yarn Manufacture II or III, Tex. 304, or Tex. 310, 311. Elective for seniors in Textile School.

Physical and chemical properties: reclaimed wool and secondary raw materials; grading; sorting; mixing and blending; oiling and garnetting; description of feeders; cards; tape condensers; card setting; stripping and grinding; woolen spinning; twister head; mechanical details and production: the practical application of machines in Woolen Yarn Manufacture. Mr. Hilton.

Tex. 420. Cotton Quality I. History, development, production, ginning, and handling of cotton. World crops; marketing methods; classification; relation of grade and staple to value of cotton. Mr. Campbell.

Tex, 421. Cotton Quality II.

Laboratory measurement of the physical properties of cotton fibers: differences among varieties; relation of fiber properties to spinning quality; relation of grade and staple to waste, spinning behavior, and yarn quality. Selection of cotton for different types of varns and fabrics.

Mr. Campbell.

#### Tex, 426, 427. Mill Organization.

A study of the factors involved in the organization of a textile mill, including environmental factors; land, building, machinery and personnel requirements and planning for their assembly and utilization in mill Mr. Grover. operation.

#### Tex, 428. Flat Knitting,

Prerequisites: Tex. 351, 352,

Required of seniors in knitting. Elective for others.

A study of the leading types of flat knitting machines including warp knitting machines, design possibilities, and fabric adaptability.

Messrs. Shinn, Lewis.

Tex, 429. Full-fashioned Ho-iery Manufacture. 3-0-0

0.3.0 1 1-0

0.2.0

0-0-3

0.9.9

300

306 [TEXTILES]

## Tex. 423, 421, 125. Knitting Laboratory III. 2 2-2

Required of seniors in knitting. Elective for others.

Mechanics of the full fashioned hosiery machine including practical training in its adjustment and operation. Attention is given to yarn preparation, kuitit e, inspection, finishing and packaging hosiery.

Mr. Lewis.

# Tex. 435. Cotton, Wool and Rayon Weaving. 0-0-3 and

Tex. 431, 432. Cotton, Wool and Rayon Weaving Laboratory I. 1-1-0 Prerequisites: Dobby Weaving, Tex. 331, 332, 333, 335.

Required of seniors in Textile Manufacturing. Elective for others.

Messrs. Nelson, Hart.

Tex. 433, 131. Hosiery Manufacture.

3 3-0

Prerequisites: Tex. 207, 208, 209, 211.

Required of juniors in Knitting and seniors in Textile Manufacturing, Elective for others.

A study of advanced types of circular knitting machines and the problems involved in the manufacture of the more complex types of hosiery. Insiery design and analysis.

Tex. 437, 138, 439. Cotton, Wool and Rayon Weaving Laboratory II. 2-2-1

Prerequisites: Dobby Weaving. Tex. 335, 337, 338. 339.

Required of seniors in Weaving and Designing.

Principles of loom construction to weave rayon and fine cotton fabrics; pick and pick looms; box and multiplier chain-building; arrangement of colors in boxes to give easy running loom; extra appliances for weaving leno, towel, and other pile fabrics; construction and operation of single, double lift, and rise and fall jacquards; the-up of harness for dress goods, table napkins, damask, and other jacquard fabrics, such as leno; relative speed of looms; production calculations and fabric costs.

Operation and fixing of dobby, pick and pick, and jacquard looms; preparation of warps to weave rayon, wool and fine cotton fabries; building of box, dobby, and multiplier chains. Messers. Nelson, Hart.

3 or 3-0

Prerequisites: Fabric Design and Analysis I. Tex. 341, 342.

Required of seniors in Textile Manufacturing and in Weaving and Designing, Elective for others.

Designing fabrics, such as fancy crepes, figured double plain, matelasse, velvets, cordurovs, pique, lines of samples. Leno weaves with one, two or Mr Nelson more sets of warps.

#### Tex. 444. Advanced Dobby Design.

Prerequisite: Dobby Design, Tex. 443.

Required of seniors in Weaving and Designing.

Combination of plain and fancy weaves with leno; methods of obtaining leno patterns; methods of making original designs for dress goods, draperies, etc. Mr. Nelson.

#### Tex. 445. Jacquard Design.

Tex. 443. Dobby Design.

Prerequisites: Fabric Design and Analysis I, Tex. 341, 342.

Required of seniors in Textile Manufacturing and juniors in Weaving and Designing, Elective for others,

Designing fancy and jacquard fabrics; methods of making original designs for table napkins, table covers, dress goods, draperies.

Mr. Nelson.

#### Tex, 447, 448, 449. Jacquard Design Laboratory.

Prerequisites: Jacquard Design, Tex, 445.

Required of seniors in Weaving and Designing.

Designing fancy and jacquard fabrics; methods of making original designs by combinations of color, weave, and sketches; designs for table napkins, table covers, dress goods, draperies, Messrs. Nelson, Shinn.

#### Tex, 451. Fabric Analysis,

Prerequisites: Fabric Design and Analysis, Tex. 341, 342.

Required of seniors in Textile Manufacturing and Weaving and Designing. Elective for others.

Analyzing samples of cotton, wool, worsted, linen, rayon, and silk fabrics for size of yarns, ends and picks per inch, weight of warp and filling, so as to accurately reproduce samples analyzed; obtaining design, drawing in draft, chain, and reed plan for fancy fabrics, such as stripes, checks. extra warp and extra filling figures, leno fabrics, jacquard fabrics, draperies. Mr. Nelson.

2-0-0

111

0.0.3

# 0-3-0

308 [TEXTILES]

Tex. 455, 456. Color in Woven Design.

Prerequisites: Fabric Structure and Analysis, Tex. 236, 237.

Required of seniors in Weaving and Designing. Elective for others.

Pigment and light theories of color; contrast and harmony of color; factors which influence quality, style, and color; methods of applying weaves and color to fabrics for wearing appared and home decorations.

Mr. Hart.

Tex. 457, 458, 459. Textile Testing II.

Prerequisite: Fabric Testing, Tex. 343 or equivalent.

Required of seniors in Weaving and Designing.

Tests for moisture content, regain, twist, and tensile strength; description and operation of testing equipment; solution and written reports of assigned textile problems.

Tex. 474. Cotton and Rayon Dyeing I.

and

Tex. 471, 472, 473. Cotton and Rayon Dyeing Laboratory I. Prerequisites: Dyeing I, Tex. 371, 372, 373, 375.

Required of seniors in Textile Manufacturing. Elective for others.

Lectures on color mixing, money value of dyes; testing of dyes, water, starch, and materials used in sizing; lubricating oils and oil compounds; processes and machinery used in dyeing and finishing; textile printing; apparatus used in research laboratory.

Color matching; testing dyes for strength and money value; physical and chemical examination and application of starches, sizing materials and finishing compounds; examination of textile oils, soap, and all the different rayons; analysis of mixed fabrics. Messrs. Grimshaw, Hayes.

Tex. 475. Textile Microscopy I.

Prerequisites: Dyeing I or II, Tex. 375 or 381, 382.

Required of scniors in Textile Manufacturing. Elective for others.

Instruction in the use of the microscope; examination of fibres; preparation of permanent slides. Messrs. Grimshaw, Hayes.

0-0-1

1-1-1

0 - 3 - 0

[TEXTILES] 309

Tex, 480, 481. Cotton and Rayon Dyeing II.

and

Tex, 477, 478, 479. Cotton and Rayon Dyeing Laboratory II. 2.2.2 Prerequisites: Dyeing II, Tex, 377, 378, 379, 381, 382,

Required of seniors in Textile Chemistry and Dyeing.

Theories of color matching: lectures on color mixing, water and mold, starch, materials used in sizing; lubricating oils, textile oils and oil compounds: processes and machinery used in dveing and finishing: method of analyzing textile fabrics; laboratory equipment used in textile research and testing laboratories.

Color matching: physical and chemical examination and application of textile oils, soaps, and finishing compounds; microscopic and chemical tests on rayons; dveing various types of rayon; operation of dveing and finishing equipment in the dyc house and research laboratories.

Mr. Grimshaw.

Tex. 487. Textile Printing.

and

Tex. 483, 484, 485. Textile Printing Laboratory. 1-1-1

Prerequisites: Dveing II, Tex. 381, 382.

The history of printing and the development of machinery used; calico printing and the mordant, basic, and vat colors, analine black, indigo, and insoluble azo colors; resist and discharge styles.

Paste mixing: practical experiments. Messrs, Grimshaw, Hayes.

Tex. 489, 490. Textile Microscopy II.

Prerequisites: Dyeing I or II, Tex, 375 or 381, 382.

Required of seniors in Textile Chemistry and Dyeing. Elective for others. Instruction in the use of the microscope; examination of fibres; prepara-Messrs, Grimshaw, Haves. tion of permanent slides.

Tex, 495. Principles of Fabric Finishing. 0 - 0 - 3

and

Tex, 491, 492, 493. Principles of Fabric Finishing Laboratory. 1-1-1 Prerequisites: Dyeing II, Tex. 371, 372.

Required of students in Textile Chemistry and Dyeing.

A study of machinery used in finishing of textile fabrics and in textile printing, with lectures on materials used in the textile finishing and Mr. Grimshaw. printing industry and experiments.

0.3.3

3-0-0

1-1-0

#### Courses for Graduates Only

#### Tex. 501, 502, 503. Yarn Manufacture.

Prerequisites: Yarn Manufacture IV, Tex. 405 or equivalent.

A study of breaking strength and related properties of cotton yarns made under various atmospheric conditions; comparison of yarns produced from long and short-staple cotton with regular and special carding processes; efficiency of various roller covering materials at the drawing proresses; climination of roving processes by special methods of preparation; comparison of regular and long-draft spinning. Messrs. Grover, Hilton.

## Tex. 505, 506, 507. Textile Research.

Prerequisite: Graduate standing.

A study of the moisture content of cotton yarns and fabrics; the convolutions in cotton fibres and their relation to spinning, weaving, and dycing; the effect of mercerization on cotton yarns and fabrics; testing yarns and fabrics: under variable conditions for breaking strength and elasticity. Staff.

Tex. 531, 532, 533. Textile Design and Weaving. 3-3-3

Prerequisites: Leno, Dobby and Jacquard Design, Tex. 441, 443, 445 or equivalent.

Study and practice in more advanced designing and analysis of fabrics, such as lenos made with twine and wire doups, lappits, and other fancy fabrics; designing for jacquard dress goods, table covers, reversibles, and other, fabrics; making original designs for dobby and jacquard fabrics; fabric costs; weaving fancy and jacquard fabrics.

Messrs. Nelson, Hart.

#### Tex. 535, 536, 537. Seminar. 1-1-1 Discussion of scientific articles of interest to textile industry; review and discussion of student papers and research problems. Textile Staff.

## Tex. 561, 562, 563. Knitting Research.

Prerequisite: Graduate Standing.

Problems of specific interest to the knitting industry will be assigned for study and investigation. The use of experimental methods will be emphasized. Attention will be given to the preparation of reports for publication.

3-3-3

3-3-3

3-3-3

[ZOOLOGY] 311

#### Tex. 571, 572, 573. Textile Dyeing.

Prerequisites: C. & R. Dyeing I, Tex. 474 or equivalent.

The course consists of matching shades from standard and season color cards upon classes of materials which require skill in their dysing, such as three-fbre, cotton-wool, and half-slik hosiery, woolens and worsteds with effect stripes, and cotton fabrics with woven figures or stripes of the different varieties of rayon; advanced work on chemical and microscopical examination of materials used in dycing and finishing. Mr. Grinshaw.

# Tex. 575. Advanced Textile Microscopy. 0 0-3

Prerequisites: Textile Microscopy, Tex. 489, 490.

Microscopic study of textile starches, fibres, fabrics, oils, etc.; study of mounting media for above; methods of mounting textile materials; methods of cross sectioning textile materials; photomicrography. Mr. Grimshaw.

#### ZOOLOGY

#### Courses for Undergraduates

Zool. 101. General Zoology. Animals with special reference to the morphology and physiology of vertebrates. Messrs. Kulash, Mitchell, McCutcheon, Stevens, Wing.

Zool, 102. Economic Zoology.

Animals with special reference to the more important economic groups; designed to give the student a general knowledge of the animal kingdom. Messrs. Kulash, Mitchell, Stevens.

Zool. 111. Elementary Wildlife Management. 1-0-0

An introductory survey of the field of wildlife management.

Mr. Stevens.

5-0.0

0 4 or 4

#### **Courses for Advanced Undergraduates**

Zool. 201. Animal Physiology.

Prerequisites: Zool. 101, Phys. 115, Chem. 201, 202, 203.

Comparative physiology of vertebrates, with particular reference to mammals and man. Detailed studies of various functions, with metabolism cmphasized. Mr. McCutcheon.

3-3-3

# 312 [ZOOLOGY]

Zool. 213.	Ecor	iomic Ento	molog;	y.				04 or 4
Prerequi	site:	Zool. 102.						
The ins	ects,	including	their	economic	importan	ce and	the	principles
of control.				N	lessrs. Mit	chell, 1	Wing,	Kulash.

Zool. 223. Comparative Anatomy.	0-0-5
Prerequisites: Zool. 101, 102.	
Comparative morphology of vertebrates. Interrelations	of organ systems
studied for the various groups.	Mr. Harkema.

Zool. 241, 213. Beekeeping.	3-0-3
Prerequisite: Zool. 102.	
Scientific beekeeping and honey marketing	. Mr. Stevens.

Zool. 251, 252, 253. Ornithology.	2-2-2
Prerequisites: Zool. 101, 102.	
Biology and morphology of North American birds.	Mr. Metcalf.

Zool. 302. Forest Entomology. 0-3-0 Prerequisite: Zool. 213. Forest insects, including the factors governing abundance, and the application of this knowledge in control. Mr. Kulash.

Zool. 312. Principles	of Game Management.	0-3 or 3
Elective for juniors	and seniors not in Game Management.	
	field, study of the major principles involved management with other land uses. Mr. S	, and the tevens.

Zool. 321, 322, 323. Wildlife Conservation.	3-3-3
Prerequisites: Zool. 251, 252, 253, F. C. 202, Bot. 101, 102, 203.	
History of game and wildlife management; relation of wildlife vation to soil and forest conservation; national and state parks;	
farming operations. Mr. Steve	

0-3-0

3-3-3

Zool, 332. Fur Resources.

Prerequisites: Zool. 321, 322, 323.

Life history and management of the important fur-bearing animals; skinning, drying, marketing pelts; fur farming. Mr. Stevens.

## Courses for Graduates and Advanced Undergraduates

Zool, 401, 402, 403, Applied Entomology,

Prerequisites: Zool. 213.

Crop and animal nests with emphasis on their identification; general principles of insect control and special study of contact insecticides, stomach poisons and fumigants; insecticide research methods, Mr. Fulton.

Zool, 411. Genetics.

Prerequisite: Bot. 101 or Zool. 101.

Basic principles of heredity and variation. Students conduct breeding experiments and study inheritance in various animals and plants.

Mr. Bostian.

Zool, 412. Advanced Genetics.

Prerequisite: Zool. 411.

Intended for students desiring more thorough and detailed training in fundamental genetics than provided by Zool. 411, with some attention to Mr. Bostian. recent advances.

Zool, 413. Advanced Physiology.

Prerequisites: Zool, 101, 102, 201,

Special studies in animal physiology with emphasis on fundamental processes involved. Lectures, reports, and conferences to promote an acquaintance with general literature and recent advances; selected exercises and demonstrations to develop experimental technique. Mr. McCutcheon.

Zool, 421, 422, 423, Systematic Zoology. 3-3-3 Prerequisites: Zool, 101, 102. The classification of insects or other groups of animals. Messrs. Metcalf, Mitchell.

500

0 3-0

# 314 [ZooLogy]

Zool. 431. Field Zoology.	3-0-0
Prerequisites: Zool. 101 and 213, or 223. The relation between animals and their environment. Fro to the field will be taken. Messrs.	equent excursions Bostian, Wing.
Zool, 112. Histology.	0 5-0
Prerequisites; Zool, 101, 102, 201, 223.	0.0-0
Animal tissues and their preparation.	Mr. Harkema.
Zool. 113. Zoological Technique.	0-0 5
Prerequisites: Zool. 101, 102, 213. Methods of preserving animals and illustrating papers.	Staff.
archous of preserving animats and mustrating papers.	otan.
Zool. 451, 452, 153. Wildlife Management.	3-3-3
Prerequisites: Zool. 321, 322, 323.	
Foods and feeding habits of the more important groups field and laboratory studies of wildlife management as economic relations of game, predatory, and fur bearing an	nd research; the
	Mr. Stevens.
Zool. 161. Vertebrate Embryology,	5-0-0
Prerequisites: Zool. 101, 102.	
The comparative embryology of the principal groups of special emphasis on the chick.	vertebrates, with Mr. Harkema.
Zool. 462, 463. Advanced Animal Ecology.	0-3-3
Prerequisite: Zool. 433.	
Animal geography and the factors which influence th animals.	e distribution of Mr. Metcalf.
Zool. 471, 472, 473. Advanced Wildlife Management.	3-3-3
Prerequisite: Concurrently with or preceded by Zool. 32	and selection of the se
An assigned problem to be planned and worked out by term paper covering the procedure.	y the student. A Mr. Stevens.

#### Zool, 481, 482, 483. Advanced Food Habits Problems.

Prerequisite: Concurrently with or preceded by Zool, 451, 452, 453, Assigned or selected problem dealing with the foods and feeding habits

of one species of wild animal or a group of similar wild animals. Mr. Stevens.

Zool. 492, 493.	Parasitology.	0.3 :
Prerequisite:	Zool, 101, 102, 223.	
Structures, li	ife-cycles, pathogenicity and control of animal	parasites.
	1	Mr. Harkema.

#### **Courses** for Graduates Only

Zool. 501, 50:	2, 503.	Systematic Entomology.	3-3-3
Propoguiei	to: 700	1 401 400 400	

Codes of nomenclature, methods of writing descriptions, constructing keys, determining priority, selecting and preserving types, and making bibliographies and indexes. Messrs. Metcalf, Mitchell.

Zool. 511, 512, 513, and Zool. 551, 552, 553. Research in Zoology. 3 3.3 Prerequisite: cighteen term credits in Zoology.

Problems in development, life history, morphology, physiology, ecology, genetics, game management, taxonomy, or parasitology.

Messrs, Metcalf, Mitchell, Bostian, McCutcheon, Harkema, Stevens,

Zool. 521, 522, 523.	Seminar.	1-1-1
Prerequisite: eig	hteen term credits in Zoology.	Mr. Metcalf.

3 0-0 Zool, 531, 532. Biological Control of Insects. Diseases, predators and parasites of insects; methods of rearing and disseminating for biological control. Messrs Fulton Smith.

Zool, 533. Advanced Genetics.

Prerequisite: Zool. 411, 412.

Special topics and recent advances, accomplished by lectures, references, conferences, and reports by students, each selecting one or more topics for special study. Mr. Bostian.

3.2.2

0.0.3

316 [ZooLoo	:y.]
-------------	------

Zool. 511, 512. Insect Physiology.	3-3-0
Prerequisite: Zool. 201.	
Mechanisms involved in the life processes of insects.	Mr. McCutcheon.
Zool, 513. Fruit Insects.	0 0-3

Prerequisite: Zool. 213 or equivalent.

The economic importance of insects attacking fruit or fruit trees; their characteristics, habits, ecology, and biology; with most practical control Mr. Smith.

Zool, 551, 552, 553.	Research in Zoology.	3-3 3
Sce Zool. 511, 512,	513.	Staff.

Zool. 561, 562, 563. Insect Biology. 3-3-3 Life histories, including modes of reproduction, embryology, growth, metamorphosis, protection, food relations, hibernation, social relations, and adaptations. Mr. Mitchell.

Zool. 571, 572, 573.	Insect Ecology and Behavior.	3-3-3
Natural activities	of insects: feeding, protection, repr	oduction, reaction
to environmental fac	tors, interrelations, and distribution.	Mr. Fulton.

Zool. 551, 582, 583. Insect Morphology. 3-3-3 The external and internal anatomy of insects and their near relatives. Mr. Metcalf.

Zool. 591. Immature Insects. 0-3-0 Prerequisite: Zool. 102 and 213 or equivalent. Methods of collecting, preserving and determining immature insects. Mr. Smith.
## V. SUMMARY OF ENROLLMENT

### 1945-46\*

1. Resident Students		
A. Candidates for Degrees		
1. Freshmen	1,487	
2. Sophomores .	464	
3. Juniors	173	
4. Seniors	130	
5. Graduates	104	
- Total	9.959	
10tai	2,358	
B. Irregular Students		
†1. Extension Classes in Raleigh and Cary	125	
2. Special Students and Auditors	52	
3. Pratt and Whitney Fellows	13	
Total	190	2,548
†2. Non-resident Students		
A. Correspondence Students for College Credit	802	
B. Correspondence Students for Conege Creat	001	
no credit	40	
Total	842	3,390
3. Summer School Students, 1945		
A. Regular Students (twelve weeks term)	225	
B. Pratt & Whitney Fellows	14	
C. Special Students and Auditors	9	
Total .	248	3,638
4. Short Courses and Special Conferences		
1. Engineering, Science and Management War		
Training Courses	451	
2. Motor Vehicle Fleet Supervisors	66	
3. Institute for Surveyors	18	
4. Waterworks School	54	
5. Mid-Southeastern Gas Association	139	
6. Short Course in Lumber Grading	32	
7. Civil Air Patrol School	24	
8. Quality Control by Statistical Methods	28	
9. Textile Lecture Course	24	
Total	836	
Grand Total		4,474

\* Does not include Spring Term, 1915-46. † Data from January 1, 1945, to January 1, 1916.

#### ENROLLMENT BY CURRICULA

#### **Basic Division**

(Freshmen and Sophomores)

Agriculture	
Engineering	1,286
Teacher Education	83
Textiles	248
Total .	1,951

#### School of Agriculture and Forestry

#### (Juniors, Seniors, Graduates)

Agricultural Options	89
Agricultural Chemistry	19
Agricultural Engineering	5
Forestry	15
Landscape Architecture	1
Wildlife Cons. and Mgt	1
Total	130

#### School of Engineering

(Juniors, Seniors, Graduates)

Aeronautical										18
Architectural										8
Architecture									ģ.	2
Ceramic .									÷	3
Chemical .										45
Civil			ļ							19
Electrical					ŝ			ì	2	23
General										4
Geological .										3
Industrial						ŝ			Ç,	7
Mechanical .										44
Total .										176

#### Division of Teacher Education

(Juniors, Seniors, Graduates)

Agricultural Education	25
Industrial Arts Education .	2
Industrial Education	1
Occup. Inf. and Guidance	3
Total	31

#### School of Textiles

(Juniors, Seniors, Graduates)

Textile Chemistry and Dyeing	11
Textile Management	12
Textile Manufacturing	41
Weaving and Designing .	6
Total .	70

#### Nonclassified Auditors and

Special		Students		52
Pratt	and	Whitney	Fellows.	13

#### 5 0 6 0

Distribution of Graduate students by schools (included in above departmental classifications).

Agriculture	69
Engineering	 14
Teacher Education .	10
Textiles .	11
Total .	104

#### FIFTY-SIXTH ANNUAL COMMENCEMENT

#### MAY 28, 1945

#### DEGREES CONFERRED

#### SCHOOL OF AGRICULTURE AND FORESTRY

#### BACHELOR OF SCIENCE

#### IN AGRICULTURAL CHEMISTRY

**Harriet Byrne Pressly				
-------------------------	--	--	--	--

#### IN AGRONOMY (FIELD CROPS)

Cecil Crouse Lowery	Chester, S. C.
Howard Murray Stamey	Raleigh

#### IN ANIMAL PRODUCTION

Robert Hughes Hudgins					Raleigh
Robert Newlin Wood			·		Graham
Edwin Edsel Wright	 i e	447.14		Ts	bor City

#### IN FARM BUSINESS ADMINISTRATION

Hugh Parks Bell	tersville
**Cleburn Gilchrist Dawson	. Dunn
William Felton Elmore	Dunn

#### IN PLANT PATHOLOGY

*Bernard Fishbein		New	York,	N.	Y.	

#### IN POMOLOGY

#### IN POULTRY SCIENCE

#### SCHOOL OF ENGINEERING

#### BACHELOR OF AERONAUTICAL ENGINEERING

*Ivey Kimbrough Collins		Forest City
Daniel Martin Matusow	New	York, N. Y.
Ronald Arthur Oatman	Anj	gola, N. Y.
William Eugene Wade, Jr.	Union	City, Tenn.

• With Honors. • With High Honors.

#### STATE COLLEGE CATALOG

#### BACHELOR OF CHEMICAL ENGINEERING

John Douglas Boone								Pendleton
Drury Robert Burton								Mebane
Charles Jackson Fetner, Jr.								Hamlet
Francis Joseph Fisher							Ros	noke Rapids
								Kernersville
Richard Edward Gross					14			Asheville
William James Hilditch .					. N	iag	ara	Falls, N. Y.
William Percy Moore, Jr.								. Salisbury
**William Meredith Nicholson	ñ .						W	inston-Salem
**Victor Balmer Shelburne, Ji	r.							Washington
Harry Graham Taylor, Jr.								Greensboro

#### BACHELOR OF CIVIL ENGINEERING

Paul Noble Howard, Jr.	Charlotte
Thomas Marvin Mayfield, Jr.	
Charles John Nackos	Wilson
Henry Negron	
*Albert Cavin Smith	 . Mooresville

#### BACHELOR OF ELECTRICAL ENGINEERING

" Stanley Lee Friedman				I	Brooklyn, N. Y.
"John David Fuller				Ha	ttiesburg, Miss.
"Merrill Nathaniel Lustgart	en				Brooklyn, N. Y.
**Harold Melville Messenge	r, Jr.				Elmira, N. Y.
"George Herbert Owen		4 1333			Detroit, Mich.
<sup>o</sup> Herbert Vernon Poe	00.00				Apex
*Philip Sine			 	. N	ew York, N. Y.
°Peter Doub Strum					Rocky Mount
Robert Allen Zachary, Jr.					. Charlotte

#### BACHELOR OF SCIENCE

#### IN GENERAL ENGINEERING

Edward Wilkie Bailey	Goldsboro
Robert Galloway Ross, Jr.	 Charlotte

#### BACHELOR OF GEOLOGICAL ENGINEERING

#### BACHELOR OF INDUSTRIAL ENGINEERING

• With Honors. • With High Honors.

,

#### BACHELOR OF MECHANICAL ENGINEERING

' Hugh Crocker Murrill					Weldon
Albert Neal Perry					Hamlet
<sup>°</sup> John Edwin Puvogel				Roya	Oak, Mich.
"Edgar Riley Rowe			a 94		Aberdeen
"Niles Forrest Wells				 Ta	rentum, Pa.

#### SCHOOL OF TEXTILES

#### BACHELOR OF SCIENCE

#### IN TEXTILE CHEMISTRY AND DYEING

John Marshall Culp, Jr. Armand Aldore Poitras Charlotte New Bedford, Mass.

#### IN TEXTILE MANAGEMENT

Arnold Brotman Chester Rudnick Gilbert Dwight Lambeth Waynick Newark, N. J. Boston, Mass. Greensboro

#### IN TEXTILE MANUFACTURING

<sup>3</sup>Maurice Cohen <sup>3</sup>Jorge Nadjar Gallardo Arthur Harold Gibbs William Barnwell Heyward Harold Kernan Massengill David John Stiles Miami Beach, Fla. Santiago, Chile Enka Charlotte Raleigh Stafford, Conn.

#### IN WEAVING AND DESIGNING

^Jean Marie Clark				Raleigh
Morton Kaplan			Forest Hi	lls, L. I., N. Y.
Ernestine Elizabeth Nelson			А	lhambra, Calif.
Martha Louise Wallace				Raleigh

#### ADVANCED DEGREES

#### MASTER OF SCIENCE

#### IN ANIMAL PRODUCTION

Bruce Bernard Blackmon . . . Buies Creek

\* With Honors. • With High Honors.

#### STATE COLLEGE CATALOG

#### IN ENTOMOLOGY

Mario Enrique Perez Escolar	
Jose Antonio Ramos	Mayaguez, Puerto Rico
Beverley Shirley Steinert	Raleigh

#### IN RURAL SOCIOLOGY

Martin Reed Chambers				÷								Bahama
Frances Marion Henderson											Wi	Imington
Ada Amanda McRackan										 		Raleigh

#### IN TEXTILE CHEMISTRY AND DYEING

Adrian Newton Stuart	The second of the second secon	Snow Camp
----------------------	--	-----------

#### MASTER OF EXPERIMENTAL STATISTICS

Harold Leslie Manning	Harold	St. Vincent, B.	W. I.
-----------------------	--------	-----------------	-------

#### HONORARY DEGREES

#### DOCTOR OF AGRICULTURE

#### DOCTOR OF MILITARY SCIENCE

#### DOCTOR OF TEXTILE SCIENCE

Arthur Mills Dixon Gastonia

#### MEDALS AND PRIZES

#### MEDALS AND PRIZES

#### SCHOLARSHIP DAY AND COMMENCEMENT, 1945

#### American Institute of Chemical Engineers' Award

George Walter Parker, Junior, Chemical Engineering, Murfreesboro, N. C.

#### Ceramic Awards

J. C. Steele Scholarship Cup (Upperclassman) C. Rogers Westlake, Sophomore, Ceramic Engineering, Sycamore, Ill.

Moland-Drysdale Scholarship Cup (Freshman) Dave Waring Sewell, Freshman, Ceramic Engineering, Greensboro, N. C.

#### Forensic Awards

National Individual Ranking in Direct Clash Debating Daniel Francis Lovelace, Jr., Freshman, Occupational Information and Guidance, Raleigh, N. C.

Leon Alvon Mann, Jr., Sophomore, Chemical Engineering, Newport, N. C.

Richard Killian Worsley, Freshman, Industrial Engineering, Greenville, N. C.

#### Gamma Sigma Epsilon Scholarship Cup (Chemistry)

(onemaary)

Victor Balmer Shelburne, Jr., Senior, Chemical Engineering, Washington, N. C.

#### National Association of Cotton Manufacturers' Medal

#### (Textile)

Miss Martha Louise Wallace, Scnior, Weaving and Designing, Raleigh, N. C.

#### Phi Kappa Phi Medals

(National Honorary Scholarship)

#### (Senior Award)

Victor Balmer Shelburne, Jr., Senior, Chemical Engineering, Washington, N. C.

(Junior Award) Louis Samuel Hovis, Sophomore, Chemical Engineering, Dallas, N. C.

#### STATE COLLEGE CATALOG

(Sophomore Award) Eustace Robinson Conway, III, Sophomore, Chemical Engineering, Greenville, N. C.

Sigma I'i Alpha Award (National Language) National Award of Merit for Scholarship Eastace Robinson Conway, III, Sophomore, Chemical Engineering, Greenville, N. C.

Edgar Allen Orr, Sophomore, Chemical Engineering, Rocky Mount, N. C.

Barnette Wesley Allen, Junior, Geological Engineering, Newport News, Va.

Tau Beta Pi (Honorary Engineering) Scholarship Cup Eustace Robinson Conway, III, Sophomore, Chemical Engineering, Greenville, N. C.

Slide Rules Stephen Goodyear Flannagan, Freshman, Aeronautical Engineering, Henderson, N. C.

Edward Carson Yates, Freshman, Aeronautical Engineering, Raleigh, N. C.

### INDEX

Administration, Officers of, State College	8
College Administrative Council of the Consolidated University Advance Standing Aeronautical Engineering 101, Agricultural Chemistry 64, Agricultural Chemistry 64, Agricultural Education Agricultural Education 67,	0
Consolidated University	7
Admission	22
Advance Standing	23
Agricultural Chemistry 64	108
Agricultural Economics 66.	170
Agricultural Education	138
Agricultural Engineering 67,	174
Arriculture and Forestry, School of Experiment Station Extension Work General Arriculture 75, Arricultural Chemistry 63, Arricultural Chemistry 63, Arricultural Chemistry 64, Arricultural Chemistry 64, Arricultural Chemistry 64, Arricultural Chemistry 64, Arricultural Chemistry 64, Extension 64,	61
Agricultural Engineering 67.	174
Experiment Station	86
Extension Work	88
Forestry 75.	244
Agricultural Chemisture	102
Agricultural Economics 66	170
Agronomy 69.	242
Animal Husbandry 71,	176
Botany	185
Dairy Manufacturing . 65,	72
Experimental Statistics 51	84
Farm Business Administration 62	170
Farm Business Administration 62, Farm Marketing and Farm Finance 62, Field Crops 69, Floriculture 62, Freshman and Sophomore 82	
Finance 62,	170
Field Crops 69,	242
Floriculture 62,	256
Currianta and Sophomore	00
Horticulture 78	956
Plant Pathology	185
Pomology	78
Poultry Science	81
Rural Sociology	183
Soils	70
Landsonne Architecture 70	18
Wildlife Conservation and	201
Freehman and Sophomore Curricula Berticulture Foundary Pomology Po	84
Wildlife Conservation and Management Zoology 69, Alumni Association and Dairying 71, Animal Production 73, Applicants Information for Admission for Admission 164, Pepenson 164, Pinanela Aids and Scholarships	84
Agronomy 69	242
Alumni Association	41
Animal Husbandry and Dairying . 71,	176
Animal Production	181
Applicants Information for	22
Expanses 164	102
Fellowships	33
Financial Aids and Scholarships	31
Registration	
Self-Help	44
Self-Help	44
Self-Help 31, Architectural Engineering and Architecture 103,	44 180
Self-Help 31, Architectural Engineering and Architecture 103, Athletics and Physical Education	26 44 180
Expenses 164, Fellowships 26, 26, 26, 26, 26, 26, 26, 26, 26, 26,	44 180 48 384
Awards, 1944	384
Awards, 1944	384
Awards, 1944 Basic Division Organization and Objects Programs of Study	384 47 48 19
Awards, 1944 Basic Division Organization and Objects Programs of Study	384 47 48 19
Awards, 1944 Basic Division Organization and Objects Programs of Study Freshman and Sophomore Curricula of Schools, Divisions, and	384 47 48 49
Awards, 1944 Basic Division Organization and Objects Programs of Study Freshman and Sophomore Curricula of Schools, Divisions, and	384 47 48 49
Awards, 1944 Basic Division Organization and Objects Programs of Study Freshman and Sophomore Curricula of Schools, Divisions, and	384 47 48 49
Awards, 1944 Basic Division Organization and Objects Programs of Study Freshman and Sophomore Curricula of Schools, Divisions, and	384 47 48 49
Awards, 1944 Basic Division Organization and Objects Programs of Study Freshman and Sophomore Curricula of Schools, Divisions, and	384 47 48 49
Awards, 1944 Basic Division Organization and Objects Programs of Study Freshman and Sophomore Curricula of Schools, Divisions, and	384 47 48 49

Calendar, Colleg Calendar, 1946-4 Ceramic Engine Chemical Engine Chemistry					
	e				3
Calendar, 1946-4	7.			1.4.4	
Ceramic Engine	ering .			106,	190
Chemical Engine	eering			108,	100
Civil Engineerir	100			10,	100
(Concert)		111	114	116	202
Construction			112	115	116
Sanitary			113	115	116
Transportation	e 1 (de		113.	115.	116
Chemical Engine Chemistry Civil Engineerin (General) Construction Sanitary Transportation Clubs and Socie College. The	Studen	ts .			30
Clubs and Socie	ties			ini.	34
College. The College Extensio					20
					166
Commencement,	1945,	Degree	8		
Conferred . Construction E: Cooperative Pla	Sec. 11. 2		1.121		319
Construction En	igineeri	ng	112,	114,	203
Cooperative Pla	n of E	nginee	ring		107
Education Curricula: See	Cabral	Denne	22.00	1.0	105
Division Cone	school,	Depart	men	, or	
Division Conc	ernea.				
Dairying, Anim	al Hus	handra		1 71	176
Dairy Manufact Degrees Conferred, 194	iring	caring ,		72,	211
Degrees					30
Conferred, 194	5				
Division of T	eacher	Educat	ion		136
					160
Graduate School of Agn School of Eng School of Text Description of Order by Dep	fculture	and i	Fores	try	61
School of Eng	incering				99
School of Text	iles				144
Description of	Courses	(Aip)	abet	ical	168
Diesel Engineer	artment	s)			
Division of Cue	ducto S	a cartas			167
Diesel Engineer Division of Gra Division of Teac	than Edu	nention		138	218
Dormitories				22.	26
Dorinitories					
Economics			14.1	47,	213
Agricultural				66,	170
Education .	-		1.00	47. 66. 136.	218
(See Teacher	Educat	tion, D	ivisio	136. n of	218
(See Teacher Electrical Engin	Educat	tion, D	ivisio	136. n of 118,	218
(See Teacher Electrical Engin	Educat eering chanics	tion, D	IV1810	118, 95	226
(See Teacher Electrical Engin	Educat eering chanics hool of	tion, D	IV1810	118, 95	226
(See Teacher Electrical Engin	Educat eering chanics hool of Objects	tion, D	IV1810	118, 95	226
(See Teacher Electrical Engin Engineering Me Engineering, Sc Organization, Aeronautical	Objects	, Requi	ivisio	118, 95	226
(See Teacher Electrical Engin Engineering Me Engineering, Sci Organization, Aeronautical Architectural	Engine	, Requi	ivisio  ireme	n of 118, 95, ints 101,	226 229 89 89 168
(See Teacher Electrical Engin Engineering Me Engineering, Sci Organization, Aeronautical Architectural	Engine	, Requi	ivisio  ireme	n of 118, 95, ints 101,	226 229 89 89 168
(See Teacher Electrical Engin Engineering Me Engineering, Sci Organization, Aeronautical Architectural	Engine	, Requi	ivisio  ireme	n of 118, 95, ints 101,	226 229 89 89 168
(See Teacher Electrical Engin Engineering Me Engineering, Sci Organization, Aeronautical Architectural	Engine	, Requi	ivisio  ireme	n of 118, 95, ints 101,	226 229 89 89 168
(See Teacher Electrical Engin Engineering Me Engineering, Sc Organization, Aeronautical Architectural Architectural Architectural Ceramic Chemical Civil	Engine	, Requi	ireme nd 114,	n of 118, 95, 101, 103, 106, 108, 117,	226 229 89 168 180 190 193 203
(See Teacher Electrical Engin Engineering Me Engineering, Sc Organization, Aeronautical Architectural Architectural Architectural Ceramic Chemical Civil	Engine	, Requi	ireme nd 114,	n of 118, 95, 101, 103, 106, 108, 117,	226 229 89 168 180 190 193 203
(See Teacher Electrical Engin Engineering Me Engineering, Sc Organization, Aeronautical Architectural Architectural Architectural Ceramic Chemical Civil	Engine	, Requi	ireme nd 114,	n of 118, 95, 101, 103, 106, 108, 117,	226 229 89 168 180 190 193 203
(See Teacher Electrical Engin Engineering Me Engineering, Sc Organization, Aeronautical Architectural Architectural Architectural Ceramic Chemical Civil	Engine	, Requi	ireme nd 114,	n of 118, 95, 101, 103, 106, 108, 117,	226 229 89 168 180 190 193 203
(See Teacher Electrical Engin Engineering Me Engineering, Sc Organization, Aeronautical Architectural Architectural Architectural Ceramic Chemical Civil	Engine	, Requi	ireme nd 114,	n of 118, 95, 101, 103, 106, 108, 117,	226 229 89 168 180 190 193 203
(See Teacher Electrical Engin Engineering Me Engineering, Sc Organization, Aeronautical Architectural Architectural Architectural Ceramic Chemical Civil	Engine	, Requi	ireme nd 114,	n of 118, 95, 101, 103, 106, 108, 117,	226 229 89 168 180 190 193 203
(See Teacher Electrical Engin Engineering Me Engineering, Sc Organization, Aeronautical Architectural Architectural Architectural Ceramic Chemical Civil	Engine	, Requi	ireme nd 114,	n of 118, 95, 101, 103, 106, 108, 117,	226 229 89 168 180 190 193 203
User Teacher Electrical Engin Engineering, Sc Organization, Aeronautical Architectural Architectural Chemical Construction Cooperative P Diesel Electrical Experiment S Furniture General Geological	Engine	, Requi	ireme nd 114,	n of 118, 95, 101, 103, 106, 108, 117,	226 229 89 168 180 190 193 203
tisee Teacher Electrical Engin Engineering Se Organization, Aeronautical Architectural Chemical Civil Construction Construction Construction Construction Construction Experiment S Furniture General General Heating and	Engine Engine Ian of tation	, Requi ering a 111, Educat	114, 114, 112, 100	n of 118, 95, 101, 103, 106, 108, 108, 117, 114, 118, 125,	2226 229 89 168 190 193 203 105 129 123 249 123 249 1249
tisee Teacher Electrical Engine Engineering, Se Organization, Aeronautical Architectural Commit Comparative Diseal Electrical Electrical Electrical Geological Heating and Heating and Mechanical	Engine Engine Ian of tation	, Requi ering a 111, Educat	114, 114, 112, 100	n of 118, 95, 101, 103, 106, 108, 108, 117, 114, 118, 125,	2226 229 89 168 190 193 203 105 129 123 249 123 249 1249
tisee Teacher Electrical Engine Engineering, Se Organization, Aeronautical Architectural Commit Comparative Diseal Electrical Electrical Electrical Geological Heating and Heating and Mechanical	Engine Engine Ian of tation	, Requi ering a 111, Educat ditionir	ireme nd 114, 112, ion	n of 118, 95, ents 101, 103, 106, 108, 117, 114, 118, 125, 130,	2226 2229 89 168 180 190 203 203 203 203 203 105 117 2226 96 129 123 249 134 260 269
tisee Teacher Electrical Engine Engineering, Se Organization, Architectural Architectural Architectural Cenamic Construction Construction Construction Diesei Electrical Experiment. S Furniture General Industrial Metals	Engine Engine Ian of tation	, Requi ering a 111, Educat ditionir	ireme nd 114, 112, ion	n of 118, 95, 101, 103, 106, 108, 117, 114, 118, 125, 130,	2226 2229 89 168 180 190 203 203 203 203 203 203 203 203 203 20
tisee Teacher Electrical Engine Engineering, Se Organization, Architectural Architectural Architectural Cenamic Construction Construction Construction Diesei Electrical Experiment. S Furniture General Industrial Metals	Engine Engine Ian of tation	, Requi ering a 111, Educat ditionir	ireme nd 114, 112, ion	n of 118, 95, 101, 103, 106, 108, 117, 114, 118, 125, 130,	2226 2229 89 168 180 190 203 203 203 203 203 203 203 203 203 20
tisee Teacher Electrical Engine Engineering, Se Organization, Architectural Architectural Architectural Cenamic Construction Construction Construction Diesei Electrical Experiment. S Furniture General Industrial Metals	Engine Engine Ian of tation	, Requi ering a 111, Educat ditionir	ireme nd 114, 112, ion	n of 118, 95, 101, 103, 106, 108, 117, 114, 118, 125, 130,	2226 2229 89 168 180 190 203 203 203 203 203 203 203 203 203 20
tisee Teacher Electrical Engine Engineering Me Engineering Sc Acronautical Architectural Architectural Architectural Chemical Construction Construction Construction Construction Experiment S Diesel Experiment S Diesel Experiment S Diesel Geological Heating and Industrial Mechanical Sanitary Service Depan Transportation	Engine Engine lan of tation Air-Con-	, Requi ering a 111, Educat	visio ireme nd 114, 112, ion 113, 113,	n of 118, 95, 95, ents 101, 103, 104, 103, 104, 108, 117, 118, 125, 130, 115, 115, 118,	2226 229 89 168 180 190 193 203 203 203 203 203 203 203 225 203 249 25 260 269 269 203
tisee Teacher Electrical Engine Engineering Me Engineering Sc Acronautical Architectural Architectural Architectural Chemical Construction Construction Construction Construction Experiment S Diesel Experiment S Diesel Experiment S Diesel Geological Heating and Industrial Mechanical Sanitary Service Depan Transportation	Engine Engine lan of tation Air-Con-	, Requi ering a 111, Educat	visio ireme nd 114, 112, ion 113, 113,	n of 118, 95, 95, ents 101, 103, 104, 103, 104, 108, 117, 118, 125, 130, 115, 115, 118,	2226 229 89 168 180 190 193 203 203 203 203 203 203 203 225 203 249 25 260 269 269 203
tisee Teacher Electrical Engine Engineering Me Engineering Sc Acronautical Architectural Architectural Architectural Chemical Construction Construction Construction Construction Experiment S Diesel Experiment S Diesel Experiment S Diesel Geological Heating and Industrial Mechanical Sanitary Service Depan Transportation	Engine Engine lan of tation Air-Con-	, Requi ering a 111, Educat	visio ireme nd 114, 112, ion 113, 113,	n of 118, 95, 95, ents 101, 103, 104, 103, 104, 108, 117, 118, 125, 130, 115, 115, 118,	2226 229 89 168 180 190 193 203 203 203 203 203 203 203 225 203 249 25 260 269 269 203
tisee Teacher Electrical Engine Engineering, Se Organization, Architectural Architectural Architectural Cenamic Construction Construction Construction Diesei Electrical Experiment. S Furniture General Industrial Metals	Engine Engine lan of tation Air-Con-	, Requi ering a 111, Educat	visio ireme nd 114, 112, ion 113, 113,	n of 118, 95, 95, ents 101, 103, 104, 103, 104, 108, 117, 114, 125, 130, 115, 115, 118,	2226 229 89 168 180 190 193 203 203 203 203 203 203 203 225 203 249 25 260 269 269 203

Page

Deres

Ethics and Religion Executive Committee of the Board Trustees	47. of	237
Trustees		7
Expenses 24, 26,	101	300
Expenses 24, 26,	104.	100
experiment station, Agricultural	92,	86
Engineering Experimental Statistics	76,	96
Experimental Statistics	76	239
Extension, Agricultural		88
Extension, College		
		166
Faculty Council		8
Faculty Council Faculty, Officers of Instruction Farm Business Administration Farm Marketing and Farm Finance		9
Farm Rusings Administration	62	170
Farm Marketing and Farm Finance	00.	170
Fees 24,	164,	165
Fellowships	33.	159
Field Crops	69	942
Fees 24, Fellowships Field Crops Financial Aids and Scholarships Floriculture Forestry	00,	91
Planate And and Actionary and		01
Floriculture Forestry	- 6Z,	256
Forestry	75.	244
Fraternities, Honor		35
Social		2.0
Furniture		36
Furniture		123
Gardening, Vegetable	82,	264
General Engineering		123
		20
Geography		249
the local many	1002	249
Geological Engineering	125,	249
Grades and Honor Points		27
Graduate Division. Fee. Organizati	201	
Graduate Division. Fee, Organizati	on.	
Fellowships, Admission, Degrees,		
	26,	157
Graduates, 1944		329
Graduation Requirements for		0.00
Division / Parshas 10		1000
Division of Teacher Education Graduate Division		136
Graduate Division		15°
School of Agriculture and Forest	rv.	61
School of Engineering		.49
School of Agriculture and Forest School of Engineering School of Textiles		99 144
		99 144
Health of Students		49
Health of Students		49 144 41 134
Health of Students		49 144 41 134
Health of Students	47.	49 144 41 134 253
Health of Students	47.	49 144 41 134 253 35
Health of Students Heating and Air-Conditioning History and Political Science Honor Fraternities and Societies Honor Points	47.	49 144 41 134 253 35 27
Health of Students	47.	49 144 41 134 253 35
Health of Students Heating and Air-Conditioning History and Political Science Honor Fraternities and Societies Honor Points	47.	49 144 41 134 253 35 27
Health of Students Heating and Air-Conditioning History and Political Science Honor Fraternities and Societies Honor Points Horticulture	47.	49 144 41 134 253 35 27 256
Health of Students Heating and Air-Conditioning History and Political Science Honor Fraternities and Societies Honor Points Horticulture	47. 79.	49 144 41 134 253 35 27 256
Health of Students Health of Students Hintory and Political Science Honor Fraternities and Societies Honor Polinis Horticulture Industrial Arts Education Industrial Education	47. 78.	49 144 41 134 253 253 256 140 290
Health of Students Health of Students Hintory and Political Science Honor Fraternities and Societies Honor Polinis Horticulture Industrial Arts Education Industrial Education	47. 78.	49 144 41 134 253 35 27 256 140 220 127
Health of Students Heating and Air-Conditioning Heating and Air-Conditioning Heating and Air-Conditioning Honor Fratewise and Societies Honor Points Horticulture Industrial Education Industrial Education Industrial Education Information for Ambients	47. 78.	49 144 41 134 253 35 27 256
Health of Studenta Heating and Air-Conditioning History and Political Science Monor Fraternities and Societies Honor Points Horticulture Industrial Education Industrial Education Industrial Engineering Inspection for Applicants Inspection for Applicants	47. 78.	49 144 41 134 253 35 27 256 140 220 127
Health of Studenta Heating and Air-Conditioning History and Political Science Monor Fraternities and Societies Honor Points Horticulture Industrial Education Industrial Education Industrial Engineering Inspection for Applicants Inspection for Applicants	47. 78.	49 144 41 134 253 256 140 220 127 22
Health of Studenth Hesting and Air-Conditioning History and Political Science Honor Fraternities and Societies Horiteulture Industrial Education Industrial Education Industrial Education Industrial Engineering Information for Applicants Inspection Trips:	47. 78.	49 144 41 134 253 256 140 220 127 222 92
Health of Students Health of Students Health and Al-Conditioning History and Political Science Monor Praternities and Societies Monor Points Hontreillure Industrial Accelion Industrial Exploretion Industrial Engineering Information Grapplicants Inspection Trips; Sugingering	47. 78.	49 144 1134 255 256 140 220 225 140 220 225 5 5
Health of Studenth Hesting and Air-Conditioning History and Political Science Honor Fraternities and Societies Horiteulture Industrial Education Industrial Education Industrial Education Industrial Engineering Information for Applicants Inspection Trips:	47. 78.	49 144 41 134 253 256 140 220 127 222 92
Health of Students Heating and AricConsitioning History and Political Science Nono Praternities and Societies Houtical Heat Houtical Arts Education Industrial Engineering Information for Applicants Information for Applicants Information for Applicants Engineering Porsering Porsering Testiles	47. 78. 136,	49 144 1342 256 140 227 256 140 227 258 145
Health of Students Heating and AricConsitioning History and Political Science Nono Praternities and Societies Houtical Heat Houtical Arts Education Industrial Engineering Information for Applicants Information for Applicants Information for Applicants Engineering Porsering Porsering Testiles	47. 78. 136,	49 144 1342 256 140 227 256 140 227 258 145
Health of Students Heating and AricConsitioning History and Political Science Nono Praternities and Societies Houtical Heat Houtical Arts Education Industrial Engineering Information for Applicants Information for Applicants Information for Applicants Engineering Porsering Porsering Testiles	47. 78. 136,	49 144 1342 256 140 227 256 140 227 258 145
Health of Students Mesting and Aric-Conditioning History and Political Science Monor Points Monor Points Industrial Arta Education Industrial Arta Education Industrial Engineering Industrial Engineering Industrial Engineering Provide Provide International Description of Applications Description of Application Provide Provide International Description of Application Provide Provide International Description Into Astisochild Description of Applications	47. 78. 136,	49 144 1342 256 140 227 256 140 227 258 145
Health of Students Resting and Arconditioning Hatory and Political Science Honor Praternities and Societies Hontraultars H	47. 78. 136,	49 144 41 134 253 27 256 140 1227 256 140 1227 29 745
Health of Students Resting and Articonstitution Resting and Pulitical Science Moore Pulitical Science Moore Pulitical Science Industrial Arts Education Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Networks of the Industrial Networks of the Industrial Industrial Science Science Industrial Networks of the Industrial Industrial Science Industrial Indust	47. 78. 136,	49 144 41 134 253 256 140 227 256 140 227 25 145 79
Health of Students Resting and Ariconditioning Resting and Political Science House yand Political Science House Political Science House Political Science House Political House Political Hous	47. 78. 136,	49 144 41 134 253 27 256 140 1227 256 140 1227 29 745
Health of Students Resting and Ariconditioning Resting and Political Science House yand Political Science House Political Science House Political Science House Political House Political Hous	47. 78. 136,	49 144 41 134 255 256 1220 256 1220 255 140 1227 29 78 145 79 43
Health of Students Resting and Articonstitution Resting and Pulitical Science Moore Pulitical Science Moore Pulitical Science Industrial Arts Education Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Networks of the Industrial Networks of the Industrial Industrial Science Science Industrial Networks of the Industrial Industrial Science Industrial Indust	47. 78. 136,	49 144 41 134 253 256 140 227 256 140 227 25 145 79
Health of Students Resting and Articonstitution Resting and Publical Science Honor Publical Science Honor Publical Science Honor Publica Science Honor Publica Industrial Arts Education Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Industrial Detection Industrial Industrial Detection Industrial Industrial Detection Industrial Industrial Detection Industrial Indu	47, 78, 136,	49 144 41 253 256 140 220 127 256 140 220 78 31 79 43 31
Health of Students Resting and Articonstitution Resting and Publical Science Honor Publical Science Honor Publical Science Honor Publica Science Honor Publica Industrial Arts Education Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Industrial Detection Industrial Industrial Detection Industrial Industrial Detection Industrial Industrial Detection Industrial Indu	47, 78, 136,	49 144 41 134 253 27 256 140 220 127 2 78 31 79 43 31
Health of Students Resting and Articonstitution Resting and Publical Science Honor Publical Science Honor Publical Science Honor Publica Science Honor Publica Industrial Arts Education Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Industrial Detection Industrial Industrial Detection Industrial Industrial Detection Industrial Industrial Detection Industrial Indu	47, 78, 136,	49 144 41 134 253 27 256 140 220 127 2 78 31 79 43 31
Health of Students Resting and Articonstitution Resting and Publical Science Honor Publical Science Honor Publical Science Honor Publica Science Honor Publica Industrial Arts Education Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Detection Industrial Industrial Detection Industrial Industrial Detection Industrial Industrial Detection Industrial Industrial Detection Industrial Indu	47, 78, 136,	49 144 41 134 253 27 256 140 220 127 2 78 31 79 43 31
Health of Students Resting and Arto-Conditioning Resting and Publical Science Mone Publical Science Mone Publical Science Industrial Arts Education Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Industrial Science Industrial Industrial Science Industrial	47, 78, 136, 95,	49 144 41 134 253 255 256 120 127 22 56 140 127 25 78 145 79 43 1 264 130 129
Health of Students Resting and Arto-Conditioning Resting and Publical Science Mone Publical Science Mone Publical Science Industrial Arts Education Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Industrial Science Industrial Industrial Science Industrial	47, 78, 136, 95,	49 144 41 134 253 255 256 120 127 22 56 140 127 25 78 145 79 43 1 264 130 129
Health of Students Resting and Arto-Conditioning Resting and Publical Science Mone Publical Science Mone Publical Science Industrial Arts Education Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Industrial Science Industrial Industrial Science Industrial	47, 78, 136, 95,	49 144 41 134 253 255 256 120 127 22 56 140 127 25 78 145 79 43 1 264 130 129
Health of Students Resting and Arto-Conditioning Resting and Publical Science Mone Publical Science Mone Publical Science Industrial Arts Education Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Industrial Science Industrial Industrial Science Industrial	47, 78, 136, 95,	49 144 41 134 253 255 256 120 127 22 56 140 127 25 78 145 79 43 1 264 130 129
Health of Students Resting and Arto-Conditioning Resting and Publical Science Mone Publical Science Mone Publical Science Industrial Arts Education Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Industrial Science Industrial Industrial Science Industrial	47, 78, 136, 95,	49 144 41 134 253 255 256 120 127 22 56 140 127 25 78 145 79 43 1 264 130 129
Health of Students Resting and Arto-Conditioning Resting and Publical Science Mone Publical Science Mone Publical Science Industrial Arts Education Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Industrial Science Industrial Industrial Science Industrial	47, 78, 136, 95,	49 144 41 134 253 255 256 120 127 22 56 140 127 25 78 145 79 43 1 264 130 129
Health of Students Resting and Arto-Conditioning Resting and Publical Science Mone Publical Science Mone Publical Science Industrial Arts Education Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Industrial Science Industrial Science Industrial	47, 78, 136, 95,	49 144 41 134 253 255 256 120 127 22 56 140 127 25 78 145 79 43 1 264 130 129
Health of Students Resting and Arto-Conditioning Resting and Publical Science Mone Publical Science Mone Publical Science Industrial Arts Education Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Industrial Science Industrial Science Industrial	47, 78, 136, 95,	49 144 41 134 253 255 256 120 127 22 56 140 127 25 78 145 79 43 1 264 130 129
Health of Students Resting and Arto-Conditioning Resting and Publical Science Mone Publical Science Mone Publical Science Industrial Arts Education Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Industrial Science Industrial Science Industrial	47, 78, 136, 95,	49 144 41 134 253 255 256 120 127 22 56 140 127 25 78 145 79 43 1 264 130 129
Health of Students Resting and Arto-Conditioning Resting and Publical Science Mone Publical Science Mone Publical Science Industrial Arts Education Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Industrial Science Industrial Science Industrial	47, 78, 136, 95,	49 144 41 134 253 255 256 120 127 22 56 140 127 25 78 145 79 43 1 264 130 129
Health of Students Resting and Arto-Conditioning Resting and Publical Science Mone Publical Science Mone Publical Science Industrial Arts Education Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Science Industrial Industrial Science Industrial Science Industrial	47, 78, 136, 95,	49 144 41 134 253 255 256 120 127 22 56 140 127 25 78 145 79 43 1 264 130 129
Health of Students Health of Students Health and Africantilonian Health and Africantilonian Honor Putters Honor Pu	47, 78, 136, 95,	49 144 41 134 253 255 256 120 127 22 56 140 127 25 78 145 79 43 1 264 130 129

	Page
Nonresident Students	2
Occupational Information and Guidance	8. 23
Administration of State College Administration Council of the Consolidated University	3
Consolidated University Instruction: Faculty of State Colleg	e .
Instruction : Faculty of State Colleg Other Administrative Officers Special Officers Trustees	
Physical Education and	
Athletics	8, 28
Physical Education and Athletica 37, 44 Physics 39 Plant Pathology 71 Political Science, History and Pomology 74 Toolarty Science 81 Professional Degrees Psychology 222	, 28- , 19-
Pomology	25
Professional Degrees	, 289
College Engineering Experiment Station . Student	40
Refunds Refigion, Ethics and 40 Registration Reserve Officers Training Corps Rooms, Dormitory 25 Room Rent Rural Sociology 83	21
Religion, Ethics and . 41	. 24
Reserve Officers Training Corps	4
Rooms, Dormitory 22 Room Rent	, 2
Rural Sociology .83	, 29
Sanitary Engineering 113, 116 Scholarships and Awards Scholarships, Financial Aids and School of Agriculture and Forestry School of Textiles School of Textiles Schoo	61 89 144 47
Section for scoons 31 Engineering Extension Testle, for mill men Societies, Glubs, Praternilies, 34, 34 Sola Sola Sola Clubs and Societies Fraternilies, Honor Coocial Clubs and Societies Fraternilies, Honor Coocial Publications Summer Work for Engineering	99
Textile, for mill men	161
Societies, Clubs, Fraternities 34, 35 Sociology	. 36
Soils	. 295
Student Activities	3
Fraternities, Honor	34
Social	36
Publications	3
Summer Work for Engineering Students	93
Teacher Education : Organization	
Objects, Requirements Agricultural Education 137 Industrial Arts Education 144 Industrial Education 136	13
Industrial Arts Education 134	. 21
Industrial Education 136 Occupational Information and	, 22
Cocupational Information and Guidance 137 Textiles, School of: Organization, Objects Reput	, 29
Objects, Requirements	14
JexLifes, School of: Organization, Objects, Requirements Chemistry and Dyeing	, 15
Arts Degrees	146
Manufacturing	. 151
Mill Men, Short Course	. 14

-

	Tage
Weaving and Designing Yarn Manufacturing and	148, 153
Knitting Transfer Students	146. 153
Transportation Trustees, Board of	. 113, 115, 203
Executive Committee	25, 164, 165
Vaccination	27

Page	
War Training 99, 172	
War Training 99, 172 Weaving and Designing	
Wildlife Conservation and	
Manngement	
Yarn Manufacturing and Knitting 116, 117 Young Men's Christian Association 44	
Young Men's Christian Association . 44	
Zoology	

.

# DIRECTORY

## FACULTY, STAFF, AND STUDENTS

OF

NORTH CAROLINA STATE COLLEGE OF

AGRICULTURE AND ENGINEERING

OF THE

UNIVERSITY OF NORTH CAROLINA

## 1945-1946

State College Station

Raleigh

## OFFICERS OF ADMINISTRATION

#### FOR THE ACADEMIC YEAR 1945-46

#### THE CONSOLIDATED UNIVERSITY

President of the University. Frank Porter Graham Controller W. D. Carmichael, Jr.

#### N. C. STATE COLLEGE

Chancellor		
Dean of Students		E. L. Clovd
Director of Registration		W. L. Maver
Assistant Controller and Bi	usiness Manager	J. G. Vann

#### FACULTY COUNCIL

Colonel J. W. Harrelson, Chairman Chancellor
Donald B. Anderson Professor of Botany
L. D. Baver Dean. School of Agriculture and
Forestry; Director, Agricultural Experiment Station
Forestry, Director, Agricultural Experiment Station
B. F. Brown
T. E. Browne Director, Division of Teacher Education
Malcolm E. Campbell
E. L. Cloyd, Secretary
H. A. Fisher
John Harold Lampe Dean, School of Engineering
W. L. Mayer Director of Registration, and Purchasing Agent
Z. P. Metcalf Associate Dean, Graduate School;
Head, Department of Zoology and Entomology
I. O. Schaub Director, Agricultural Extension Service
W. E. Shinn Professor of Textiles
C. B. Shulenberger Professor of Accounting
J. G. Vann Assistant Controller and Business Manager
L. L. Vaughan

#### OTHER OFFICERS

Alumni Secretary H. W. Taylor
Architects: College
Landscape J. P. Pillsbury
Athletics: Director J. F. Miller
Business Manager J. L. Von Glahn
College Extension, Director
Dining Hall, Steward H. E. Stewart
Dormitories: Superintendent T. T. Wellons
Chief Assistant James E. Hobbs
Engineer, College L. L. Vaughan
Gymnasium, Custodian
Laundry, Superintendent W. L. Godwin
Librarian, Acting . Mrs. Reba Davis Clevenger
Military, P. M. S. & T Col. Douglass N. McMillin
Music, Director
Nurse, Head Miss I. Trollinger
Physician A. C. Campbell, M.D.
Power Plant Superintendent A A Biddle
Publicity, College, Director Rudolph Pate
Self-Help, Director Mrs. L. W. Bishop
Service Department, Manager W. F. Morris
Station Farms, Director
Y.M.C.A., General Secretary
and a second sec

## DEPARTMENTAL TELEPHONE DIRECTORY

NOTE: Dial 9 before making an outside call

	TTO TE. DIAL 5 DELO	re making	g an outside can
	GENERAL OFFICES	297	Org. Chemistry
210	Chancellor	265	Gen. Office
252	Alumni Secretary	269	Cattle and Swine Ext.
295	Assistant Controller	300	Cotton Fiber Invest.
2 - 2407	Bus, Mgr. Athletics	277	Dairy Extension
2-0243	Boarding Dept. Business Office	305	Dairy Research-Sta.
298	Business Office	212	District Agents
278	Cashiers' Office	313	Experimental Statistics
260	College Extension	291 270	Farm MgtExt.
215	Dean of Students	270	Forestry
6934	Coaches' Office	214	4-H Club Work
7615	Infirmary	244	Home Demonstration
283	Laundry	242	Clothing Home Mat. Foods
259	Library	243	Clothing, Home Mgt., Foods District Home Agt.
233	Military	275	Horticulture
253	News Bureau	240	Greenhouse
234	Power Plant	296	Landscape Arch.
2-1340		292	Program Planning
281	Print Shop	254	Mailing Room-Ext.
230	Purchasing Dept.	306	Marketing
219	Registration Office	280	Poultry
225	Students Supply Stores	9696	Poultary Form
272	Warehouse:	0.0544	Poultry Farm Prod. and Mktg. Agcy. (AAA) Publications
-14	Central Stores	2-0344	Dublications
	Drayage	312	Publications Dural Casialant
	Supt. of Dormitories	239	Rural Sociology
7184	Y.M.C.A.	239	Zoology
1104	1.M.C.A.	DI	UISION OF TEACTER
	BASIC DIVISION	DI	IVISION OF TEACHER
223		070	EDUCATION
223	Dean's Office	256	Director's Office
	Economics	256	Agr. Educ.
237	English	258	Industrial Arts
231	Ethics and Religion	257	Trade Industrial
200	History	286	Psychology
231	Modern Languages	282	Vocational Education
218	Physical Education		
231	Sociology		TEXTILE SCHOOL
		273	Dean's Office
SCH	OOL OF AGRICULTURE	273	Yarn Mfg.
211	Dean's Office	288	Chemistry and Dyeing
211	Dir. of Exp. Sta.	289	Knitting
213	Dir. of Extension	293	Library
280	Dir. of Instruction	327	Research
206	Agr. Chem. Res.		
308	Agr. Econ. (College)	SCH	OOL OF ENGINEERING
255	Agr. Economist	216	Dean's Office
274	Agr. Engr.	250	Architecture
8901	Agr. Exp. Farm	249	Ceramic Engr.
262	Agronomy	301	Chemical Engr.
209	Chemistry Lab.	303	Civil-Highway
220	Research Lab.	236 307	Electrical Engr.
222	Soils Lab. (College)	307	Engr. Exp. Sta.
263	Farm Crops	317	Engr. Mechanics
294	Agronomy Extension	304	Geology
324	Forage Crops	227	Mathematics
268	Animal Husbandry	246	Mechanical Engr.
241	Ani. Nutrition	247	Mechanical Drawing
276	Cattle and Swine	245	Mechanical Shops
267	Botany	229	Physics
266	Chemistry-Dept. Head	303	Registration Board
264	Biochemistry	303	Sanitary Engr.
	For information concerning	Military	Personnel dial 0 or 233

For information concerning Military Personnel dial 0 or 233

#### STANDING COMMITTEES

FOR THE SCHOOL YEAR 1945-46

DISCIPLINARY:

ATHLETICS: H. A. Fisher, Chairman A. L. Wilson, Secretary J. W. Patton I. O. Schaub J. L. Stuckey BUILDINGS AND GROUNDS: M. E. Gardner, Chairman J. P. Pillsbury, Secretary W. F. Babcock C. H. Bostian J. K. Coggin L. E. Cook P. I. Commune L. E. Cook R. L. Cummings R. S. Fouraker T. R. Hart W. N. Hicks W. H. Hoffman C. L. Mann J. F. Miller W. F. Morris T. L. Nash W. E. Shinn Pore Shumpler Ross Shumaker J. G. Vann W. G. Van Note CAMPUS GOVERNMENT: W. N. Hicks, Chairman J. W. Cell E. L. Cloyd F. W. Lancaster J. R. Ludington J. D. Paulson G. K. Slocum COLLEGE EXTENSION: H. B. Briggs, Chairman E. W. Ruggles, Secretary C. H. Bostian J. K. Coggin R. S. Dearstyne T. R. Hart A. I. Ladu Roger Marshall C. G. Mumford J. D. Paulson S. R. Winston COLLEGE GOVERNMENT: J. W. Patton, Chairman E. L. Cloyd, Secretary E. L. Oloya, Secretary C. H. Bostian L. E. Cook J. R. Ludington W. E. Shinn C. B. Shulenberger G. Wallace Smith

SCIPLINARY: F. W. Lancaster, Chairman E. L. Cloyd, Secretary R. S. Fouraker Roger Marshall D. J. Moffie J. A. Rigney FRATERNITY LIFE: KATERNITY LIFE: H. Page Williams, Chairman E. L. Cloyd, Secretary R. C. Bullock A. M. Fountain F. M. Haig FRESHMAN HOUSING: SHIMAN HOUSING: C. M. Mumford, Chairman E. L. Cloyd H. F. Dade F. M. Haig W. N. Hicks J. T. Lynn W. F. Morris W. A. Reid W. A. Reid HISTORY: STORY: J. W. Patton, Chairman J. K. Coggin A. M. Fountain F. M. Haig T. R. Hart C. L. Mann H. W. Taylor H. H. Vestal HONORARY DEGREES: Z. P. Metcalf, Chairman L. D. Baver B. F. Brown T. E. Browne Malcolm E. Campbell H. A. Fisher E. G. Hoefer J. H. Lampe I. O. Schaub JOBS AND SELF-HELP: F. B. Wheeler, Chairman J. C. Clark E. L. Cloyd E. S. King W. F. Morris R. H. Ruffner H. F. Stawart H. E. Stewart LIBRARY: A. I. Ladu, Chairman

- Mrs. Reba D. Clevenger, Sec'y D. B. Anderson

LIBRARY: C. R. Bramer J. M. Clarkson R. W. Cummings A. H. Grimshaw A. H. Grimshaw J. R. Ludington T. B. Mitchell G. H. Satterfield J. L. Stuckey W. G. Van Note L. L. Vaughan LOANS: E. L. Cloyd, Chairman W. L. Mayer, Secretary C. B. Shulenberger J. G. Vann UBLIC LECTURES Faculty Members: L. E. Hinkle, Chairman L. O. Armstrong R. C. Bulerch R. C. Bulerch R. C. Hourch R. Grover E. G. Hoefer E. S. King C. D. Kutschinski Rocer Marshall PUBLIC LECTURES Roger Marshall Rudolph Pate Rudolph Pate J. W. Patton R. B. Rice G. H. Satterfield G. Wallace Smith B. W. Wells PUBLIC LECTURES: Student Members: To be appointed REFUND OF FEES: E. L. Cloyd, Chairman W. L. Mayer J. G. Vann RESEARCH: Z. P. Metcalf, Chairman L. D. Baver Malcolm E. Campbell J. K. Coggin Gertrude M. Cox Gertrude M. Cox J. B. Derieux A. H. Grimshaw C. D. Grinnells J. H. Lampe J. F. Lutz R. B. Rice G. H. Satterfield L. L. Stucker J. L. Stuckey W. C. Van Note B. W. Wells

SCHOLARSHIPS, AWARD OF: ADLARSHIPS, AWARD OF: E. L. Cloyd, Chairman L. O. Armstrong L. R. Harrill T. R. Harti T. B. Mitchell W. E. Selkinghaus J. G. Vann Social Functions. Faculty Members: F. M. Haig, Chairman E. L. Cloyd, Secretary J. F. Miller J. F. Miller R. H. Ruffner G. Wallace Smith A. F. Greaves Walker ocial Functions, Student Members: John C. Boyter E. R. Conway, III W. J. Daniel C. A. Fisler I. W. Gatlin B. E. Gupton R. W. Kennison, Jr. W. K. Thornton R. E. Wooten Social Functions. STUDENT PUBLICATIONS BOARD. Faculty Members: F. H. Jeter, Chairman Rudolph Pate, Secretary H. F. Dade Roger Marshall W. L. Mayer STUDENT PUBLICATIONS BOARD, Student Members: Student Members Mario Cohen W. J. Daniel L. W. Gatlin D. T. House G. M. House E. J. Mahoney J. M. Monroe E. T. Sullivan S. Walher, Jr. P. F. Wooter R. E. Wooten H. C. Wroton STUDENT WELFARE, STUDENT WELFARE, Faculty Members: C. R. Bramer, Chairman A. C. Campbell J. D. Clark E. L. Miller C. G. Mumford W. A. Reid G. K. Slocum I. L. Stochart J. L. Stuckey

STUDENT WELFARE, Student Members: To be appointed

TRAFFIC: W. H. Hoffman, Chairman W. F. Babcock, Secretary R. W. Cummings C. G. Mumford W. G. Van Note

## DORMITORY ASSISTANTS 1945-1946

JAMES E. HOBBS, Chief Assistant 203 Watauga, Box 3021

Note: Dormit	ory telephones are pay-stations. They should be dialed directly, not through the College exchange.
Alexander	Room Name of Assistant
(A): Tel.	117 J. E. Deas
9257	217 Pat T. Fugate, Jr.
Turlington (C): Tel. 9453	
Bagwell:	
Tel. 9412 (1st)	111 J. J. West 125 C. A. Fisler
9131 (2nd)	211 J. B. Stinson
	224 W. K. Thornton 325 Norman Hodul
Becton:	9 H. D. Penn
Tel. 9256 (1st)	109 Warren C. Shaw
9334 (2nd)	124 Stewart Wood 209 Jay H. Hardee
	224 D. T. House 309 W. H. Riggan, Jr.
	324 T. J. Morgan
Berry: Tel.	Coll Down
	Social Room Frank N. Burns John Parnag
Tel. 9350 (1st)	
Tel. 9350 (1st) 9334 (2nd) Fieldhouse: Tel. 9127 Syme:	
Tel. 9350 (1st) 9334 (2nd) Fieldhouse: Tel. 9127	John Parnag
Tel. 9350 (1st) 9334 (2nd) Fieldhouse: Tel. 9127 Syme: Tel. 9288 (1st)	John Parnag
Tel. 9350 (1st) 9334 (2nd) Fieldhouse: Tel. 9127 Syme: Tel. 9288 (1st) 9150 (2nd) Fourth: Tel. Gold:	John Parnag
Tel. 9350 (1st) 9334 (2nd) Fieldhouse: Tel. 9127 Syme: Tel. 9288 (1st) 9150 (2nd) Fourth: Tel.	John Parnag 107
Tel. 9350 (1st) 9334 (2nd) Fieldhouse: Tel. 9127 Syme: Tel. 9288 (1st) 9150 (2nd) Fourth: Tel. Gold: Tel.	John Parnag 107
Tel. 9350 (1st) 9334 (2nd) Fieldhouse: Tel. 9127 Syme: Tel. 9288 (1st) 9150 (2nd) Fourth: Tel. Gold: Tel.	John Parnag John Parnag I07 J. T. Moss I01 G. C. Fuller P. W. Taylor Sol. J. E. Adkins I03 M. B. Mizelle 203 J. E. Hobbs
Tel. 9350 (1st) 9334 (2nd) Fieldhouse: Tel. 9127 Syme: Tel. 9288 (1st) 9288 (1st) 9288 (1st) 9288 (1st) 70urth: Tel. 9263 (2nd) Watauga: Tel. 9132	John Parnag 107 J. T. Moss 101 G. C. Fuller 201 P. W. Taylor 301 J. E. Adkins 103 M. P. Mizelle 203 J. E. Hobbs 303 V. C. Thomas
Tel. 9350 (1st) 9334 (2nd) Fieldhouse: Tel. 9127 Syme: Tel. 9288 (1st) 9150 (2nd) Fourth: Tel. Gold: Tel. 9263 (2nd) Watauga:	John Parnag John Parnag I07 J. T. Moss I01 G. C. Fuller P. W. Taylor Sol. J. E. Adkins I03 M. B. Mizelle 203 J. E. Hobbs

## FRATERNITY ROSTER

## 1945-1946

Organization	Address	Telephone
Alpha Lambda Tau	10 Enterprise Street	
Delta Sigma Phi	2412 Hillsboro Street	2-1873
Lambda Chi Alpha	10 Enterprise Street	8218
Pi Kappa Alpha	1720 Hillsboro Street	8910
Pi Kappa Phi		
Sigma Alpha Mu	109 Oberlin Road	7638
Sigma Chi	12 Horne Street	3-1934
Sigma Nu	2412 Hillsboro Street .	9531
Sigma Phi Epsilon	103 Chamberlain Street	
Sigma Pi	2513 Clark Avenue	2-0268

## FACULTY DIRECTORY

## 1945-1946

77......

	13.000.
*Abrahamsen, Martin A.—Agr. Economist., Agr. Econ. Dept. 210-A Patterson Residence: 2718 Bedford Ave. Tel. 6204.	306
*Adams, A. Harvey-Clerk, Central Stores. Warehouse Residence: Clayton, N.C. Tel. 333-1.	272
Adams, Hazel C.—Sec., Dept. of Hort. 304 Polk	275
*Adams, W. EAsst. Prof., M. E. Dept. 206 Page	247
Alderman, Pansy—Sec., Entom. Ext. 105 Zoology Residence: 2230 Hillsboro St. Tel. 5096.	201
Alexander, Margaret-Sec., Home Demonstration Dept., Agr. Ext. Service. 209-1911 Residence: 1710 Park Drive. Tel. 3-1287.	243
*Alford, A. O.—Mgr., College Print Shop. 13 Tompkins Residence: 1904½ Hillsboro St. Tel. 2-1422.	281
*Allen, Mrs. John E., Jr.—Sten., Program Planning Dept. 309—1911 Residence: 307 W. Park Drive. Tel. 9961.	292
*Allen, Ruth Couch (Mrs. LeRoy)—Instr., English Dept. 6 Pullen . Residence: Roylen Wood. Tel. 9685.	237
*Altman, L. B.—Dist. Agt., Agr. Ext. Service. 101 Ricks Residence: 1210 Cowper Drive. Tel. 2-3204.	212
*Ammerman, James P., Jr.—Asst. in A. H., A. I. Dept. A. H. Farm. Residence: Cary, N. C., Rt. J. Tel. 2-0354.	
*Anderson, Donald B.—Prof. of Bot., Bot. Dept. 212 Winston Residence: 906 Brooks Ave. Tel. 2-3061.	267
Anderson, R. L.—Assoc. Prof., Expt. Stat. Dept. 106-B Patterson Residence: 107 Chamberlain St. Tel. 7468.	313
Andrews, Noreen-Sec., Psych. Dept. 124 Tompkins Residence: 104 N. McDowell St.	286
Arant, Anamerle—N. W. Dist. Agt., Ag. Ext. Service, Home Demonstration. 201-1911 Residence: 1821 Glenwood Ave. Tel. 8089.	285
Arey, J. A.—In Charge, Office of Dairy Ext. 102 Polk Residence: 5 Maiden Lane. Tel. 2-3535.	277
*Armstrong, Lindsey Otis—Assoc. Prof. of Ed., Div. of Teacher Ed. 116 Tompkins Residence: 308 Dixie Trail. Tel. 2-0063.	256
*Atkins, Mrs. Rupert E.—Ext. Auditor, Agr. Ext. Service. 105 Ricks Residence: 3021 Eton Rd. Tel. 2-0989.	271
*Austin, Nan B.—Sec., M. L. Dept. 205 Peele Residence: 409 Calvin Rd. Tel. 2-1826.	231

.

*Peleed Mer Terr C. Clad M. C. Clark D. J. C. D. J. C. D.	Ext.
*Babcock, Mrs. Jane S. Clerk, N. C. State Board of Registration for Engrs. and Land Surveyors. 207 C. E. Residence: 1702 Hillsboro St. Tel. 6825.	303
*Babcock, W. F.—Asst. Prof., C. E. Dept. 202 C. E. Residence: 1702 Hillsboro St. Tel. 6825.	303
*Badders, Hal Asst. Supt., Power Plant. Power Plant Residence: 117 Cox Ave. Tel. 2-2452.	234
Bailey, Janie R.—Sec., M. E. Dept. 109 Page Residence: 854 W. Morgan St. Tel. 2-3840.	246
*Baker, Mrs. A. L.—PBX Operator, College Tel. Exchange. 117 Winston Residence: 537 E. Jones St. Tel. 4143.	0
*Ballenger, S. T. Assoc. Prof., M. L. Dept. 213 Peele Residence: 2714 Rosedale Ave. Tel. 9570.	231
Barker, Nell-Cashier, Business Office. "B" Holladay Residence: Grosvenor Gardens, Apt. C-4. Tel. 5902.	278
*Barnes, Mamie L.—Warp Drawer, School of Textiles. 2nd Floor, Tex. Building Residence: 1904½ Hillsboro St. Tel. 2-2567.	273
*Barnhardt, Luther W. Assoc. Prof., Hist. and Polit. Sc. 102 Peele . Residence: 2502 Stafford Ave. Tel. 8796.	200
*Baumgarten, W. L.—Asst. Prof., Arch. 309 Daniels Residence: 2509 Country Club Rd. Tel. 7486.	250
*Baver, L. D.—Dean, School of Agr. and For., and Dir., Agr. Exp. Sta. 108 Patterson Residence: 1810 St. Mary's St. Tel. 2-3741.	211
Baxley, Hartlee Mae—Res. Asst. (Nutr. Section), A. I. Dept. 314 Polk Residence: E-1 Grosvenor Gardens. Tel. 3-1851.	241
*Beam, R. D. Dir. of Foundations. Public Relations Office. "A" Holladay Residence: 1539 Caswell. Tel. 2-1869.	322
*Beamon, Mrs. Naomi F.—Sec., Library Residence: College Court, Apt. 5. Tel. 5673.	259
*Beasley, Mary Carter-Sec., Dir. of Foundations. "A" Holladay Residence: 327 Oakwood Ave. Tel. 2-3305.	322
*Bell, Mrs. J. C., Jr.—Veterans' Clerk, Business Office. 105 Holladay Residence: 107 Chamberlain. Tel. 7468.	295
*Bennett, L. S.—Res. Assoc. Prof. Agron., Agron. Dept. 315 Ricks Residence: 2636 Kilgore Ave. Tel. 5303.	207
*Best, Mrs. Wilfrid—Sec., Farm Management. 206 Patterson Residence: B-1 Wilmont Apts.	291
*Biggs, Mrs. V. L.—Clerk, Publications. 5 Ricks Residence: 3208 Merriman Ave. Tel. 5689.	279
*Bishop, Mrs. L. W. Office Sec., Self-Help Dir., Y.M.C.A Tel. Residence: 8 Bagwell Ave. Tel. 2-0672.	7184

	Ext.
*Biswell, H. H. Plant Ecologist, In Charge, Range Research, A. I. Dept., A. H. Section. 218 Polk	326
Bledsoe, M. C. M. (Miss) Sec., A. I. Dept., A. H. and Dairying Section. 115 Polk Residence: 1103 Brooks Ave. Tel. 2-0688.	268
*Blumer, Thomas N.—Research Asst. Prof. of A. I. 217 Polk Residence: 3209 Hillsboro St. Tel. 4544.	276
Boshart, Edward W. Prof. of Ed. and Guid., Div. of Teacher Ed. 101 Tompkins Residence: F-1-B Cameron Court Apts. Tel. 2-2745.	258
"Bostian, C. H. Asst. Dir. of Instr., Agr. and For., Assoc. in Poul.	
Genetics and Prof. of Zool. Poul. and Zool. Dept. 109-B Patterson Residence: Lake Boone Trail (Route 6). Tel. 2-3600.	280
*Brady, D. E. Prof., A. H., A. I. Dept. 217 Polk 326 & Residence: 2311 Lake Drive.	276
Bramer, C. RAssoc. Prof., C. E. Dept. 209 C. E. Bldg. Residence: 311 W. Park Dr.	303
*Bray, Grover D. S/Sgt., DEML-ASTP. Mil. Dept. Armory Residence: 202 Groveland Ave. Tel. 8012.	232
*Brennecke, Cornelius Godfrey Prof. and Head, E. E. Dept. 203 Daniels Residence: 2408 Everett Ave. Tel. 4594.	236
Bretsch, Gertrude Jr. Stat. Clerk, Exp. Stat. 101 Patterson Residence: 117 S. Boylan Ave. Tel. 2-3193.	313
*Brickhouse, C. M. Dist. Agt., Agr. Ext. Service. 101 Ricks Residence: 1013 Harvey St. Tel. 9585.	212
<sup>a</sup> Bridge, Gladys G.—Veterans' Clerk, Reg. Office. 206 Holladay Residence: 407 Gardner St. Tel. 2-3358.	219
<sup>a</sup> Bridges, W. S. Assoc. Prof., M. E., M. E. Dept. 105 Page Residence: 125 Chamberlain St. Tel. 4159.	246
*Briggs, Hermon B.—Prof., Engr. Draw. and Des. Geom. M. E. Dept. 206 Page Residence: 126 Groveland Ave. Tel. 2 1030.	247
*Briggs, Betty E. Sec., Ag. Ext. Service. Home Demonstration. 222-1911 Residence: 226 East Park Drive. Tel. 6076.	242
*Bright, Richard Assoc. Prof., C. E. Dept. 107 Winston Residence: Rt. 1, Neuse, N. C. (No telephone.)	301
"Brigman, H. P. Clerk, Poul. 214 Ricks Residence: 213 N. Bloodworth St. Tel. 5940.	280
*Brooks, Dr. E. C. Pres. Emeritus of the College. Residence: 617 N. Blount St. Tel. 4582.	
*Brooks, Mrs. J. M. Night Supervisor. Clark Infirmary Tel. Residence: 1306 Mordecai Dr. Tel. 2-1169.	7615

	Ext.
<sup>o</sup> Brown, B. F.—Dean, Basic Div. 103 Peele Residence: 202 Hillcrest Rd. Tel. 2-0692.	223
*Brown, Edmond J. Asst. Prof., Physics. 208 Daniels Residence: 2710 Kittrell Dr. Tel. 3-1168.	229
Brown, Jean Sec., Ext. Studies, Agr. Ext. Service. 108 Ricks Residence: 1313 Hillsboro St. Tel. 4142.	255
Brown, Robert R. Prof., E. E. Dept. 104 Daniels	235
*Brown, T. T.—Specialist, Poul. Ext. Dept. 210 Ricks Residence: 1709 Bickett Blvd. Tel. 9731.	321
*Browne, T. E.—Director, Div. of Teacher Ed. 120 Tompkins Residence: 1715 Park Dr. Tel. 6151.	256
*Browne, Wm. Hand, Jr.—Prof., E. E. Dept. "B" Daniels Residence: Dixie Trail-Extended. Tel. 5201.	235
*Bryan, Mrs. D. M.—Sten., N. C. Crop Improvement Association. 315 Ricks Residence: 3303 Clark Ave. Tel. 8083.	207
Bryan, Mary-Sten., M. E. Dept. 109 Page Residence: 9 Pogue St. Tel. 3-3530.	323
Bryan, Rose Ellwood—Home Demonstration Agent at Large. Agr. Ext. Service. 208-1911 Residence: Roxboro Rd., Durham, N. C. Tel. R 3452.	243
Buffaloe, Minnie M.—Clerk, Poul. Ext. 208 Ricks Residence: 1115 Hillsboro St. Tel. 6250.	321
*Buell, Murray F. Asst. Prof., Botany. 201 Winston Residence: 911 Brooks Ave. Tel. 2-2112.	267
*Bullock, Roberts C. Assoc. Prof. Math. 218 Tompkins Residence: Dixie Trail. Tel. 7127.	228
*Burkhart, Leland—Asst. Prof. Agron., Agron. Dept. 6 Withers Residence: 214 Taylor St. Tel. 3-2320.	209
Busbee, D. Frances-Ediphone Dept. 213-1911 Residence: c/o W. E. Lawrence, Rt. 3. Tel. 2-0763.	221
Cain, Nancy B.—Clerk, Agr. Ext. Auditing. 105 Ricks Residence: 210 Ashe Ave. Tel. 8677.	571
*Callahan, Mrs. Esta-Clerk and Sten., Ag. Ec. 205-B Patterson Residence: 1600 Fairview Rd. Tel. 8067.	308
Calvert, Ellen-Sec., Ext. Spec. Plant Pathology. 202 Winston Residence: 2610 Vanderbilt Ave. Tel. 2-1915.	267
*Campbell, Dr. A. C.—College Physician. Clark Infirmary Tel. Residence: 302 Hawthorne Rd. Tel. 6849.	7615
*Campbell, Malcolm E.—Dean, School of Tex. 108 Tex. Bldg Residence: 1315 Williamson Dr. Tel. 3-3971.	273
*Carley, William Sutton Asst. Prof., E. E. Dept. 104 Daniels Residence: 118 E. Park Dr. Tel. 8798.	235

14

	Ext.
*Carmichael, W. D., Jr.—Controller, Consol. Univ. 105 Holladay Residence: Chapel Hill, N. C. Tel. 4141.	295
*Case, L. I.—In Charge, A. H. Ext. 201 Polk Residence: 2703 Kilgore Ave. Tel. 2-0198.	269
Castleman, Ann—Tech. Asst., Exp. Stat. 101 Patterson Residence: 2402 Clark Ave., Apt. 5. Tel. 2-3789.	313
*Caudle, J. E.—Soil Scientist, Soil Conservation Service. 213-1911 Tel. 3- Residence: Rt. 1. Tel. County 5405.	2531
*Caudle, Mrs. T. J.—Sec., Farm Mgt. Dept. 206 Patterson Residence: 1523 Hanover St. Tel. 3-1824.	291
*Cell, John W.—Asso. Prof., Math. Dept. 218 Tompkins Residence: 602 Dixie Trail. Tel. 2-2528.	228
Chambers, Clement L. Mgr., Book Dept. Students Supply Store. Y.M.C.A. Tel. 2-23874 and Residence:	225
Chamblee, D. S.—Res. Instr. Agron., Forage Crops, Agron. Dept. 320-1911 Residence: 140 Alexander Dorm., Box 4132.	324
*Chase, Eugene BMajor, Inf., Commanding Officer, 1st Bn. ASTP Mil. Dept. 108 Syme Residence: 812 E. Gardner Dr. Tel. 3-2680.	203
*Chronister, Borden S.—Instr., Agron., Soil Fertility, Agron. Dept. 310 Withers Residence: 3207 Merriman Ave. Tel. 2-0993.	222
*Clark, Joseph Deadrick—Prof., English Dept. 108 Pullen Residence: 15 Furches St. Tel. 7385.	237
*Clarkson, J. M.—Assoc. Prof., Math. Dept. 206 Tompkins Assoc. Prof., Exp. Stat. 105-A Patterson Residence: 2605 Clark Ave. Tel. 8762.	226 313
*Clayton, Carlyle N.—Asso. Plant Pathologist. Botany Dept. 217 Winston Residence: 2601 Van Dyke Ave.	267
*Clevenger, Mrs. Reba Davis Acting Librarian. Library Residence: 305 Calvin Rd. Tel. 8141.	259
Clevenger, Wm. L.—Prof., Dairy Manufacturing. A. I. Dept., A. H. and Dairying Section. 211 Polk Residence: 5 Maiden Lane. Tel. 2-3535.	305
*Cloyd, E. L.—Dean of Students. 108-109 Holladay Residence: 2224 Hillsboro St. Tel. 5983.	215
*Coggin, J. KProf., Agr. Ed., Div. of Teacher Ed. 104 Tompkins . Residence: Cary, N. C. Tel. 2482.	257
*Cole, L. B.—Butcher, Cafeteria. Leazar Hall	0243

100.00

	Love.
Collins, E. R. Prof. of Agron., In Charge, Agron. Ext. Dept. 203 Ricks Residence: 2713 Rosedale Ave. Tel. 9715.	294
'Colwell, W. E. Res. Prof., Agron. Dept. Residence:	
*Comstock, R. E. An. Sci. Stat., Exp. Stat. 107 Patterson Assoc. A. I., A. I. Dept. A. H. Section. 337-1911 and	313
216 Polk Residence: 2726 Everett Ave. Tel. 3-1885.	326
*Cone, A. A. Asst. State Conservationist, Soil Conservation Service. 234-1911 Residence: 118 E. Park Dr. Tel. 8798.	2531
Conley, Mable C. Sec., Div. of For. 301 Ricks Residence: 15 Enterprise St. Tel. 8433.	270
Connor. Irene T. Sec., Reg. Office. 207 Holladay Residence: 115 Woodburn Rd. Tel. 2-2933.	219
<sup>'</sup> Conner, N. W. Prof., E. M. Dept. 101 C .E. Residence: 2719 Bedford Ave. Tel. 4924.	317
*Cook, Leon E. Prof., Agr. Ed., Div. of Teacher Ed. 118 Tompkins Residence: 111 Brooks Ave. Tel. 2-1234.	256
Cooke, Henry C. Instr., Math. Dept. 221 Tompkins	228
*Cope, R. L. Asst. Prof., M. E. Dept. Shop Residence: 2 Logan Court. Tel. 2-2673.	245
*Copley, T. L.—Project Supervisor, Research Div., Soil Conservation Service. 228-1911 Residence: 1722 Chester Rd. Tel. 5956.	3579
Cox, Gertrude M Dir., Institute of Stat. 105-B Patterson	313
Cox, GladysSec., Dean of Students' Office. 108-109 Holladay Residence: 109 Park Ave. Tel. 2 2533.	215
Cox, Paul M. Mechanic, School of Tex. Tex. Building Residence: 13 W. Dixie Dr. Tel. 2 1940.	287
Craddock, Anne Sec., Arch. Dept. 315 Daniels . Residence: 2608 Vanderbilt Ave. Tel. 2-3745.	250
*Crawford, John W.—Program Planning Specialist, Program Planning Dept. 313-1911 Residence: 3204 Clark Ave. Tel. 5050.	292
Crawford, Ora JSten., Ediphone Dept. 214-1911 Residence: 2406 Fairview Rd. Tel. 8109.	221
Creech, Eunice Sten., Expt. Stat. Dept. 105-A Patterson Residence: 2710 Rosedale Ave. Tel. 2-3091.	313
Crocker, Lizette Sten., Zool. Dept. 103 Zoology Residence: 215 N. Boylan Ave. Tel. 4855.	239
*Croom, Mrs. W. D. Sec., Dept. of Phys. Ed. and Ath. Gym . Tel. 2- Residence: 204 E. Park Dr. Tel. 3-1043.	2407

\* Married.

16

	L.CL.
Crump, Ila Mae Assoc. Nurse, Clark Infirmary Tel. Residence: Carroll House. Tel. 3-1010.	7615
"Crumpler, Mrs. B. FSten., M. E. Dept. 206 Page Residence: 2307 Byrd St. Tel. 6796.	247
"Cummings, Charles E. Capt., Inf. Supply Officers and Asst. PMS&T. Mil. Dept., 11 Holladay 	314
*Cummings, Ralph W. Asst. Dir. Exp. Sta., Head, Agron. Dept. 118 Ricks	262
Current, Ruth State Home Demonstration Agent. Agr. Ext. Service. 206-1911 Residence: 1425½ Park Dr. Tel. 8715.	244
Currin, Mary Sr. Stat. Clerk. Exp. Stat. 101 Patterson Residence: 114 N. Boylan Ave. Tel. 4766.	313
Dade, Henry Fitzhugh-Asst. Dean of Students. 102 Holladay Residence: 2212 Hope St. Tel. 4972.	215
Dawson, C. G.—Representative, Bureau of Agr. Econ., U.S.D.A. 209 Patterson Residence: 2209 Hope. Tel. 6792.	308
<sup>o</sup> Dearstyne, R. S. Prof. and Head, Poul. Dept. 216 Ricks Residence: 2509 Fairview Rd. Tel. 2-2764.	280
*Derieux, J. B.—Prof., Theoretical Physics, Phys. Dept. 110 Daniels Residence: 2802 Hillsboro St. Tel. 2-0916.	229
<sup>o</sup> Diseker, Ellis G. Research Assoc. Prof. of Agr. Engr. 314 Ricks Residence: 2722 Van Dyke Ave. Tel. 5495.	274
"Doak, C. G. Asst. Prof., Dept. of Phys. Ed. and Ath. Gym Residence: 120 Woodburn Rd. Tel. 2-3701.	218
*Dobbins, Mary Sr. Stat. Clerk, Exp. Stat. Dept. 101 Patterson Residence: 303 Hillcrest Rd. Tel. 8126.	313
Dodd, Margaret S. Asst. Mgr., Book Dept. Students Supply Store. Y.M.C.A. Residence: 117 N. Blount St. Tel. 5913.	225
*Doggett, J. Frank—Specialist, Agron. Ext. 206 Ricks Residence: 304 4th	
*Doody, Thomas C.—Prof., C. E. Dept. 107 Winston Residence: 38 Bagwell Ave. Tel. 5884.	301
Dorsett, Harry K. Acting Assoc. Prof., Psych. Dept. 124 Tompkins Residence: 13 Furches St. Tel. 6452.	286
Dosher, Mrs. Doris A.—Clerk, Ext. Ag. Engr. 320 Ricks Residence: 127 Woodburn Rd. Tel. 8827.	274
*Drake, J. C. Instr., English Dept. 4 Pullen Residence: Rt. 4, Western Blvd. Tel. 2-3543.	237
Dudley, Inez—Sec., Ext. For. 307 Ricks Residence: 102 Capital Apts.	270

	Ext.
*Dunlap, G. H. Technologist, School of Tex. 103 Tex. Residence: 605 Lake Boone Trail. Tel. 2-2349.	289
Dunn, R. M. Clerk, Soil Conservation Service. 237-1911 Tel. 3 Residence: 222 Park Ave. Tel. 5016.	-2531
"Edsall, Mrs. Katherine Alston Acting Circulation Librarian. Library Residence: 205 Woodburn Rd. Tel. 2-1698.	259
"Edsall, Preston W. Assoc. Prof. Hist. and Political Sc. 114 Peele . Residence: 205 Woodburn Rd. Tel. 2-1698.	200
Ellen, Melba-Asst., Circulation Dept. Library Residence: 6 Seaboard Ave. Tel. 7410.	259
Eller, Emily M.—Clerk-Sten., U.S.D.A. 312 Polk	206 275
Ellington, Mary Oliver-Lab. Asst. Zool. and Entom. 204 Zoology Residence: 303 New Bern Ave. Tel. 2-2001.	261
*Ellis, D. E.—Assoc. Plant Pathologist, Bot. Dept. 217 Winston Residence: 324 Shepherd St. Tel. 2-2239.	267
"Ellis, H. M.—Agr. Engr. Ext. Spec., Ext. Ag. Engr. 318 Ricks Residence: 2706 Hazelwood Dr. Tel. 5887.	274
*Etchells, John L. Bacteriologist, U.S.D.A. 312 Polk Residence: 122 Faircloth. Tel. 2-2270.	206
*Fahrer, Carolyn Moore—Sten., Agron. Dept. 311 Ricks Residence: 204 Woodburn Rd. Tel. 6868.	207
Feagan, Anne Sten., Alumni Office. 202 Holladay Residence: A-4, Wilmont Apts. Tel. 6170.	252
*Feathers, W. B.—Head Football and Baseball Coach. Dept. of Phys. Ed. and Ath. Fieldhouse Residence: Fincastle Apts., 3109 Hillsboro St. Tel. 3-2252.	6934
*Ferguson, B. Troy—Dist. Agt., Agr. Ext. Service. 101 Ricks Residence: 2405 White Oak Drive. Tel. 2-0617.	212
*Filicky, John J. Assoc. Chemist, Dairy Manufacturing Sect., Dept. of A. I. 211 Polk Residence: 517 S. Salisbury St. Tel. 2-1712.	305
*Fisher, H. A.—Head, Dept. of Math.; Armed Services, Coordinator. 201 Tompkins Residence: 125 Brooks Ave. Tel. 4138.	227
Fitch, Clara Lee Sec., Dist. Agt., Agr. Ext. Ser. 206 Patterson Residence: 115 Forest Rd. Tel. 2-1115.	291
Fleming, Margaret K. Research Inst., Exp. Stat. and Agr. Ec. Dept. 207-B Patterson Residence: C-301 Boylan Apts. Tel. 3-1458.	308
*Forster, G. W. Head, Agr. Econ. 205-A Patterson Residence: 1924 Sunset Drive. Tel. 2-1361.	308

	Ext.
Fort, Nellie—Sec. and Clerk, A. I. Dept. 117 Polk Residence: 315 N. Boundary St. Tel. 6108.	320
*Foster, John E.—Prof., A. H., A. I. Dept., A. H. Section. 218 Polk	326
*Fountain, A. M.—Assoc. Prof., English Dept. 101 Pullen Residence: 900 Canterbury Rd. Tel. 3-1055.	237
*Fouraker, R. S.—Prof. of E. E., E. E. Dept. 102 Daniels Residence: 601 Brooks Ave. Tel. 2-3094.	235
Fowler, Miss Louise-Tech. Asst., Zool. Dept. 101 Zoology Residence: 908 W. Johnson St. Tel. 2-2143.	239
*Fox, A. L.—Acting Chief, Raleigh Div., Metal. Branch. U. S. Bureau of Mines. 102,-3,-4,-6,7-1911 Residence: 2410 Everett Ave. Tel. 3-3536.	1976
Freeman, Doris—Sten., Basic Div. 105 Peele Residence: D-201 Boylan Apts. Tel. 2-1438.	223
Freeman, Jeanne—Grad. Asst., Exp. Stat. Dept. 102 Patterson Residence: 2406 Stafford Ave. Tel. 9511.	313
*Fulton, B. B.—Prof., Zool. and Entom. Zool. and Entom. Dept. 208 Zoology Residence: 600 Brooks Ave. Tel. 2-1868.	261
*Gaither, E. W.—Subj. Matter Analyst, Agr. Ext. Service. 2nd Floor, Patterson Residence: "Carova" Rt. 4, Western Blvd. Tel. 8616.	291
*Gardner, M. E. Head, Hort. Dept. 304 Polk	318
*Garrett, Earl B. State Conservationist, Soil Conservation Service. 235-1911 Tel. 3- Residence: 223 Hawthorn Rd. Tel. 4328.	2531
*Garriss, Howard R.—Ext. Specialist, Plant Pathologist, Bot. Dept. 202 Winston Residence: 2713 Bedford Ave. Tel. 2-3638.	267
*Gauger, H. C.—Assoc. Prof., Poul. Sc. Poul. Dept. 218 Ricks Residence: 2724 Van Dyke.	280
Geile, Mrs. W. G.—Sec., School of Tex. 110 Tex. Residence: 2509 Country Club Rd. Tel. 7486.	273
Gibbs, Eleanor Lab. Technician, Hort. Dept. Greenhouse Residence: F-102 Boylan Apts.	240
Gilbert, Clara L.—Sec., Agr. Econ. Dept. 205-B Patterson Residence: 17 Dixie Trail. Tel. 5933.	308
*Gilbert, P. A. Steward, Cafeteria. Leazar Hall	
*Giles, G. W.—Assoc. Prof., Agr. Engr. Dept. Agr. Engr. Shop Bldg. Residence: Chamberlain St. Tel. 2-1052.	1374

19

	Ext.
*Glenn, Karl B.—Assoc. Prof., E. E. E. Dept. 102 Daniels Residence: 309 N. Bloodworth St. Tel. 2-1207.	235
*Godwin, W. L.—Supt., Laundry Residence: 2720 Kilgore Ave. Tel. 2-2079.	283
*Goldston, E. F.—Res. Asst. Prof. Agron., Soil Survey. Agron. Dept. 206 Ricks Residence: No home	294 3456
*Goodman, J. W.—Asst. Dir., Agr. Ext. Service Tel. 3- 104 Ricks Residence: 2118 Woodland Ave. Tel. 2-2079.	3882 213
Gordon, Pauline E.—Ext. Specialist in Home Mgt. and House Furnishings. Agr. Ext. Ser. 221-1911 Residence: 825 Holt Dr. Tel. 8430.	242
Grady, James Henry Asst. Prof., Arch Dept. 309 Daniels Residence: 224 Hawthorne Rd. Tel. 5428.	250
*Graeber, R. W. In Charge, For. Ext. 307 Ricks Residence: 303 Hillcrest Rd. Tel. 8126.	270
*Grant, M. C.—Plumber, Service Dept. Warehouse Residence: State College. Tel. 9927.	272
*Gray, John L. Asst. Ext. Forester, For. Dept. 307 Ricks Residence: 2405 Clark Ave.	270
*Gray, Mrs. Margaret G.—Clerk, Clark Infirmary	7615
Greaves, R. E.—Asst. Prof., Poul Sc. Poul. Dept. 202 Ricks Residence: 2512 Clark Ave. Tel. 2-0019.	280
*Greaves-Walker, A. F.—Prof. and Head, Ceramic Engr. Dept. Ceramic Bldg. Residence: 305 Forest Rd. Tel. 6264.	249
*Green, R. W. Assoc. Prof., Econ. Dept. 113 Peele Residence: 3328 White Oak Rd. Tel. 8460.	223
Greene, Minda Sec., Dean's Office, Basic Div. 103 Peele Residence: 2303 Clark Ave. Tel. 8083.	223
*Greene, R. E. L.—Assoc. Agr. Economist, Agr. Econ. Dept. 204-B Patterson Residence: 2811 Barmettler. Tel. 8700.	308
*Gregory, Walton C.—Assoc. Prof. Agronomy, Plant Breeding, Agron. Dept. 314-1911 Residence: Cary, Route 1. Tel. 3-3222.	324
*Grimshaw, A. H.—Head, Tex. Chem. and Dyeing Dept. School of Tex. No. 1 Tex. Bldg. Residence: Mansion Park Hotel. Tel. 7541.	288
*Grinnells, C. D.—Prof., Dairy Research Section, A. I. Dept. 211 Polk Residence: 409 Dixie Trail. Tel. 2-1305.	305
*Grover, Elliot B.—Head, Yarn Manufacturing Dept., School of Tex. 111 Tex. Residence: 804 Lake Boone Trail. Tel. 8226.	273

	Ext.
*Guyot, Mrs. H. M. Sten., Farm Management Dept. 206 Patterson Residence: 18 Horne St. Tel. 3-3970.	291
<sup>a</sup> Haig, Frederick M.—Prof., A. H. and Dairying, Dept. of A. I. 114 Polk Residence: 801 Halifax St. Tel. 7146.	268
°Hall, Ruth B.—Instr., M. L. Dept. 205 Peele Residence: 1804 Sunset Dr. Tel. 5026.	231
<sup>o</sup> Halverson, John O.—Assoc., Nutr. Sect., A. I. Dept. 315 Polk Residence :2813 Mayview Rd. Tel. 2-1488.	241
Hartley, Lodwick C. Prof. and Head, English Dept. 104 Pullen	237
Halyburton, Jeanne Sten., Agron. Dept. 314-1911 Residence: 127 Brooks Ave. Tel. 9922.	324
*Hamilton, C. Horace Head, Rural Sociol. Dept. 135-1911 Residence: 3207 Bedford Ave. Tel. 2-3383.	312
*Hamilton, C. Merrill Supervisor, Student Teaching, Ind. A. Dept., Div. of Teacher Ed. 122 Tompkins Residence: V-2-A Cameron Court Apts. Tel. 7759.	258
Hamilton, Geraldine Sec., A. I. Dairy Research Sec. 213 Polk Residence: 1541 Sunrise Ave.	305
*Hancock, Elizabeth O. Sec., Soil Conservation Service. 229-1911 Tel. 3	-2531
Residence: 1605 N. Blount St. Tel. 3-1730.	
Residence: 1605 N. Blount St. Tel. 3-1730. Hand, Douglas Sec., Agr. Ext. Service, Home Demonstration Dept. 203-1911 Residence: B-102 Boylan Apts. Tel. 9535.	285
Hand, Douglas Sec., Agr. Ext. Service, Home Demonstration Dept. 203-1911	285 219
Hand, Douglas Sec., Agr. Ext. Service, Home Demonstration Dept. 203-1911 Residence: B-102 Boylan Apts. Tel. 9535. Harden, Kath Transcript Clerk, Registration Office. 206 Holladay	
<ul> <li>Hand, Douglas Sec., Agr. Ext. Service, Home Demonstration Dept. 203-1911 Residence: B-102 Boylan Apts. Tel. 9535.</li> <li>Harden, Kath Transcript Clerk, Registration Office. 206 Holladay Residence: 1615 Hillsboro St. Tel. 7502.</li> <li>Hardison, Winfred Lab. Technician, Dairy Research Sect., A. I. Dept. 210 Folk Residence: 2118 St. Mary's. Tel. 6510.</li> <li><sup>6</sup>Hare, W. H. Carpenter, Agr. Engr. Dept. Agr. Engr. Bldg. Tel. 3 Residence: Carp. N. C.</li> </ul>	219 305
<ul> <li>Hand, Douplas Sec., Agr. Ext. Service, Home Demonstration Dept. 203-091</li> <li>Residence: B-102 Boylan Apts. Tel. 9535.</li> <li>Harden, Kath Transcript Clerk, Registration Office. 206 Holladay Residence: 1615 Hilbsbor St. Tel. 7502.</li> <li>Hardison, Winfred Lab. Technician, Dairy Research Sect., A. I. Dept. 210 Polk Residence: 118 St. Mary's. Tel. 6510.</li> <li><sup>6</sup>Hare, W. H. Carpenter, Agr. Engr. Dent. Agr. Engr. Bidg. Tel. 3</li> </ul>	219 305
<ul> <li>Hand, Douglas Sec., Agr. Ext. Service, Home Demonstration Dept. 203-1911 Residence: B-102 Boylan Apts. Tel. 9535.</li> <li>Harden, Kath Transcript Clerk, Registration Office. 206 Holladay Residence: 1615 Hillsboro St. Tel. 7502.</li> <li>Hardison, Winfred Lab. Technician, Dairy Research Sect., A. I. Dept. 210 Folk Residence: 2118 St. Mary's. Tel. 6510.</li> <li><sup>6</sup>Hare, W. H. Carpenter, Agr. Engr. Dept. Agr. Engr. Bldg. Tel. 3 Residence: Carp. N. C.</li> </ul>	219 305 -1374
<ul> <li>Hand, Douglas Sec., Agr. Ext. Service, Home Demonstration Dept. 203-1911</li> <li>Residence: B-102 Boylan Apts. Tel. 9535.</li> <li>Harden, Kath Transcript Clerk, Registration Office. 206 Holladay Residence: 1615 Hillsboro St. Tel. 7502.</li> <li>Hardison, Winfred Lab. Technician, Dairy Research Sect., A. I. Dept 210 Folk</li> <li>Hardison, Winfred Lab. Technician, Dairy Research Sect., A. I. Berg, Eldy Folk</li> <li>Fareward, H. Carpenter, Agr. Engr. Dept. Agr. Engr. Bidg. Tel. 3 Residence: 1303 Hillsboro St. Tel. 6810.</li> <li>*Harrib, R. Staté +H Club Leader. 201 Ricks</li> </ul>	219 305 -1374 210 214
<ul> <li>Hand, Douglas Sec., Agr. Ext. Service, Home Demonstration Dept. 203-1911</li> <li>Patta Bartin, Patta State, Patta Sta</li></ul>	219 305 -1374 210 214 & 318
<ul> <li>Hand, Douglas Sec., Agr. Ext. Service, Home Demonstration Dept. 203-1911</li> <li>Residence: B-102 Boylan Apts. Tel. 9535.</li> <li>Harden, Kath Transcript Clerk, Registration Office. 206 Holladay Residence: 1615 Hilbsbor St. Tel. 7502.</li> <li>Hardison, Winfred Lab. Technician, Dairy Research Sect., A. I. Dept. 210 Polk.</li> <li>Hardison, Vinfred Lab. Technician, Dairy Research Sect., A. I. Dept. 210 Polk.</li> <li>"Hareison, John William Chancellor. Holladay Residence: 1637 Hilbsbor St. Tel. 6510.</li> <li>"Harrelson, John William Chancellor. Holladay Residence: 1903 Hilbsbor St. Tel. 6810.</li> <li>"Harrison, John William Chancellor. Holladay Residence: 1001 Hilbsbor St. Tel. 6810.</li> <li>"Harris, John H. Specialist, Hort. Dept. 302 Polk Residence: 101 Erooks Ave. Tel. 2:2000.</li> <li>"Harris, John H. Specialist, Hort. Dept. 3:200.</li> <li>"Harris, John H. Specialist, Hort. Dept. 3:200.</li> <li>"Harris, John H. Specialist, Hort. Dept. 3:200.</li> </ul>	219 305 -1374 210 214 & 318 8901

	Ext.
*Hart, T. R. Prof. and Head, Weaving and Designing Dept., School of Tex. 107 Tex. Residence: 501 W. Whitaker Mill Rd. Tel. 2-1653.	273
Hartley, Lodwick C.—Prof. and Head, English Dept. 104 Pullen Residence: 812 E. Gardner Drive. Tel. 6289.	237
*Hartsock, Georgia C.—Clerk, Business Office. "B" Holladay Residence: 205 Chamberlain St. Tel. 2-3882.	316
*Hartwig, E. E.—Res. Asst. Prof. Agron., Plant Breeding, Agron. Dept. 314-1911 Residence: 2824 Bedford Ave. Tel. 3-3063.	: 262
*Harvey, Paul H.—Res. Prof. Agron., Plant Breeding, Agron. Dept. 112 Withers Residence: 2706 Everett Ave. Tel. 2-0475.	263
*Hayes, A. C.—Asst. Prof. of Tex. Chem. School of Tex. 2 Tex Residence: 3008 Ruffin St. Tel. 2-3851.	278
Haywood, Miss Nettie D.—Sec., Agr. Exp. Sta. 109-A Patterson Residence: 821 Wake Forest Road. Tel. 4206.	211
*Heartt, Mrs. Charles I. In Charge, Bureau of Corresp. Instr., College Ext. Div. 2014 Library Residence: 128 S. Dawson St. Tel. 4057.	260
*Hebert, Teddy T.—Asst. Pathologist, Botany Dept. 212 Withers Residence: 1104 Glenwood.	310
*Heck, C. M.—Prof. and Head, Physics Dept. 112 Daniels Residence: 200 Hawthorne Rd. Tel. 9829.	229
*Hendrix, J. Max State Admin. Asst., Soil Conservation Ser. 232-1911 Residence: 18 Maiden Lane. Tel. 3-1548.	2531
Henson, Ruth S. Bookkeeper, Busines sOffice. 106 Holladay Residence: 116½ Horne St. Tel. 7449.	298
Hicks, Madie Belle-Sec., Chem. Dept. 108 Withers Residence: 926 N. Boylan Ave. Tel. 5781.	265
*Hicks, William Norwood Prof. and Head, Ethics and Religion Dept. 204 Feele Residence: 2505 Vanderbilt Ave. Tel. 7750.	231
Hill, Randolph (Miss)-Sten., Agron. Dept. 120 Ricks Residence: 2200 Hope St. Tel. 2-3466.	262
*Hilton, James Harold Head, A. I. Dept. 116 Polk Residence: Dixie Trail-Extended. Tel. 2-2460.	320
*Hilton, John T.—Prof. of Tex., School of Tex. 301 Tex Residence: 1610 Ambleside Dr. Tel. 6936.	287
*Hiner, Foy Pate (Mrs.)—Cashier, Cafeteria. Steward's Office. Tel. 2- Residence: Cary, N. C., Rt. 1.	2043
*Hines, T. I.—Asst. Prof., Swim. and Cross Country Coach. Phys. Ed. and Ath. Dept. Gym Residence: 5½ Dixie Trail. Tel. 2-1139.	218

Ex	t.
*Hinkle, L. E. Head, M. L. Dept., and Dir., Transl. Ser. 203 Peele. 23 Residence: 1714 Park Dr. Tel. 2-0380.	31
*Hinson, Zona G.—Bookkeeper, Business Office. 103 Holladay 31 Residence: 3314 Pollock Place. Tel. 5195.	6
Hobbs, James E.—Farm Forester, For. Ext. Dept. 307 Ricks 27 Residence: 203 Watauga Hall. Tel. 9132.	0
*Hobby, Arlene B.—Mail Clerk, Publications Dept. 15 Ricks 25 Residence: 919 W. South St. Tel. 2-2702.	54
Hodge, M. Glynn-Sec., Ind. Arts Dept. Teacher Ed. Div. 123 Tompkins Residence: Knightdale, N. C. Co. 5302.	36
*Hoefer, E. G. Prof., M. E., M. E. Dept. 205 Page	)2
*Hoffman, Mrs. F. B. Sten., Agr. Ext. Ser. Tel. 3-388 104 Ricks 21 Residence: Andrew Johnson Hotel. Tel. 4466.	32
*Hoffman, W. H.—Clerk, Ser. Dept. Warehouse	12
Hofmann, Julius V.—Dir., Div. of For. 301 Ricks	10
*Holler, Dan F. Ext. Cotton Marketing Specialist, Agr. Ext. Ser. 211 Patterson Residence: 2807 Mayview Rd. Tel. 3-1343.	)6
Holler, Nancy L.—Sten., Program Planning Dept. 309-1911 29 Residence: 3201 Clark Ave. Tel. 2-2262.	92
Honeycutt, Roylene H. Sec., History Dept. 104 Peele	00
*Hooke, Robert—Asst. Prof., Math. Dept. 209 Tompkins	26
*Hopkins, John I.—Asst. Prof., Physics. 208 Daniels	29
*Horan, Mrs. Helen B. Sec., E. E. Dept. 201 Daniels	36
*Hostetler, Earl H.—Prof. and Head, A. H. Sect., A. I. Dept. 215 Polk Residence: 2524 White Oak Rd. Tel. 5794. 276 & 32	26
Hudgins, Madge-Sten., Seed Imp., Agron. Dept. 311 Ricks 20 Residence: 402 Horne St. Tel. 2-2129.	07
*Hunt, C. Lindsey—Soil Scientist, Soil Conservation Ser. 226-1911 Residence: Country Club Homes. Tel. 3-1428.	31
*Hunter, Mrs. J. B.—Relief Operator, College Tel. Ex. 117 Winston. Residence: 2211 Hope St. Tel. 8971.	0
Hunter, Willie (Miss)—Ext. Spec. in Clothing. Agr. Ext. Ser. Home Demonstration Dept. 220-1911 Residence: 825 Holt Drive. Tel. 8430.	12

1	Ext.
Hyde, Thomas E. Instr., M. E. Dept. 207 Page Residence: 311 Forest Rd. Tel. 7829.	302
"Ivey, L. L. Manager, Students Supply Store. Y.M.C.A. Tel. 2-3674 & Residence: 202 E. Park Drive. Tel. 8210.	225
<sup>6</sup> James, II. Brooks-Agr. Economist, Agr. Econ. 206 Patterson Residence: 2810 Mayview Rd. Tel. 3-2365.	291
<sup>4</sup> Jensen, James II. Plant Pathologist, Botany Dept. 219 Winston Residence: R.F.D. 1, Raleigh. Tel. County 116-5622.	267
"Jernigan, E. C.—Asst. State Conservationist, Soil Conservation Ser. 233 1911 Residence: 2809 Kittrell Drvie, Tel. 2-1267.	2531
<sup>4</sup> Jeter, Frank H. Dir., College News Bureau; Editor, Publications and Publicity. 1 Ricks Residence: 304 Forest Rd. Tel. 6518.	279
*Johnson, E. M. Custodian Gym. and Supplies, Dept. of Phys. Ed. and Ath. Gym Residence: 9 Dixie Trail. Tel. 3-1506.	218
Johnson, Robbie (Miss) Sec., Business Office. 105 Holladay Residence: 230 E. Park Drive. Tel. 2 1686.	295
Jones, Alice Clerk, Voc. Ed. Dept. 105 Tompkins Residence: Cary, N. C. Tel. 2676.	311
*Jones, Ivan D. Biochemist, Hort. Dept. 305 Polk	318
	282
Jones, Mabel M.—Clerk, Soil Conservation Ser. 239-1911 Tel. 3-2 Residence: 944 Harp Terrace. Tel. 8178.	2531
Jones, Margaret Sec., Poul. Dept. 216 Ricks Residence: B-301 Boylan Apts. Tel. 3-1129.	280
*Jones, Mrs. W. Bryce Clerk, Business Office. "B" Holladay Residence: Carr, N. C.	278
Jordan, Betty W.—Sec., Ag. Ed. Dept., Div. of Teacher Ed. 103 Tompkins Residence: Cary, N. C. Tel. 2172.	257
Jordan, Pauline—Chief Clerk, Soil Conservation Exp. Sta. 228-1911 Residence: 18 Horne St. Tel. 2-3	3579
*Jordan, W. E. Assoc. Prof. of Chem., Chem. Dept. 106 Withers Residence: 2600 Rosedale Ave. Tel. 2-3574.	265
*Judd, Mrs. Lilly B.—Clerk, Office of Dir. of Agr. Exp. Sta. 109-C Patterson Residence: 309 E. Morgan St. Tel. 8970.	315
	270
	235

	Ester.
*Kelley, Jack A. H. Ext. Specialist. 203 Park Residence: 24 Dixie Trail. Tel. 5648.	269
Kendrick, Alma—Sec., Graduate School. 104 Zoology Residence: 105 Harrison Ave. Tel. 7652.	239
*Kerr, E. G.—Supt. of Dairy, A. I. Dept Residence: Dairy Farm Cottage. Tel. 2-1429.	1429
*Kerr, Thomas—Cytologist, Cotton Fiber Investigations. 105 Polk Residence: 3401 Clark Ave. Tel. 2-2101.	300
<sup>5</sup> Kime, P. H. Res. Assoc. Prof. Agron., Plant Breeding, Agron. Dept. 112 Ricks Residence: 2717 Vanderbilt Ave. Tel. 2-2126.	262
*Kimrey, A. C.—Ext. Dairyman, Dairy Ext. Div. 104 Polk Residence: 220 E. Park Dr. Tel. 2-0856.	277
*Kincheloe, Henderson G. Asst. Prof., English Dept. 103 Pullen Residence: 222 Hawthorne Rd. Tel. 5120.	237
*King, E. S. Gen. Sec., YMCA. YMCA, 2nd Floor	7184
King, Nora Lillington—Sec. to the Chancellor. "A" Holladay Residence: 205 Woodburn Rd. Tel. 2-1698.	210
Klapp, Ruth Clerk-Sten., Soil Conservation Ser. 240-1911 Tel. 3 Residence: 114 E. Park Dr. Tel. 8682.	2531
<sup>o</sup> Kovac, Theodora Sen. Stat. Clerk, Exp. Stat. Dept. 105-A Patterson Residence: D-1-A Cameron Court Apts. Tel. 4445.	313
<sup>4</sup> Krantz, B. A.—Res. Asst. Prof. Agron., Soil Fertility, Agron. Dept. 310 Withers Residence: 2632 Kilgore Ave. Tel. 3 3846.	222
<sup>*</sup> Kulash, Walter M.—Asst. Prof., Assoc. Entomologist, Zool. and Entomol. Dept. 106 Zoology Residence: 28 Bagwell Ave. Tel. 7407.	239
*Kutschinski, C. D. Dir. of Music. 10 Holladay Residence: 1500 Hillsboro St. Tel. 5427.	251
<sup>o</sup> Ladu, Arthur I. Prof., English Dept. 105 Pullen Residence: 411 Horne St. Tel. 2-0709.	237
*Lambe, C. M. Asst. Prof., C. E. Dept. 219 C. E Residence: 413 Calvin Rd. Tel. 6565.	303
*Lampe, John Harold Dean, School of Engineering. 122 C. E Residence: 2201 White Oak Rd. Tel. 2-1254.	216
*Lancaster, Elizabeth DJr. Acct., Vocational Ed. 105 Tompkins . Residence: 407 N. Person St. Tel. 5896.	311
Lancaster, Alice M. Sten., School of Textiles. 108 Tex. Residence: 16 N. East St. Tel. 6787.	273
*Lancaster, Forrest W.—Assoc. Prof., Physics Dept. 206 Daniels Residence: 2403 Everett Ave. Tel. 6316.	229

3	Ext.
Lane, Rachel Penn Librarian Abstracter, School of Tex. 104 Tex. Residence: 110 Cox Ave. Tel. 8212.	293
<sup>a</sup> Lassiter, J. Y.—Ext. Specialist, Hort. Dept. 301 Polk	318
Leagans, J. P.—Program Planning Specialist, Program Planning Dept. 310 1911 Residence: 24 Shepherd St. Tel. 7866.	292
Leager, Marc CProf., Econ. Dept. 116 Peele Residence: 2718 Bedford Ave. Tel. 6204.	224
*Lcar, John Emery Prof. of E. E., E. E. Dept. "A" Daniels Residence: 1812 Park Dr. Tel. 7701.	235
Lee, Melva CSten., Physics Dept. 112 Daniels Residence: 2230 Hillsboro St. Tel. 5096.	229
*Lee, W. D.—Assoc. Prof. Agron., Soil Classification, Agron. Ext. Dept. 206 Ricks Residence: 318 Forches St. Tel. 2-3930.	294
<sup>*</sup> Lehman, S. G.—Prof., Plant Pathology, Bot. Dept. 206 Winston Residence: 123 Brooks Ave. Tel. 8764.	267
<sup>4</sup> Leipold, John A. M Sgt., DEML-ROTC. Post Sgt. Major, Mil. Dept. 3 Holladay Residence: D 2 A Cameron Court Apts. Tel. 3-1524.	233
*Leonard, Paul B. Asst. Prof., M. E., M. E. Dept. 207 Page Residence: 2804 Barmettler St. Tel. 9692.	302
*Lewis, J. G. Assoc. Prof. of Tex., School of Tex. 220 Tex Residence: 518 Dixie Trail. Tel. 7783.	273
Lineberry, Foy Catalog Librarian. Library Resdience: 203 Forest Rd. Tcl. 3-1347.	259
Lineberry, Lillian Johnson Lab. Tech., Agron. Dept. 5 Withers Residence: Rt. 4.	209
*Lineberry, R. A. Asst. Chemist, Bureau of Mines. Bureau of Mines Bldg. 18 and 19 Withers Residence: 3006 Ruffin St. Tel, 3-1125.	319
Little, Mamie Lee Sec., Purch Dept. "A" Holladay Residence: 119 Pace St. Tel. 3-3452.	230
Livingstone, Mrs. John A. Sec., A. I. Dept., A. H. Section. 215 Polk Residence: 903 West Johnson St. Tel. 6997.	326
*Loeppert, Richard H.—Asst. Prof., Chem. Dept. 318 Withers Residence: 301 Forest Rd. Tel. 2-1414.	265
*Lott, Wreal L. Res. Assoc. Prof. Agron., Soils, Agron Dept. Residence:	
*Lovvorn, R. L.—Prof. Agron., Forage Crops, Agron. Dept. 320-1911	262

	12.000.
*Lowen, Walter Instr., M. E. Dept. 105 Page Residence: 2707 Bedford Ave. Tel. 5965.	246
*Lowen, Mrs. Walter—Lab. Tech., A. I. Dept., Dairy Research Sec. 210 Polk Residence: 2707 Bedford Ave. Tel. 5965.	305
*Lucas, H. L. Assoc. Prof., Exp. Stat. Dept. 107 Patterson Residence:	313
Lucas, Ruby-Sten., Div. of Vocational Ed. 111 Tompkins Residence: 11 S. Wilmington St. Tel. 9794.	325
*Ludington, John R.—Prof. of Education, Head, Ind. Arts Dept., Div. of Teacher Ed. 122 Tompkins Residence: 2620 Churchill Rd. Tel. 5288.	258
Lutz, J. R.—Prof., Agron., Soils, Agron. Dept. 115 Ricks Residence: Dixie Trail-Extended Tel. 2-2460.	262
*Lynn, Mrs. D. E.—Sec., Agron. Ext. 208 Ricks Residence: 402 Horne St. Tel. 3-1777.	294
*Lynn, Hazel Sr. Stat. Clerk, Exp. Stat. Dept. 101 Patterson Residence: Neuse, N. C. Tel. County 6913.	313
*Lynn, J. T.—Asst. Prof., Physics, Phys. Dept. 108 Daniels Residence: 112 Cox Ave. Tel. 2-3798.	229
*McAllister, Mary LExt. Economist in Food Conservation and Marketing. Agr. Ext. Service, Home Demonstration. 215-1911 Residence: 1426½ Park Dr. Tel. 8715.	243
*McCaslan, C. L. Agr. Engr. Ext. Specialist, Agr. Engr. Ext. 312 Ricks Residence: 3310 Clark Ave. Tel. 2-3809.	274
*McCrary, O. F.—Dist. Agt., Agr Ext. Service. 101 Ricks Residence: 127 Brooks Ave. Tel. 9922.	212
*McCutcheon, F. H. Prof., Zool. Dept. 209 Zoology	239
*McDonald, Mrs. Mable P.—Clerk, Agr. Ext. Aud. Dept. 105 Ricks Residence: 1905 McDonald Lane. Tel. 9920.	271
*McDuffie, Mrs. Arlesia D.—Asst. Supt. and Cashier, Laundry Residence: 202 Ashe Ave. Tel. 7754.	283
*McGehee, William Prof. and Head, Psychol. Dept. 124 Tompkins . Residence:	286
McIver, Julia Asst. Ext. Spec. in Clothing. Agr. Ext. Ser., Home Demonstration Dept. 217-1911 Residence: 22202 Ridgecest Rd. Tel. 2-1904.	242
McKimmon, Mrs. Jane S.—Asst. Dir., Agr. Ext. Ser. 116 Ricks Residence: 123 New Bern Ave. Tel. 8619.	262
*McKimmon, Katharine C. Clerk, Agron. Dept. 120 Ricks Residence: E-4, Raleigh Apts. Tel. 6753.	262
McLean, Grayce—Clerk, Business Office. "B" Holladay Residence: 1508 Hillsboro St. Tel. 6153.	316
	Ext.
--	-------
*McMillen, R. WRes. Asst. Prof. Agron., Seed Improvement, Agron. Dept. 111 Withers Residence: 2704 North Dr.	263
*McMillin, Douglass N.—Col., Infantry, PMS&T, ROTC, and Com- mandant, ASTP. 1 Holladay Residence: 209 Woodburn Rd. Tel. 5323.	233
MeVay, Francis E.—Agr. Statistician, Bureau of Agr. Econ., USDA. 104 Patterson Tel. 3 Residence: 2716 Rosedale Ave. Tel. 2-3396.	-2454
*Maddison, C. W.—Foreman, Foundry. M. E. Dept. Shop Residence: 301 Furches St. Tel. 2-3775.	245
Maddrey, Ellen Lab. Technician, Agron. Dept. 9 Withers Residence: The Elms, 220 Hillsboro St. Tel. 9317.	209
Maddry, Linda—Sec., Math. Dept. 201 Tompkins Residence: Avent Ferry Rd. Tel. 5797.	227
*Maddux, Henry Asst. Ext. Editor. 9 Ricks Residence: 2404 Everett Ave. Tel. 2-1032.	279
*Magarian, Vahn K.—1st Lt. AGD. Classification Officer, Mil. Dept. 2 Holladay Residence: F-203 Boylan Apts. Tel. 4265 or 4757.	233
*Mancari, Sebastian A. Sgt., DEML-ASTP. Personnel Clerk. Mil. Dept. 3 Holladay Residence: 11 Dixie Trail. Tel. 2-3206.	233
<sup>*</sup> Mann, C. L.—Prof. and Head, C. E. Dept. 211 C. E. Residence: 1702 Hillsboro St. Tel. 6825.	303
*Marlowe, Mrs. Thomas J. Sec., Publications. 5 Ricks Residence: 202 Groveland Ave. Tel. 3-3761.	279
*Marshall, Roger Powell—Prof., English Dept. 104 Pullen Residence: 1512 Park Dr. Tel. 5297.	237
Martin, A. M.—Jr. Admin. Asst., Soil Conservation Ser. 238-1911	-2531
Mason, Edna Belle—Sec., C. E. Dept. 210 C. E. Residence: 113½ Chamberlain St. Tel. 2-3994.	303
Mason, Eleanor H. Sec., Agr. Ext. Ser. Home Demonstration. 207-1911 Residence: Boylan Apts., A-103.	244
*Matrone, Gennard Chemist, U. S. Dept. of Agr., Nutrition Section. 311 Polk Residence: Western Blvd., Rt. 4. Tel. 2-1717.	241
*Maupin, C. J.—Ext. Poul. Specialist, Poul. Ext. Dept. 210 Ricks . Residence: 2806 Hillsboro St. Tel. 3-3671.	321
*Maupin, Mrs. T. K. Sec., Ceramic Engr. Dept. Ceramic Bldg Residence: 2725 Bedford Ave. Tel. 2-3003.	249
*Mayer, W. L.—Dir. of Registration. 208 Holladay Residence: 20 Bagwell Ave. Tel. 2-0027.	219

	Ext.
<sup>o</sup> Maynard, Mrs. M. B.—Sec., Div. of Teacher Ed. 119 Tompkins Residence: 220 Chamberlain St. Tel. 2-0222.	256
*Mayo, Selz C.—Rural Sociologist, Rural Sociol. Dept. 139-1911 Residence: D-3 Country Club Homes.	312
*Mayton, R. W. Carpenter Foreman. Service Dept. Warehouse Residence: Cary, N. C. Tel. 2863.	272
*Meacham, H. L.—In Charge, Marketing Ext. Agr. Ext. Ser. 211 Patterson	306
*Meares, J. S. Assoc. Prof., Physics Dept. 206 Daniels Residence: 2408 Everett Ave. Tel. 4594.	229
<sup>o</sup> Meekins, E. N.—Dist. Supervisor, Voc. Ed. Dept. 106 Tompkins Residence: Cary, N. C. Tel. 2591.	282
*Mehlich, Adolf—Res. Assoc. Prof. Agron., Soil Chemistry. Agron. Dept. 111 Polk Residence: Oakland Rd.	220
<sup>o</sup> Mendenhall, W. G.—Instr., M. E., M. E. Dept. Shop Residence: Cary Rd. Tel. 3-3417.	245
*Merritt, Rebecca—Sec., Soil Conservation Service. 233-1911. Tel. 3- Residence: 609 Rosemont Ave. Tel. 7029.	-2531
*Metcalf, Z. P.—Assoc. Dean of Grad. School. Head, Zool, and Entom. Dept. 101 Zoology Residence: 315 Forest Rd. Tel. 2-3788.	239
*Michelsen, Gerald L. 1/Sgt., DEML-ASTP. Sgt. Maj., 1st Bn. ASTP, Mil. Dept. 106 Syme 	203
<sup>o</sup> Middleton, Gordon K.—Prof. of Agron., Head, Field Crops Section. Agron. Dept. 119 Ricks Residence: 28230 Barmettler St. Tel. 2-2313.	262
*Miller, E. L., Jr. Asst. Prof. Geol., Geol. Dept. 2 Primrose Residence: Leesville Rd. (Rt. No. 6).	304
*Miller, F. E.—Dir. of Test Farms, N. C. Dept. of Agr. Agr. Bldg. Tel. 6611, Ext Residence: 1628 Park Dr. Tel. 7180.	. 560
*Miller, J. F. Prof. and Head, Phys. Ed. and Ath. Dept. Gym Residence: 191 Chamberlain St. Tel. 5823.	218
*Miller, William D.—Assoc. Prof., For. Dept. 303 Ricks Residence: 1907 Victoria Rd. Tel. 2-1066.	270
*Mitchell, Adolphus-Assoc. Prof., Engr. Mechanics Dept. 204 C.E. Residence: 1614 Ambleside Dr. Tel. 2-2412.	303
Mitchell, Mary Frances-Mail Clerk, Publications. 15 Ricks Residence: 2015 Fairview Rd. Tel. 2-1026.	254
*Mitchell, T. B.—Prof., Zool, Zool, Dept. 103 Zoology Residence: 1007 W. Peace St. Tel. 6967.	239
*Moen, R. O.—Prof., Business Admin. Economics Dept. 113 Peele Residence: 3202 Clark Ave. Tel. 5051.	223

	axt.
Monk, Martha M. Sec., News Bureau, Pub. Dept. 13 Ricks 5 Residence: 1719 Park Dr. Tel. 2-1245.	253
*Moorc, Chas. Albert Petigru Instr., English Dept. 7 Pullen. Residence: Boylan Apts. C-302. Tel. 2-2713.	
Moore, Frances M.—Lab. Technician, Hort. Dept. Greenhouse : Residence: 1307 Hillsboro. Tel. 9502.	240
*Moore, J. H.—Res. Assoc. Prof., Agron., Cotton Technology. Agron. Dept. 317 Ricks Residence: 2713 Bedford Ave. Tel. 2-3638.	207
*Moore, James L. Asst., A. I., Dairy Sect., A. I. Dept. 213 Polk : Residence: 3218 Bedford Ave. Tel. 2-0821.	805
*Moore, R. P. Res. Assoc. Prof. Agron., Seed Improvement. Agron. Dept. 315 Ricks Residence: 216 Chamberlain St. Tel. 6881.	207
Morgan, Anna Jo Clerk, Rural Sociol. Dept. 135-1911 Residence: 413 Dixie Trail. Tel. 6037.	312
*Morgan, G. Daylon-Clerk, Central Stores. Warehouse	272
*Morgan, John W.—Instr., Chem. Dept. 115 Withers Residence: 2614 Van Dyke Ave. Tel. 8608.	265
Morris, Jean—Clerk, Agr. Exp. Station. 109 Patterson Residence: 2509 Vanderbilt Ave. Tel. 5319.	315
*Morris, W. FDirector of Services, Service Dept. Warehouse Residence: 2509 Vanderbilt Ave. Tel. 5319.	272
*Morrow, E. B. Assoc. Horticulturist. Hort Dept. 309 Polk. 275 & Residence: 2712 Vanderbilt Ave. Tel. 2-1952.	318
*Mumford, C. G. Prof., Math. Dept. 224 Tompkins Residence: 712 Brooks Ave. Tel. 5315.	228
Murakishi. Harry—Research Fel., Plant Pathology. Bot. Dept. 215 Winston Residence: 2510 Vanderbilt Ave. Tel. 2-1606.	267
*Murray, W. M.—Auditor, Business Office. "B" Holladay Residence: T-3-B Cameron Court Apts. Tel. 2-3525.	298
*Neely, John K.—Clerk, Students Supply Stores. YMCA Tel. 2-3674 or Residence: 2406½ Hillsboro St. Tel. 2-1268.	225
	317 304
Nelson, Thomas—Dean Emeritus, School of Textiles. 105 Tex Residence: 16 Enterprise St. Tel. 2-2247.	273
*Nelson, W. L.—Res. Assoc. Prof. Agron., Soil Fertility. Agron. Dept. 810 Withers Residence: 2710 Van Dyke Ave. Tel. 8-8748.	222
*Nesbit, W. B.—Turkey Research, Poultry Dept. Turkey Plant. Residence: Marcom Ave. Tel. 3-1587.	

	sæt.
*Newman, Mrs. C. L.—Sec., Dept. of A. I., A. H. Sect. 215 Polk . 276 & Residence: 1618 Oberlin Rd. Tel. 2-0912.	326
Newton, Foy—Sec., Agr. Ext. Ser. 101 Ricks Residence: 319 New Bern Ave. Tel. 2-2096.	212
*Nichols, J. Hervey—Lab. Technician, E. E. Dept. 9 Daniels Residence: 2820 Mayview Rd. Tel. 9776.	235
*Niswonger, H. R.—In Charge, Hort. Ext., Hort. Dept. 301 Polk 275 & Residence: A-2-A Cameron Court Apts. Tel. 2-3297.	318
Norman, Kathryn—Tech. Asst., Exp. Stat. Dept. 101 Patterson Residence: 622 Hillsboro St. Tel. 9687.	313
O'Neal, Dorothy Clerk, Dormitory. Warehouse Residence: Wendell, N. C. Tel. 3226.	272
	237
*Park, Hubert V.—Assoc. Prof., Math. Dept. 222 Tompkins Residence: 404 Chamberlain St. Tel. 2-3589.	228
*Parrish, C. F.—In Charge, Poul. Ext. 208 Ricks Residence: Western Blvd. Tel. 2-2888.	321
*Pate, Rudolph—News Editor, News Bureau. 13 Ricks Residence: 2206 Hope St. Tel. 8963.	253
Patten, Elizabeth Admissions Clerk, Registration Office. 207 Holladay Residence: 13 Furches St. Tel. 6452.	219
*Patton, Carlotta P.—Instr., Math. Dept. 205 Tompkins	226
*Patton, James W.—Head, Hist. and Polit. Sc. Dept. 102 Peele Residence: 2612 Clark Ave. Tel. 3-2317.	200
*Paulson, Jehu DProf., Arch. Dept. 315 Daniels Residence: 2705 Everett Ave. Tel. 8823.	250
*Peach, Paul—Indus. Statistician, Exp. Stat. Dept. 103 B Patterson Residence: 1908 Park Dr. Tel. 5406.	313
Pearsail, Elizabeth—Lab. Technician, Agron. Dept. 5 Withers Residence: Boylan Apts., F-102.	209
*Pearsall, Robert James—Asst. Prof., E. E. Dept. 106 Daniels Residence: 2312 Hillsboro St. Tel. 3-2404.	235
Pearson, Ruby S.—Asst. State 4-H Club Leader, 4-H Dept. 201 Ricks Residence: D-303 Boylan Apts.	214
*Peeler, R. J.—Asst. Supv., Voc. Agr. Dept. 107 Tompkins Residence: 2812 Kilgore St. Tel. 2-3649.	282
*Peirce, Frederick T. Dir. of Tex. Research, School of Tex. 116 Tex. Residence: 126 Forest Rd. Tel. 2-0293.	327
*Pennington, Mildred C.—Sr. Stat. Clerk, Bureau of Agr. Ec. 101 Patterson Residence: 611 Gaston St. Tel. 7611.	313

E	sst.
*Peterson, Walter J.—Prof. and Head, Nutrition Sec., A. I. Dept. 116 and 314 Polk 320 & Residence: 1121 Harvey St. Tel. 3-1651.	241
Phelps, (Mrs.) Elaine T. Sec. to Dean of Engr. 122 C. E. Residence: 15 Enterprise St. Tel. 8433.	216
Phelps, W. R. Clerk, Service Dept. Warchouse Residence: 217½ N. Bloodworth St. Tel. 6688.	272
<sup>a</sup> Phillips, Llewellyn B. In Charge, Print. and Supplies, Pub. Ext. 21 Ricks Residence: 2809 O'Berry St. Tel. 8437.	254
Piland, J. R. Assoc. Prof., Agron., Soil Chem., Agron Dept. 5 Withers Residence: 2406 Stafford Ave. Tel. 9511.	209
Pillsbury, J. P.—Prof., Land Arch. Dept. 204 Polk Residence: 2715 Hillsboro St. Tel. 6694.	296
Pleasant, Maythorne Clerk-Sten., Soil Con. Ser. 239-1911 Tel. 3-2 Residence: 1222 Courtland Dr. Tel. 9522.	531
Poe. Herbert Vernon Instr., E. E., E. E. Dept. 105-B Daniels Residence: 125 Woodburn Rd. Tel. 2-1462.	235
Poole, Mary Elizabeth Reference and Document Librarian. Library Residence: 221 Hawthorne Rd. Tel. 2-3742.	259
Porter, Sarah Research Instr., Exp. Stat. Dept. 107 Patterson Residence: 700 N. East St. Tel. 7408.	313
Powell, Geo. B. Athl. Trainer, P. E. and Athl. Dept. Fieldhouse Tel. 6 Residence: Fieldhouse. Tel. 6934.	934
Pressly, Harriet Byrne Research Asst., Nutrition Sec., A. I. Dept. 314 Polk Residence: 526 N. Wilmington St. Tel. 5024.	241
Price, E. W., Jr. Instr., C. E., C. E. Dept. 208 C. E Residence: 2707 Van Dyke Ave. Tel. 8283.	303
	254
Production and Marketing Administration AAA Building Tel. 2-0	544
*Randall, Glenn O.—Prof., Hort. Dept. 305 Polk	318
*Randolph, Dr. E. E.—Prof., Chem. E. Dept. 106 Winston Residence: 212 Groveland Ave. Tel. 8992.	309
*Rankin, W. H.—Res. Assoc. Prof. Agron., Soil Fertility, Agron. Dept. 114 Ricks Residence: 2408 Stafford Ave. Tel. 8057.	262
*Rautenstrauch, Robert F. Assoc. Prof., Aero Dept. Aero Bldg Residence: Lewis Farm Rd.	248
*Ray, M. E. Instr., C. E. Dept. 208 C. E. Residence: 317 Calvin Rd. Tel. 4749.	303

	Ext.
Reavis, Mary Ruth Jr. Stat. Clerk, Exp. Stat. Dept. 101 Patterson Residence: 3202 Hillsboro St. Tel. 5762.	313
"Reed, J. F. Res. Prof. Agron., Soil Chemistry, Agron. Dept. 114 Ricks Residence: 118 Horne St. Tel. 2-1962.	262
<sup>c</sup> Reid, W. A.—Assoc. Prof., Chem. E. Dept. 311 Withers 265 & Residence: Dixie Trail. Tel. 2-3157.	222
Rice, Robert B. Prof., M. E.; Dir., Diesel Engr. 107 Page Residence: 2712 Cambridge Rd. Tel. 2-1195.	323
<sup>^</sup> Rich, L. M.—Asst. Football, Track Coach, P. E. and Athl. Dept. Field House Residence: Y-2, 2628 Kilgore St.	6934
°Riddle, A. A. Supt., Power Plant. Power Plant Residence: 2805 Bedford Ave. Tel. 2-2706.	234
Riggs, Hazel—Sec., Chem. E. Dept. 111 Winston Residence: 119 Pace St. Tel. 3-3452.	301
<sup>*</sup> Rigney, J. A. Prof., Exp. Stat. Dept. 103-A Patterson Residence: 712 Brooks Ave. Tel. 5047.	313
Riley, Jeanette Sten., Bot. Dept. 220 Winston Residence: 2304 Clark Ave. Tel. 7001.	267
Riley, Phyllis B. Clerk, Ext. Studies. 108 Ricks Residence: 20 Ferndell Lane. Tel. 5334.	255
<sup>o</sup> Ritchey, Wilbert S.—Corporal, DEML-ASTP. Truck Driver and Asst. Sup. Sgt., Mil. Dept. Armory Residence: 1904/2 Hillsboro St. Tel. 2-1158.	232
Rives, Sarah Leigh Asst. Bookkeeper, Students Supply Stores. YMCA Tel. 2 Residence: 2230 Hillsboro St.	3674
"Roberts, William M.—Assoc., Dairy Mfg. Sect. A. I. Dept. 211 Polk Residence: 20 Bagwell Ave. Tel. 9814.	305
<sup>*</sup> Robinson, Allyn PInstr., English Dept. 7 Pullen Residence: King Charles Rd. Tel. 2-0731.	237
*Robinson, Glenn H.—Soil Surveyor, Agron. Dept. 206 Ricks Residence:	294
*Rogers, Robert Asst., Greenhouse, Hort. Dept. Greenhouse Residence: 113 N. Wilmington St. Tel. 8683.	240
Rondeau, H. C. Kitchen Mgr., Boarding Dept. Leazer Hall Tel. 2- Residence: 115 Oberlin Rd.	0243
Rowe, Anna C. Agr. Ext. Ser., Home Demonstration. 307-1911 . Residence: A-202 Boylan Apts. Tel. 9520.	244
Rowe, Beatrice Sec., English Dept. 104 Pullen Residence: 1709 Hillsboro St. Tel. 9802.	237
"Rowland, Macon R. Instr., Diesel Engr. 109 Page Residence: 2520 Clark Ave. Tel. 2-3475.	246

E	xt.
*Ruffner, R. H.—Prof., A. H. and Dairying, A. I. Dept. 115 Polk 2 Residence: 1910 Park Dr. Tel. 2-0746.	268
*Ruggles, Edward WDir., College Ext. Div. 201-4 Library 2 Residence: 2411 Everett Ave. Tel. 2-1812.	238
*Statterfield, G. Howard Prof. of Biochem., Chem. Dept. 201 Withers Residence: 407 W. Park Dr. Tel. 2-2963.	264
Schaub, I. ODir., Agr. Ext. Ser. 104 Ricks	213
Schoenborn, Edward M., Jr. Prof. and Head, Chem. E. Dept. 111 Winston Residence: 2512 Kenmore Dr. Temporary Tel. 8956.	301
Scholz, Ruby Asst, Ext. Economist in Food Conserv. and Marketing, Agr. Ext. Serv., Home Demonstration Dept. 216-1911 	243
Scott, D. JBookkeeper, College Ext. Div. 201 Library	260
*Scott, G. T. Dir., Prod. and Mkt. Adm. 101 AAA Bldg Tel. 2-04 Residence: Selma, N. C.	544
*Scott, Mrs. J. K. Sec., Agr. Ext. Ser. 104 Ricks Tel. 3-3882 & 2 Residence: 1505 Caswell St. Tel. 7931.	213
Scott, Nancy—Multilith Operator, Pub. Dept. 21 Ricks Residence: 116 St. Mary's St., No. 3. Tel. 2-0885.	254
*Scagraves, W. P. Asst. Prof., Math. Dept. 224 Tompkins : Residence: 406 Chamberlain St. Tel. 8357.	228
Sebastian, Kic K.—Research Asst., Rural Sociol. 135-1911 : Residence: 1710 Park Dr. Tel. 2-1387.	312
Seegers, L. Walter Asst. Prof., History Dept. 114 Peele Residence: 2701 Mayview Rd. Tel. 6238.	200
*Seely, J. Frank—Asst. Prof., Chem. E. Dept. 105 Winston Residence: 2815 Barmettler St. Tel. 2-3096.	301
*Selkinghaus, W. E.—Assoc. Prof., M. E. Dept. 103 Page	246
*Senter, C. T.—Chief Clerk, Students Supply Stores. YMCA Residence: 907 W. Lenoir St. Tel. 4034.	225
Senter, Mary Ellen—Asst. in Circulation Dept. Library	259
*Shanklin, J. A.—Assoc. Prof. Agron., Agron. Dept. 204 Ricks : Residence: 406 Brooks Ave. Tel. 3-1058.	294
*Shelley, A. Bernard R.—Asst. Prof., English Dept. 106 Pullen : Residence: 810 Chamberlain St. Tel. 6235.	237
*Sherwood, F. W.—Assoc., Nutrition Sec., A. I. Dept. 317 Polk S Residence: 318 N. Boundary St. Tel. 2-0128.	241

	sæt.
*Shinn, W. E.—Prof. of Tex., School of Textiles. 103 Tex Residence: 2709 Bedford Ave. Tel. 2-0387.	289
*Shirley, Mrs. L. M.—Sec., F.F.A., Div. of Voc. Agr. 106 Tompkins Residence: 2515 Clark Ave. Tel. 2-3906.	282
*Shoffner, R. W. Dist. Agt., Agr. Ext. Ser. 206 Patterson Residence: 2402 Clark Ave. Tel. 7977.	291
*Showalter, Merle F.—Assoc. Prof., Chem. Dept. 220 Withers Residence: 2820 Barmettler St. Tel. 8858.	265
*Shulenberger, C. B.—Prof., Accounting, Econ. Dept. 115 Peele Residence: 2501 Stafford Ave. Tel. 7165.	224
*Shumaker, Meredith Lee—Instr., A. I., Dairy Mfg., A. I. Dept. 211 Polk Residence: 24½ Shepherd St. Tel. 2-1987.	305
*Shumaker, Ross-Head, Arch. Dept.; College Architect. 315 Daniels Residence: 2744 Rosedale Ave. Tel. 2-1706.	250
*Shunk, Ivan V.—Prof., Bot. Dept. 211 Winston Residence: 1809 Park Dr. Tel. 7810.	267
*Simpson, Julia P.—Instr., Math. Dept. 205 Tompkins Residence: 2223 Circle Dr. Tel. 2-1375.	226
*Sloan, Fred S.—State Program Leader, Prog. Plan. Dept. 311-1911 Residence: 1407 Canterbury Rd. Tel. 3-3388.	292
Residence: 226 Woodburn Rd. Tel. 5508.	270
*Smith, B. W.—Assoc. Prof., Agron. Cytogenetics, Agron. Dept. 336-1911 824 & Residence: 2707 North Dr. Tel. 9962.	262
Smith, Clyde F.—Assoc. Entomologist and Assoc. Prof., Zool. and Zoology Residence: 2716 Rosedale Ave. Tel. 2-3396.	201
*Smith, Dorris J.—See., Marketing Ext., Agr. Ext. Ser. 211 Patterson Residence: 109 Park Ave. Tel. 2-2533.	306
Smith, Miss Elsie Lee-Photographic Asst., Pub. Dept. 12 Ricks Residence: 2404½ Stafford Ave.	279
*Smith, Estelle T.—Asst. to State Home Agt., Agr. Ext. Ser. Home Demonstration. 202-1911 Residence: 128 E. Edenton St. Tel. 2-0853.	243
*Smith, G. Wallace—Prof., Head, E. M. Dept. 101 C. E. Residence: 222 Hawthorne Rd. Tel. 5120.	317
*Smith, F. H. Asst., Nutrition Sec., A. I. Dept. 316 Polk Residence: 2506 Stafford Ave. Tel. 6798.	241
Smith, Mrs. Hattie C.—Sec., Ext. Agr. Engr. 318 Ricks Residence: 2402 Everett Ave. Tel. 6814.	274
*Smith, J. Warren—Assoc. Prof., Div. of Teacher Ed. 101 Tompkins Residence: 2626 Dover Rd. Tel. 2-3654.	325

	Ext.
Smith, Pauline N. E. Dist. Home Agt., Agr. Ext. Ser. 204-1911 Residence: 105 N. Person St. Tel. 5200.	285
Spearman, (Miss) Bess Assoc. Nurse. Clark Infirmary Tel. ' Residence: Carroll House. Tel. 3-1010.	7615
Stamey, H. M. Specialist, A. H. Ext. 203 Polk Residence: K-1-A Cameron Court Apts. Tel. 3-3902.	269
Stanton, Verna S. E. Dist, Home Agt., Agr. Ext. Ser., Home Demonstration. 208 1911 Residence: Raleigh Apts.	285
<sup>*</sup> Stevenson, Mrs. Lois A. Lab. Tech., Agron. Dept. 5 Withers Residence: RFD-1, Raleigh. Tel. County 116-5105.	209
Stewart, H. A. Assoc, Prof., A. J. Dept. 216 Polk	326
*Stewart, H. E. Manager, Cafeteria. Leazer Hall	0243
"Stiemke, Robert E. Assoc. Prof., C. E. Dept. 208 C. E Residence: 1005 Canterbury Rd. Tel. 9970.	303
*Stinson, E. H. Instr., M. E. Dept. 207 Page Residence: 3411 Hillsboro St. Tel. 2-3231.	302
*Stinson, W. E. Foreman, Service Dept. Warehouse Residence: 2226 Hillsboro St. Tel. 3-1539.	272
Stone, Barbara—Sec., Sociol. Dept. 202 Peele Residence: A-8 Wilmont Apts. Tel. 3-3762.	231
Stott, Estelle HaroldChief Clerk, Pub. Dept. 3 Ricks	279
Stott, Juanita Asst. Registrar. 205 Holladay Residence: 2208 Hope St. Tel. 7056.	219
Stott, Ruth Ediphone Dept. 213-1911 Residence: 2208 Hope St. Tel. 7056.	221
Strickler, Marie-Sec., Zool. Dept. 104 Zoology Residence: 528 New Bern Ave. Tel. 2-2561.	239
*Strobel, Charles F. Asst. Prof., Math. Dept. 209 Tompkins Residence: 3310 Pollock Place. Tel. 2-3255.	226
*Stuart, A. D. Evt. Assoc. Prof., Agron., Seed Improvement, Agron. Dept. 119 Ricks Residence: 2704 Clark Ave. Tel. 2-1022.	262
Stuckey, J. L. Prof., Head, Geol. Dept. 1 Primrose Residence: 1911 Sunset Dr. Tel. 2-0187.	304
Sturdivant. Dorothy Sr. Stat. Clerk, Exp. Stat. 101 Patterson Residence: 109 N. Boylan Ave. Tel. 3-3432.	313
Sumner, Baye—Asst. Purchasing Agt. "A" Holladay Residence: Z-1-B Cameron Court Apts. Tel. 2-3595.	230
Sutton, Lenora Sten., Bot. Dept. 220 Winston Residence: Cary, N. C. Tel. 2172.	267

Ext.	
265	<sup>o</sup> Sutton, Paul Porter Asst. Prof., Chem. Dept. 20 Withers Residence: 908 Canterbury Rd. Tel. 3-2233.
285	"Swain, Mrs. Virginia Sloan—Ext. Spec. in Family Relations. Home Demonstration Dept. 212-1911 Residence: 2268 Circle Dr.
214	Taylor, Ellen Sec., 4-H Club. 201 Ricks Residence: 1313 Hillsboro St. Tel. 4142.
252	*Taylor, H. W. Alumni Sec. 201 Holladay Residence: 2820 Bedford Ave. Tel. 2-3274.
311	*Teachey, A. L.—State Dir., Food Production War Training. Voc. Ed. Dept. 108 Tompkins Residence: 2404 Clark Ave. Tel. 4393.
209	*Teter, Mrs. Norman C. Lab. Tech., Agron. Dept. 5 Withers Residence: 619 Brooks Ave. Tel. 3-2650.
232	"Thomas, Horace C. M/Sgt, DEML ROTC; Sup. Sgt, ROTC Mil. Dept. Armory Residence: Powell Dr. Tel. 2-2895.
243	Thomas, (Miss) Mary E. Ext. Nutritionist, Home Demonstration Agt. Ext. Ser. 210-1911 Residence: 221 Hawthorne Rd. Tel. 2-3742.
7615	Thomas, Myrtle L. X Ray and Lab. Tech., Clark Infirmary Tel. Residence: Carroll House. Tel. 3-1010.
282	*Thomas, Roy H.—State Supervisor of Agr. Ed., Div. of Voc. Ed. 106 Tompkins Residence: Raleigh Apts. Tel. 4098.
252	Thompson, Frances—Sec., Alumni Office. 202 Holladay Residence: 109 E. Whitaker Mill Rd. Tel. 4693.
261	Thompson, Grace S. Sten. Clerk, Fish and Wildlife Ser. 202 Zool. Residence: 915 N. Blount St.
313	*Thompson, Marguerite J. Sec., Exp. Stat. 105-A Patterson Residence: 34 Shepherd St. Tel. 2 0951.
326	*Thornburg, Murray DAsst. State Supv., Trade and Ind. Ed. 111 Tompkins Residence: 1510 Woodland Dr. Tel. X 5174.
291	*Tiddy, Mrs. J. Edwin Clerk, Farm Mgt. Dept. 206 Patterson Residence: 102 Logan Court. Tel. 8894.
267	*Todd, Furney A. Asst. Plant Pathologist, Bot. Dept. 202 Winston Residence: Powell Dr. Tel. 2 2895.
7615	Trollinger, Ida E. Head Nurse, Clark Infirmary
241	Tucker, Louisa Nelson Asst. Research Tech., A. H. Sect., A. I. Dept. 318 Polk Residence: 2316 Hillsboro St. Tel. 6709.
259	Turner, Anne L. Order Librarian. Library Residence: 903 West Johnson St. Tel. 6997.

" Married.

Ext.
U. S. Bureau of Mines A. L. Fox, Acting Chief, Metallurgical Branch. 102-4-1911 Tel. 3-1976
U. S. Geoligael Survey Lab.—W. L. Lamar, Chemist in Charge. 15 Winston Tel. 3-1022
U. S. Weather Bureau-C. E. Lamoureux, Meterologist in Charge. 112-1911 Tel. 4872
*Vann, J. G. Asst. Controller and Business Mgr. 105 Holladay 295 Residence: 1606 Scales St. Tel. 6240.
*Van Note, W. G.—Prof. of Metall., M. E. Dept.; Asst. Dir. of Engr. Exp. Sta. 104 Page Residence: 2214 Whitaker Dr. Tel. 3-1394.
*Vaughn, L. L. Prof. and Head, M. E. Dept. 109 Page
*Vaughn, Rosemary—Sec., Rural Sociol. 134-1911
*Veerhoff, Otto Assoc. Horticulturist, Hort. Dept. 309 Polk 275 & 318 Residence: 2830 Mayview Rd. Tel. 2-2240.
*Vestal, Herman H. Maj., Inf.; Adjutant, Mil. Dept. 1 Holladay 233 Residence: 3130 Stanhope Ave. Tel. 8128.
*Von Glahn, J. L.—Business Mgr. Athletics, Phys. Ed. and Athl. Dept. Gym Residence: Canterbury Rd. Tel. 3-1828.
Wade, Virginia Sec., Agr. Ext. Ser., Home Demonstration Dept. 223-1911 Residence: 2310 Hillsboro St. Tel. 4114.
Wallace, Martha L.—Lab. Technician, School of Tex. 115 Tex 327 Residence: 1200 Glenwood Ave. Tel. 8114.
Waller, E. M.—Asst. Prof., Physc. Ed. Dept. Gym Residence: 405 Pittsboro St., Chapel Hill. Tel. 8151.
Watson, Emma L. Clerk, Business Office. 106 Holladay
*Watson, George Carson Instr., Math. Dept. 223 Tompkins 228 Residence: Apt. 6, 104 Horne St.
*Watson, Lewis P.—Asst. Ext. Ed., Pub. Dept. 9 Ricks
*Weaver, D. S.—Head, Agr. Engr. Dept. 316 Ricks
*Weaver, Jno. W., Jr. Research Asso., Agr. Engr., Agr. Engr. Shop. Tel. 3-1374 Residence: 414 Morrison Ave.
Weeks, Susie B.—Clerk-Sten., Bur. Agr. Econ., USDA (Exp. Stat.) 104-B Patterson Tel. 3-2454 Residence: 315½ Oakwood Ave.
Weldon, Virginia Asst. Research, Nutrition Sec., A. I. Dept. 318 Polk Residence: 2316 Hillsboro St. Tel. 6709.

Ext.			

*Wellons, T. T.—Supt. of Dormitories. Warehouse Residence: 206 Chamberlain St. Tel. 3-2478.	272
*Wells, B. W.—Prof. and Head, Bot. Dept. 220 Winston Residence: 1605 Park Dr. Tel. 8746.	267
West, Gladys F.—Jr. Botanist, Cotton Fiber Investigations. 104 Polk Residence: 1324 Brooks Ave. Tel. 4731.	300
Wetmore, Mary Badger-Sec., Agron. Ext., Agron. Dept. 208 Ricks Residence: Anderson Drive Ext. Tel. 8157.	294
*Weyne, Jerome Student Asst., M. L. Dept. 205 Peele Residence: 6 Enterprise St. Tel. 4788.	231
*Wheeler, F. B.—Prof. of Practical Mechanics, M. E. Dept. Shop Residence: 20 Maiden Lane. Tel. 7958.	245
*Wheeler, W. W. Carpenter, Agr. Engr. Dept. Agr. Engr. Tel. 3- Residence: 120 W. Morgan St. Tel. 3-3296.	1374
*Wheless, M. H.—Office Mgr., Students Supply Store Tel. 2-3674 & Residence: 20 Turner St. Tel. 8053.	225
*White, Mrs. Maude B.—Bookkeeping Machine Operator, Business Office. 103 Holladay Residence: P-3-A Cameron Court Apts. Tel. 2-2051.	316
*White, Raymond Cyrus Asst. Prof., Chem. Dept. 103 Withers Residence: 317 Calvin Rd. Tel. 9582.	265
*Whitehead, Laurence C. Dist. Agt., U. S. Fish and Wildlife Service. 202 Zoology . Residence: 2613 Van Dyke Ave. Tel. 4455.	261
*Whitford, L. A.—Asst. Prof., Bot. Dept. 201 Winston Residence: 1716 Park Dr. Tel. 6197.	267
*Wiggins, Mrs. Geraldine Sec., Phys. Ed. Dept. Gym Residence: C-303 Boylan Apts. Tel. 2-2580.	218
*Williams, C. B.—Emeritus Prof., Agron. Dept. 117 Ricks Residence: 1405 Hillsboro St. Tel. 8893.	262
*Williams, C. F.—Assoc. Horticulturist, Hort. Dept. 305 Polk. 275 & Residence: 1912 Lewis Circle. Tel. 2-0233.	318
*Williams, Charles W.—Instr., Math. Dept. 222 Tompkins Residence: D-2 Grosvenor Gardens.	228
*Williams, H. Page—Prof., Math. Dept. 223 Tompkins Residence: 1015 Brooks Ave. Tel. 2-2191.	228
*Williams, L. F.—Prof. of Org. Chem., Chem. Dept. 301 Withers Residence: 1816 Park Dr. Tel. 8075.	297
Williams, Lucie R. Stock Keeper, Chem. Dept. 217 Withers Residence: 3210 Clark Ave. Tel. 8666.	265
*Williams, N. W. Asst. Prof., Poul. Sci., Poul. Dept. 214 Ricks Residence: Poultry Plant. Tel. 8686.	280
*Willis, Esther G.—S. W. Dist. Agt., Agr. Ext. Ser., Home Demonstration. 219-1911 Residence: 2902 Fairground Ave. Tel. 2-1476.	242

1	3200.
*Wilson, Arthur John—Head, Chem. Dept. 107 Withers	266
Wilson, S. Virginia Asst. Ext. Nutritionist, Agr. Ext. Ser. Home Demonstration. 218-1911 Residence: 1119 Harvey St. Tel. 2-3216.	242
*Wilson, T. L. Asst. Prof., English Dept. 12 Peele Residence: 407 Calvin Rd. Tel. 6951.	237
Winkler, E. W. Asst. Prof., E. E. Dept. 105-B Daniels Residence: 509 Daughtridge St. Tel. 2-1370.	235
Winstead, Dorothy-Sten., Hort. Dept. 303 Polk . 275 & Residence: 123 N. Bloodworth St. Tel. 2-3792.	318
Winstead, Mildred Sten., Hort. Dept. 303 Polk	318
<sup>e</sup> Winston, Sanford Prof., Sociol. Dept. 202 Peele Residence: 120 Forest Rd. Tel. 2 1402.	231
Witmer, Samuel B. Mechanic, School of Tex. Tex. Bldg Residence: 508 Dixie Trail.	273
<sup>a</sup> Witmer, Mrs. S. B. Sten., Alumni Office. 202 Holladay Residence: 508 Dixie Trail.	252
"Wolfowitz, J. Assoc. Prof., Exp. Stat. Dept. 105-A Patterson Residence:	313
*Wood. Ned Asst. State 4-H Leader. 201 Ricks Residence: L-2-A Cameron Court Apts. Tel. 3-3073.	214
Wood, Star Asst. Football Instr., ASTP. Phys. Ed. and Athl. Dept. Field House Residence: Field House. Tel. 6934.	3934
<sup>*</sup> Wood, T. W. Assoc. Prof., Ind. and Personnel Management. Econ. Dept. 104 Peele Residence: 2822 Bedford Ave. Tel. 2-3800.	200
*Woodall. Mrs. Clyde Class Attendance Clerk, Dean of Students Office. 101 Holladay Residence: 1311 Canterberry Rd. Tel. 2-0381.	215
<sup>5</sup> Woodhouse, W. W., Jr. Res. Assoc. Prof. Agron., Soil Fertility, Agron. Dept. 316-1911 Residence: 3209 Hillsboro St. Tel. 4544.	262
*Wright, J. B. Electrician, Service Dept. Warehouse Residence: Western Blvd. Tel. 4883.	272
*Wyatt, Mrs. Candace L. Sten., Poul. Ext. Dept. 210 Ricks Residence: 2702 Van Dyke Ave. Tel. 4483.	321
*Wyman. Lenthall Prof., Div. of For. 305 Ricks Residence: 1837 White Oak Rd. Tel. 8953.	270
Wynn, Willard K.—Asst. Prof., English Dept. 107 Pullen Residence: 2701 Barmettler St.	237
Wynne, Robert B. Instr., English Dept. 13 Peele & 104 Pullen Residence: 1814 Park Dr. Tel. 2-3698.	237
A TANK TANK A	

	Exc.
*Yarborough, C. E. Foreman, Hort. Dept. Greenhouse Residence: 216 Ashe Ave. Tel. 8509.	240
Yates, Phyllis J.—Asst. Editor for Exp. Sta. Publications Dept. 9 Ricks Residence: 2404½ Stafford Ave.	279
Yeardley, Nelson Paul—Instr., Math. Dept. 208 Tompkins Residence: 615 Brooks Ave. Tel. 4577.	226
*Young, Mrs. C. H. Sec., A. H. Ext. 202 Polk Residence: 2303 Clark Ave. Tel. 8083.	269
*Zimmerberg, Hyman J. Instr., Math. Dept. 220 Tompkins Residence: 12 Maiden Lane.	228

## STUDENT DIRECTORY

## 1945-1946

Name	Classification	School Address Dorm. Box No. or St. No.	Home Address
Anterns, J. E. Aller, E. W., Jr. Aller, J. J. Aller, R. L. Aller, R. L. Anderson, J. E. Jr. Anderson, G. J. P. Anderson, M. J. Andrews, W. J. Jr. Andrews, W. M. Jr. Andrews, S. C. Armitage, S. C. Armitage, S. C. Armith, R. A., III Ashworth, R. A., III Ashworth, R. A., III Ashworth, R. G. Averv, W. R. G.	Sr. M. E. Fr., For., Fr., E. Fr., Tex. Fr., M. E. So., M. E. So., C. E. Sr., Ch. E. Sr., Ch. E. Fr., Ch. E. Fr., Ch. E. Fr., Ch. E. Fr., Ch. E. Fr., Ch. E. Fr., M. E. Fr., M. E. Fr., M. E. Fr., M. E. So., Aert. Ch.	1908 Park Dr.           4 Berry, 4337           1834 Horne           204 Bargwell, 3336           205 Elim           206 Elim           207           208 Ecton, 3718           218 Becton, 3718           212 Becton, 3718           212 Bargwell, 3322           2513 Clark Ave.           709 Welch, 3257           200 Welch, 3257           211 Bagwell, 3312           215 Becton, 3749           214 Bacton, 3749           215 Becton, 3749           312 Bacton, 3749           214 Bagwell, 3312           215 Becton, 3749           314 Becton, 3749           213 Clark Ave.           12 Bagwell, 3312           215 Becton, 3749           318 Becton, 3749           213 Alex, 4118           Gym           12 N. Dawson	Summerfield, N. C. Raleigh, N. C. Greenville, N. C. Greenville, N. C. Raleigh, N. C. Greensboro, N. G. Tyrone, Pa. Wate Forest, N. C. Raleigh, N. C. Schneby, N. C. Jamestown, N. C. Jamestown, N. C. Ashchile, N. C. Ashchile, N. C. Gamide, N. C. Camide, N. C. Camide, N. S. C. Camide, N. S.
Bailey, H. Q. Bailey, H. Q. Baith, T. L. H. Janks, F. G. Ju Bartor, H. L. Barber, H. M. Barber, J. B. Barefield, Margaret. M. Barnes, J. J., Jr. Barnes, J. J., Jr. Barnhardt, E. Barnhardt, E. W. Barnhardt, E. W. Barnhardt, E. W. Barnhardt, E. W. Barnhardt, P. V. Baskervill, Jean C. Bartlett, A. Bartlett, A. Bartlett, A. Bartlett, A. Bartlett, A. Bartlett, A. Bartlett, A. Bautista, A. O. Baxiey, Hartlee M. Baxter, Rachel Bayer, S. R. Beaman, N. J.	Fr., M. E. Fr., E. E. S., M. E. K. M. L. C. & M. W. L. C. & M. Fr., Acro. Fr., E. E. Sond E. Z. Sond E. Z. Sond E. Z. Sond E. Z. Sond E. Z. Fr., M. Fr., M. Fr., C. E. Fr., Acro. Fr., Acro. Fr., C. E. Fr., C. E.	301 Bagwell, 3307         N           300 Wat, 3042         Not42           217 Wat, 3035         119 Hurdson St.           2412 Hillsbore         2412 Hillsbore           2412 Jang         Addition St.           2412 Alex, 4141         122 Park Ave           333 Becton, 3708         801           108 Becton, 3708         805           205 Weich, 525         306 Gold, 3230           101 Bagwell, 307         101 Hex, 4101           213 Alex, 4149         2306 Hilbsbore           2305 Hilbsbore         101 Alex, 4101           213 Alex, 4141         213 Alex, 4142           203 Bagwell, 335         P           F-1 Grossmor Gardens         4 Maiden Lane           100 Oberlin Rd, 320         2306 Sold, 3220           238 Bagwell, 3332         S	Shelby, N.C. Wilmington, N.C. Raleigh, N.G. Franklinton, N.C. Lynchburg, Va. Raleigh, N.C. Salemburg, N.G. Angfor, N.C. Angfor, N.C. Enfald, N.G. Enfald, N.G. Enfald, N.G. Enfald, N.G. La Grange, N.C. Ivanhoe, N.C. Lenoir, N.G. Karage, N.G. Sharpaburg, N.G. Sharpaburg, N.G. Sharpaburg, N.G. Caryaburg, N.G. Sharpaburg, N.G. Shar

Name

## School Address Classification Dorm. Box No. or St. No. Home Address

14 ame	Classification	Dorm. Doz 140. 07 De. 140. 110me Autoress
Beck, R. S	So M E	Route No. 6 Raleigh, N. C.
Bedford, W. B. Bell, E. R.	So Oco T & C	2811 Wayland Dr. Raleigh, N. C. 3 Gym Statesville, N. C.
Bealora, w. D.	30., 000. 1. @ 0	. colt wayland Dr Waleigh, N. C.
Bell, E. R	Fr., C. E.	.o Gym
Bell, G. L	Fr., Agr	.13 Becton, 3815 Huntersville, N. C.
Bell, G. L. Bell, R. C.	Fr., Ch. E.	13 Becton, 3815 Huntersville, N. C. 110 Welch, 3246 Manteo, N. C. 313 Bagwell, 3379 Asheville, N. C.
Bell W D	Fr. M. E.	. 313 Bagwell, 3379 Asheville, N. C.
Benfield J K	Fr. Tex.	202 Becton, 3736 Valdese, N. C.
Benfield, J. K. Bennett, J. G.	Fr. E. E.	211 Wat., 3029 Kittrell, N. C.
Benson, G. S.	So M E	107 4th, 3117 Reisterstown, Md.
Ponton F D	En F F	111 Beston 9711 Honowall Va
Benton, E. D Benton, F. E.	F1., E. E.	111 Becton, 3711 Hopewell, Va. 306 Welch, 3266 Hertford, N. C.
Benton, F. E.	Fr., M. E.	. old Dester 2740
Benton, W. D.	Fr., E. E.	.214 Becton, 3748 Monroe, N. C.
Benton, W. T.	Sr., Cn. E.	115 Hillsboro Wilmington, N. C. 229 Alex., 4158 New York, N. Y.
Berger, S.	Fr., Tex.	229 Alex., 4158 New York, N. Y.
Berkett, J. L.	Fr., Tex	.211 Alex., 4140 Bronx, N. Y.
Berkett, J. L Berkut, M. K.	. Grad., Agr. Ch.	211 Alex., 4140 Bronx, N. Y. 2723 Van Dyke Raleigh, N. C.
Bianco, A. L.	So., Tex.	238 Alex., 4164 East Patterson, N. J. 1720 Hillsboro Burlington, N. C.
Bingenheimer C G	So M E	1720 Hillshoro Burlington, N. C.
Dingenneiner, o. G.	En Tor	332 Bagwell, 3398 High Point, N. C.
Dingham, C. D	En ME	102 Wat 3002 Winston Salam N C
Dingnam, 1. J.	Fr., M. E.	102 Wat., 3002 Winston-Salem, N. C. Box 6114, Five Pts. Sta. Raleigh, N. C.
Biarco, A. L. Bingenheimer, C. G. Bingham, C. D. Bingham, T. J. Bird, R. L. Blackman, L. C.	So., Ch. E	DOX 0114, FIVE FIS. DIA Kaleigh, N. C.
Blackman, J. C. Blackstock, C. E., Jr.	Fr., Agr. Ed.	203 Gold, 3215     Garland, N. C.       Gym     Asheville, N. C.       111 Alex., 4108     Cleveland, N. C.
Blackstock, C. E., Jr.	So., For.	Gym Asheville, N. C.
Blackwelder, C. D.	Fr., Agr.	111 Alex., 4108 Cleveland, N. C.
Blake, W. K.	Fr., Aero	212 Alex., 4141 Chadbourn, N. C.
Blank, F. L., Jr.	Fr., Arch. E.	2412 Hillsboro Nashville, Tenn.
Blaser, R. E. Gra	ad. Agron. (F.C.).	2412 Hillsboro Nashville, Tenn. 2627 Van Dyke Raleigh, N. C.
Blank, F. L., Jr. Blaser, R. E. Gr. Bloom, R. W.	Fr., Occ. I. & G.	Field House Hillside, N. J. 317 Alex, 4180 New Bern, N. C. 119 Becton, 3719 Vass, N. C. 12 Horne Asheville, N. C.
Blow, W. L. Blue, C. H. Bocook, J. A. Bodenheimer, V. B.	Sen An Prod	317 Alex., 4180 New Bern, N. C.
Phus C H	Er F F	119 Becton 3719 Vers N C
Drue, C. H.	En Anah E	12 Horma Achovillo N.C.
DOCOOK, J. A.	Fr., Arch. E.	207 Desten 2741 High Daint M.C.
Bodenneimer, V. B.	So., Ch. E	104 Welch 2240 Carnite Fells N.C.
Bodenheimer, W. C	Fr., Aero.	104 Welch, 3240 Granice Fails, N. C.
Boling, R. W.	Fr., Cer. E.	July July 1998 Hendersonville, N. C.
Bonner, J. C.	. Fr., Occ. I. & G.	207 Becton, 3741 High Point, N. C. 207 Becton, 3740 Granite Falls, N. C. 304 Syme, 3568 Hendersonville, N. C. Field House Wilkes-Barre, Pa.
Borum, M. L.	Sr., C. E.	18½ Horne Greensboro, N. C. 115 Wat., 3015 Wilmington, N. C.
Bostian, R. L., Jr.	So., C. E	115 Wat., 3015 Wilmington, N. C.
Bowen, D. L. Bowen, E. G. Bowman, A. P. Bowman, F. A.	So., Agr.	233 Bagwell, 3365 Burgaw, N. C.
Bowen, E. G.	So., M. E.	11 YMCA
Bowman A P	So., E. E.	130 Woodburn Rd. Hickory, N. C. 131 Becton, 3731 Charlotte, N. C.
Bowman F A	Fr. Ch. E.	131 Becton, 3731 Charlotte, N. C.
Bowman, R. D.	Fr Agr	316 Becton, 2784 Julian N.C.
Downan, R. D.	ET CE	Bit Becton, 3784         Julian, N. C.           222 Bagwell, 3354         Reidsville, N. C.           326 Becton, 3794         Lenoir, N. C.
Boyd, H. E. Boyd, H. L.	Er Cool F	326 Becton 3794 Lenoir N C
Boyd, H. D. F.	F1., Geon E.	101 4th 2111 Coldahova N C
Boyette, R. E. Boykin, J. N. Boyter, J. C.	Fr., Agr.	101 4th, 3111         Goldsboro, N. C.           223 Becton, 3757         Sims, N. C.           1720 Hillsboro         Charlotte, N. C.
Boykin, J. N.	Fr., Agr. Ed.	.225 Decton, 5757 Sims, N. C.
Boyter, J. C.	So., M. E.	.1720 Hillsboro Charlotte, N. C.
Bradshaw, W. W.	Fr., Gen. E.	2630 St. Mary's Raleigh, N. C.
Branscomb, C. E.	Jr., M. E.	220 Becton, 3754 Winston-Salem, N. C.
Bransford, E. O., Jr. Brantley, G. B.	Fr., M. E.	2630 St. Mary's Raleigh, N. C. 220 Becton, 3754 Winston-Salem, N. C. 307 Wat., 3043 Winston-Salem, N. C.
Brantley, G. B.	Fr., Gen. E.	
Brantley, K. E.	Fr., Agr. Ed.	.113 Alex., 4110 Zebulon. N. C.
Breeden, C. L.	Fr. M.E.	212 Gold, 3224 Bennettsville, S. C.
Breedlove W A	Fr. E. E.	208 Welch, 3256 Nashville, N. C.
Brewer J B	Fr Arch E	118 Wat. 3018 Carthage N C
Primer I F	Sr Arch	125 Woodhurn Rd Levington N C
Proodway C A	Er For	214 Alex 4143 Norman N.C.
Broadway, G. A.	Cred Dr. Soc	1906 Mordonai Dr. Rolaigh N.C.
brooks, beity C.	. Grad., Ru. 50C.	204 Alex, 4130         Spring Hope, N. C.           2113 Alex, 4140         Zebulon, N. C.           212 Gold, 3224         Bennettsville, N. C.           208 Welch, 3256         Nashville, N. C.           218 Kink, 3018         Carthage, N. C.           215 Woolburn Rd.         Lexington, N. C.           215 Woolburn Rd.         Lexington, N. C.           2160 Mortheeai Dr.         Ralaigh, N. G.

School Address Name Classification Dorm. Box No. or St. No. Home Address 

44

Name	Classification	School Address Dorm. Box No. or St. No.	Home Address
Cheney, J. G., Jr.	Fr., Tex.	.2305 Clark Ave. 215 Becton, 3749 2209½ Hope	
Cherry, L. T.	Sp. No Coll. Cr.	215 Becton, 3749	Greenville, N. C.
Cherry, O. E.	Fr., Aero.	.303 Welch, 3263	Draper, N. C.
Childress, C. S., Jr.	Fr., C. E.	18½ Horne	Mt. Airy, N. C.
Church P. F. Jr	Fr., C. E.	.323 Becton, 3791	Wilmington, N. C.
Churn, C. R.	Fr., Occ. I. & G.	.714 Nash Drive	Raleigh, N. C.
Clark, F. O Jr., Clark L. C. Jr	, Agron. (F. C.).	.6 Enterprise	Inez, N. C.
Clark, W. O.	Fr., E. E.	22094 Hope 303 Wicht, 3263 9 Berry, 4342 4 Some 6 Syme, 3002 14 Nash Derive 6 Enterprise 18 Alex, 4147 18 4 Horne 21 Becton, 3822 21 Becton, 3825 21 Becton, 4855 21	. Tarboro, N. C.
Clayton, G. D		18½ Horne 21 Becton, 3822	Andrews N. C.
Cline, J. C.	Jr., Agr. Ed.	.301 Gold, 3225	Shelby, N. C.
Coble, W. G.	Fr., E. E.	21 Becton, 3822 214 Becton, 3748	Henderson, N. C. Monroe, N. C.
Cochrane, W. H., Jr.	Fr., Agr.	131 Alex., 4126	Franklin, N. C.
Cody, W. R., Jr.	Fr., E. E.	207 Becton, 3741	Asheville, N. C.
Coggin, Z. D.	. Fr., Cer. E.	301 Bagwell, 3367	Albemarle, N. C.
Cole, R. S., Jr.	So., Aero.	103 Chamberlain	Greensboro, N. C.
Colenda, C. E	Fr., Gen. E.	208 Becton, 3742 Mor	rehead City, N. C.
Collie, J. S.	Fr., E. E.	318 Wat., 3054	Goldsboro, N. C.
Collins, J. C.	Fr., Agr.	118 Becton, 3718 203 Becton, 3737	Francisco, N. C. Wilmington, N. C.
Compton, H. W.	Fr., E. E.	2510 Vanderbilt	Hazelwood, N. C.
Connor, G. C., Jr.	So., Arch. E.	211 Becton, 3822 214 Becton, 3748 310 Berry, 4300 207 Becton, 3741 301 Barry, 4300 207 Becton, 3741 301 Barry, 3307 2710 Vanderbilt 2710 Vanderbilt 208 Becton, 3712 208 Becton, 3712 208 Becton, 3714 118 Wat, 3054 118 Wat, 3054 11 Becton, 3713 11 Becton, 3713 11 Becton, 3713 11 Becton, 3713 12 Barry, 313 302 Barry, 313 303 303 304 305 305 305 305 305 305 305 305	High Point, N. C.
Conrad, J. E.	Fr., C. E.	11 Becton, 3813	Charlotte, N. C.
Cook, E. R.	Fr., M. E.	.2513 Clark	Kannapolis, N. C.
			Clemmons, N. C.
Cool, L. E. Cooper, J. E., Jr. Cooper, W. B. Corby, E. N. & Corey, James Did n Corracchione, A.	Fr., M. E.	302         Dag wei, 3068           2513         Clark           102         Wat., 3002           216         Wat., 3034           Gym         So. 6           202         Becton, 3736           Apt. 101, Capital Apts.         109	Glens Falls, N. Y.
Cooper, J. E., Jr.	So., M. E.	202 Becton, 3736 Apt. 101, Capital Apts.	Lincointon, N. C. Charlotte, N. C.
Corby, E. N S	Sr., Tex. C. & D.	108 Horne	
Cornacchione, A.	Jr., C. E.	1806 Hillsboro	Statesville, N. C.
Corriber, K. V.	Fr., Agr.	327 Becton, 3795	Mooresville, N. C.
Couch, R. S.	Fr., Aero.	232 Becton, 3766	Monroe, N. C.
Covington, C. W. Jr.	. Jr., Agr. Ed. Fr. Ch. E.	RFD 1 Fuguar Spres Fu	Reidsville, N. C.
Covington, H. N.	Fr., Agr.	204 Welch, 3252	Mebane, N. C.
Coward, R. C.	Fr., E. E.	106 Bagwell, 3306	Ayden, N. C.
Cowart, J. C.	So., C. E.	124 Bagwell, 3324	Newport, N. C.
Cox, R. W.	Fr., M. E.	.322 Becton, 3790	Cary, N. C.
Cox, W. C., Jr. Cozart, J. F.	Fr., Agr. Fr., Aero.	324 Becton, 3792	Richlands, N. C. Oxford N. C.
Craig, R. F.	Fr., Tex.	330 Becton, 3798	Stanley, N. C.
Creech, E. E.	Fr., Occ. I. & G.	2710 Rosedale Ave.	Asneboro, N. C. Middlesex, N. C.
Crigler, B. R.	. So., M. E.	1806 Hilleboro 327 Becton, 3765 204 4th, 3122 N 232 Becton, 3766 Field House RFD 1, Fuquay Sprgs, Fu 204 Wich, 3252 106 Bagwell, 3264 106 Bagwell, 3284 302 Wat, 3038 322 Becton, 3790 234 Becton, 3790 244 Becton, 3718 301 Becton, 3718 301 Becton, 3718 2710 Rosedale Ave. 103 Chamberlain 205 Alex, 4137	Atlanta, Ga.
MARKAN MARKAN		200 Mica, 1101	. Graigsville, va.

	<i>a</i>	School Address	
Name	Classification	Dorm. Box No. or St. No.	
Crocker, Lizette D. Crum, J. II Currin, Mary W.	Grad., Exp. Sta.	215 N. Boylan Ave. 107 Shepherd 114 N. Boylan Ave.	Northside, N. C.
Dailog, R. E. Dany, T. B. Dampier, E. H. Daniel, W. J. Daniel, W. J. Daniel, J. M. Daniel, J. M. Dariel, J. M. Davis, J. C. Davenport, A. J. C. Davenport, A. W. Davis, F. W., Jr. Davis, R. W., J. Davis, J. H. J. Davis, J. H. J. Davis, J. H. J. Davis, J. H. J. Davis, J. C. Davis, J. C. Davis, J. C. Davis, J. C. Davis, J. C. Davis, J. C. Davis, R. J. Deas, J. E. J. Deasn, R. L. Deasn, B. S. Dempsey, Eloise Dempsey, Eloise Dempsey, Eloise Dempsey, Eloise	F., Tex. Fr., C. E. Fr., C. E. Fr., M. E. So., E. E. J., So., E. E. J., So., E. E. So., M. E. Fr., Cer. E. Fr., Cer. E. Fr., Cer. E. Fr., Cer. E. So., Ch. E. Fr., Cor. So., Age. So., Age. So., Age. Fr., Ch. Fr., Ch. Fr., Ch. Fr., Ch. Fr., Ch. Fr., Ch. Fr., Ch. Fr., C. Fr., Fr., Fr., Fr., Fr., Fr., Fr., Fr.,	101         Snepheru           129         Berton, 3729           121         Halfax           120         Berton, 3729           121         Halfax           105         Berton, 3729           120         Barten, 11           120         Berton, 3729           121         Halfax           120         Barten, 12           120         Barten, 13           121         Bartax           121         Bartax           121         Bartax           120         Bartax           120         Bartax           120         Bartax           121         Bartax           121         Bartax           121         Hortax           122         Bartax           124         Bartax           125         Berton, 3769           1214         Wartax           1214         Wartax	Northside, N. C. Charlotte, N. C. Charlotte, N. C. Charlotte, N. C. Gorrisville, N. C. Raleigh, N. C. Barton, N. C. Columbia, S. C. Newport, N. C. Goldsboro, N. C. Ellerbe, N. C. Goldsboro, N. C. Louisburg, N. C. Canton, N. C. Luberty, N. C. Durham, N. C. Durham, N. C. Durham, N. C. Monroe, N. C. Michaers, N. C. Monroe, N. C. Raleigh, N. C. Raleigh, N. C. Raleigh, N. C. Raleigh, N. C.
Duncan, R. H.	Jr., M. E.	2510 Vanderbilt Ave.	Greenville, N. C.
Dunn, J. F. Dunn, M. B.	Jr., Ch. E. Sr., Aero,	522 Elm 2514 Clark Ave.	Charlotte, N. C. Charlotte, N. C.
Dunn, W. M. Dunston, Anna Claire	Fr., For.	.127 Becton, 3727 Scot 1710 Hillshoro	and Neck, N. C.
DuRant, R. W.	So., C. E.	101 Wat., 3001	Tryon, N. C.
Dutton, R. M.	Fr., Gh. E.	125 Hawthorne Rd	Pageland, S. C.

School Address Dorm. Box No. or St. No. Home Address
114 Park Ave., Box 5223         Norfolk, Va.           139 Alex, Alsi         Fayetteville, N.C.           H-1 Raleigh Apts         Raleigh, N.C.           105 Welch, Std.         Union Mills, N.C.           57 Mark Mark         Big Stonic Gar, Va.           744 Rosednet Ave.         Asheville, N.C.           307 Gold, 3231         Granite Quarry, N.C.           308 Weich, 3267         Washington, N.C.           307 Gold, 3231         Granite Quarry, N.C.           308 Weich, 3267         Gastonia, N.C.           318 Bagwell, 3347         Gastonia, N.C.           139 Lohamberlain         Raleigh, N.G.
2613 Clark Ave.         Monroe, N. C.           7 Berry, 434.         Gilkey, N. C.           203 Ave.         Stabury, N. C.           204 Stabury, N. C.         Barbury, N. C.           105 Gold, 3210         Forest City, N. C.           205 Bagwell, 3371         Winston-Salem, N. C.           109 Bagwell, 3210         Forest City, N. C.           208 Bagwell, 3371         Winston-Salem, N. C.           109 Bagrend, 3209         Grandy, N. C.           109 Bagrend, Stabury, N. C.         10 Borry, 463, 608 E. Whit. Mill Rd., Kenly, N. C.           107 Borry, 453, 608 E. Whit. Mill Rd., Kenly, N. C.         10 Borry, 453, 609 M.           108 Solid, 3229         Barlum Springs, N. C.           205 Gold, 3229         Barlum, Springs, N. C.           206 Beeton, 3774         Batk, N. C.
2266 Circle Dr.         Raleigh, N.C.           109 Wat, 3009         Bailey, N.C.           215 Syme, 3547         Wallace, N.C.           216 Syme, 3547         Wallace, N.C.           210 Welch, 3270         Willard, N.C.           202 Gold, 3214         Pairmont, N.C.           203 Eston, 767a.         Badin, N.C.           227 Becton, 767a.         Badin, N.C.           227 Becton, 8761         Zebuion, N.C.           238 Becton, 3801         Mt. Airy, N.C.           203 Berty, 827         Loss Beath, N.Y.           203 Welch, 3225         Ivanhoe, N.C.           203 Welch, 3226         Waltaberry, N.C.           204 Beywell, 3225         Ivanhoe, N.C.           205 Welch, 3262         Whitaleers, N.C.           206 Welch, 3226         Waltaberry, N.C.           206 Beywell, 3325         Grafton, N.C.           206 Beywell, 3326         Pairmont, N.C.           206 Beywell, 3326         Fairmont, N.C.           206 Gold, 3205         Spencer, N.C.           218 Alex, 4186         Winston-Salem, N.C.           218 Alex, 4186         Winston-Salem, N.C.           210 Welch, 3240         Blemarch, N.C.           218 Alex, 4182         Aberdeen, N.C.           210

School Address	
Name Classification Dorm. Box No. or St. No. Home Addre	
Pranklin, B. D.     So., For. 203 Gold, 3215     Asheville, N.       Pranklin, J. H.     Fr., Tox., 133 Bagwall, 3401     Fayetteville, N.       Pranklin, T. S.     Fr., M. E. 13 Becton, 3815     Stem, N.       Prazelic, E. L.     So., M. E.     10 E. Lane     Raleigh, N.       Prement, D., Letb J.     Grad, Str., M. E.     331 S.     Boylan Ave.     Wilth Point, N.       Prement, D., Grad, Str., So., M. E.     139 Ecton, 3763     Winstrometric Str., So., Str., 11720 Hillshoro     Greensboro. N.       Preeman, J. G.     So., Ch. E.     11720 Hillshoro     Greensboro. N.       Preeman, J. G.     So., Ch. E.     11720 Hillshoro     Greensboro. N.       Preeman, J. G.     So., Ch. E.     217 Alex, 4146 Mar.     Hillshoro. Stem, N.       Puretori, P. T., Jr.     Sr., M. E.     217 Alex, 4146 Mar.     Hillshoro. Stem, N.       Punker, G. C.     So., Ch. E.     217 Alex, 4146 Mar.     Hillshord. Grantotte, N.       Punker, G. C.     So., Ch. E.     103 Gold, 3201     Grantotte, N.       Punker, J. J.     Fr., M. E.     108 Hkh, 3118     Kannapolis, N.       Punker, J. J.     T.     Trow Mar.     Fride Kh, 3118     Kannapolis, N.	t, N. C. ce, R. I. n, N. C. n, N. C. n, N. C. y, N. C. i., N. C.
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Y.C.C.C.C.C.C.C.C.C.C.C.C.V.V.C.C.C.C.C.
Graday, J. C.         Fr., Agr. 14 Maiden Lane         Raleigh, N.           Graham, D. W.         Fr., Arch. 308 4th 3134         Raleigh, N.           Graham, J. T.         Fr., Agr. 16 Koles, 4105         St. Fauls, N.           Grainger, J. M., Jr.         Fr., Agr. 308 Var., 3042         Louisburg, N.	h, N. C. h, N. C. s, N. C. g, N. C.

		School Address
Name	Classification	Dorm. Box No. or St. No. Home Address
Grass, W. H., Jr. Graves, Caroline F. Gray, G. A. Greatsinger, C. S. Greenberg, L. H. Greene, D. B. Greene, G. R. Greer, E. C. K. Griffin, J. E., Jr. Griffin, M. G. Griffin, M. S. Griffin, M. S. Griffi	So, Arch. E. So, C. E. Fr., Acros. Fr., OAB. E. Fr., OAB. E. Jr., Ch. E. Jr., Ch. E. Fr., E. Fr., E. Fr., Agr. Fr., Agr. Fr., Acro. Fr., M. E. Fr., C. E. J., Acro. Fr., M. E. Fr., C. S. J., C. B. Fr., F. Fr., C. B. Fr., F. Fr., C. B. Fr., C. B. Fr., F., Fr., Fr., Fr., Fr., C. B. Fr., F. Fr., Fr., Fr., Fr., Fr., C. B. Fr., Fr., Fr., Fr., Fr., Fr., Fr., Fr.,	102         4th, 3112         Henderson, N. C.           103         Berry, 4304         Greenaboro, N. C.           213         Becton, 3765         Spartanburg, S. C.           231         Becton, 3765         Spartanburg, S. C.           104         Berry, 4304         Greenaboro, N. C.           201         Lanoir, M. Y.         Janoir, S. G.           218         Becton, 3765         Spartanburg, S. C.           219         Janoir, M. Y.         Janoir, N. Y.           911         W. Johnson         Nashville, N. C.           225         Alex, 4154         Bridge Hampton, N. Y.           212         Berty, 4303         Gastonia, N. C.           212         Berty, 4303         Gastonia, N. C.           213         Berty, 4303         Gastonia, N. C.           214         Becton, 3743         High Point, N. C.           215         Woodburn Rd.         Hitton village, V.a.           204         Berty, 4324         Greenaboro, N. C.           215         Berg, 441, 242         Greenaboro, N. C.           212         Berg, 441, 242         Greenaboro, N. C.
Hamrick, P. K. Hansen, H. H. Hardee, C. L. Hardin, L. T. Hardin, W. K., Jr. Hardy, P. M. Hargett, C. E. Hargrove, T. H., Jr. Harmor, W. R., Jr. Harmor, W. R., Jr. Harper, C. B. Harper, F. I., Jr.	So., E. E., Fr., E. E., So., M. E., Pratt & W., Fr., M. E., Fr., C. E., Jr., For., Fr., Agr., Fr., Agr. Fr., A. E., Jr., E. E., Jr., E. E., So., Tex., Fr., Ind. E.	103 Becton, 3703         Stanley, N.C.           310 Bagwell, 3376         Rocky Mount, N.C.           2412 Hillsboro         Oak City, N.C.           103 Chamberlain         Haleigh, N.C.           203 Chamberlain         Haleigh, N.C.           2042 Hillsboro         Oak City, N.C.           205 Chamberlain         Haleigh, N.C.           206 Welch, 2628         Shelby, N.C.           208 Welch, 2628         Shelby, N.C.           209 Bagwell, 3241         Greensboro, N.C.           209 Becton, 2743         High Point, N.C.           209 Becton, 2743         High Point, N.C.           209 Becton, 3743         High Point, N.C.           201 Wat, 3037         Shelby, N.C.           202 Alex, 4101         LaGrange, N.C.           203 Betton, 3733         Mighton, N.C.           204 Becton, 3733         Notice Aleigh, N.C.           205 Betton, 3733         Charlott, N.C.           206 Alex, 4102         Hamiton, N.C.           203 Alex, 4103         Colorain, N.C.           204 Alex, 4105         High Point, N.C.           203 Alex, 4105         Hamitot, N.C.           204 Alex, 4105         Hamitot, N.C.           205 Alex, 4105         Hamitot, N.C.           205

Name	Classification	School Address Dorm. Box No. or St. No.	Home Address
Harrison, R. F. Hart, G. E. Hartholz, M. J. Hartbook, C. M., Jr. Harwood, D. G., Jr. Hawool, P. G., Jr. Hayo, D. J. Hayos, D. L. Hayos, E. E., Jr. Hayos, S. Kathryn Hayes, S. Kathryn Hayen, E. D.	Jr., Aero. Fr., Aero. Sr., For. Fr., Agr. So., C. E. Fr., M. E. So. Can F	107 Wat., 3007 104 Becton, 3704 205 Chamberlain, Box 5664 2 Berry, 4335 N. 302 4th, 3128 T 322 Becton, 3790 Roan 105 Clownood Ava	Goldsboro, N. C. Greensboro, N. C. Raleigh, N. C. ew London, N. C. akoma Park, Md. oke Rapids, N. C. Baleigh, N. C.
Head, W. G., Jr. Hecht, A. H. Hedgepeth, R. L. Helms, I. L., Jr. Henderson, J. L. Henderson, D. L. Henderson, J. P., Jr. Hendrix, A. E. Hendrix, C. M., Jr.	Fr., Ch. E. Fr., C. E. Fr., E. E. So., M. E. Fr., Tex. So., C. E. Fr., Aero. So., Ind. E. So., Ch. E.	104 Weich, 3240	Vilmington, N. C. Norlina, N. C. Warrenton, N. C. Portsmouth, Va. herfordton, N. C. Raleigh, N. C. Shelby, N. C. Raleigh, N. C. Swannanoa, N. C.
Hepler, J. S. Hepler, R. M. Herring, E. E. Herring, H. H. Herring, M. J. Herring, P. Hersh, S. P. Hester, W. F., Jr.	Sr., Aero. Fr., Arch. E. So., Arch. E. Fr., Agr. Fr., Agr. Fr., M. E. Fr., Ch. E. Fr., Arch. E.	10 Enterprise 132 Becton, 3732 105 Wat., 3005 225 Bagwell, 3357 109 Gold, 3209 106 Welch, 3242 220 Bagwell, 3352 220 Bagwell, 3352 218 Wat., 3036	Greensboro, N. C. Greensboro, N. C. Durham, N. C. Barnesville, N. C. La Grange, N. C. Goldsboro, N. C. ston-Salem, N. C. High Point, N. C.
Hicks, F. R. Hicks, G. L. High, E. O. Higgins, B. B. Hight, Mary Elizabeth Hill, F. W., Jr. Hilley, H. S., Jr. Hinton, W. W. Hipp, W. N., Jr.	Fr., Aero. Fr., Aero. Fr., E. E. Fr., C. E. So., Occ. I. & G. Fr., E. E. So., Agr. So., M. E. Fr., E. E.	1720 Hithkerol 201 Ashe Ave. 2 Becton, 3804 2306 Hillsboro 2306 Hillsboro 2306 Hillsboro 2307 Hillsboro 2308 Hillsboro 2308 Hillsboro 2308 Hillsboro 2308 Horne, 802 2308 Horn	High Point, N. C. Raleigh, N. C. Wilson, N. C. Shelby, N. C. Henderson, N. C. Snow Hill, N. C. Wilson, N. C. Selma, N. C. Hickory, N. C.
Hobbs, J. E. Hobbs, L. M., Jr. Hobbs, R. M. Hobbs, W. G. Hobbs, W. L., Jr. Hobgood, T. N., Jr. Hockett, S. H., Jr. Hodges, L. E. Hodges, T. A.	Grad., For. Fr., Aero. Fr., Agr. So., Agr. E. Fr., Agr. Fr., Agr. Fr., Agr. So., Arch. E.	203 Wat, 3021 4 Becton, 3806 221 Bagwell, 3353 12½ Horne, Box 5665 110 Wat, 3010 105 Gold, 3205 304 Becton, 3772 Pleass 218 Becton, 3752 340 Alex, 4199	Edenton, N. C. Lumberton, N. C. Council, N. C. Roseboro, N. C. Delco, N. C. Oxford, N. C. int Garden, N. C. Fairmesland, N. C. Fayeteville, N. C.
Hodges, W. L. Hodul, N. Hofman, M. Hofman, J. G. Hogan, R. T. Hokeo, R. D. Holbrook, R. L., Jr. Holcomb, C. D. Holder, L. Holder, W. F.	Fr., E. E. Jr., For. So, Agr., Grad., For. Fr., M. E. Fr., Tex., Fr., Tex., Fr., Tex., Fr., Agr., Fr., E. E. Fr., Agr., Fr., E. E.	307 Becton, 3775           325 Bagwell, 3391           240 Alex, 4166           2800 Fairview Rd.           2210 Hope           307 Gold, 3231           219 Becton, 3753           10 Becton, 3812           309 Berry, 4329           231 Bagwell, 3363	Wadesboro, N. C. New York, N. Y. New York, N. Y. Burlington, N. C. ite Quarry, N. C. Albemarle, N. C. Yadkinville, N. C. Lillington, N. C. Candor, N. C.

Name	Classification	School Address Dorm. Box No. or St. No.	Home Address
Horne, C. M. Horne, R. F. Horton, S. F. Hostins, J. A. House, D. T. House, D. T. House, D. T. House, C. M. Howard, J. S. Howall, R. G. Hudgins, F. M. Hudgen, C. S. Hudgen, C. G. Jr. Hudgen, C. G. Jr. Hudgen, C. W. Hughes, R. W. Hughes, L. G., Jr.	Fr., Tex. Jr., Arch. E. Fr., Agr., Ed. Fr., Agr., Ed. Fr., M. E. Fr., C. E. Fr., E. E. Fr., Agr. Ch. Jr., For. So., Aer. So., Agr. Ed. Fr., Agr. Fr., Agr. Fr., Agr. Fr., M. E. Fr., M. E.	229 Bagwell, 3361 229 Polk SK, 2576 1 10 Ybl(CA, Box 2576 1 10 Ybl(CA, Box 2576 1 10 Ybl(CA, Box 2576 1 10 Ybl(CA, Box 2577 1 10 Yelch, 3257 1 11 Welch, 3247 1 11 Welch, 3247 1 11 Welch, 3247 1 12 Heton, 3776 King 12 Heton, 3776 King 12 Becton, 3725 1 220 Betton, 3725 1 220 Betton, 3725 1 221 Becton, 3725 1 231 Becton, 3758 1 231 Becton, 3780 1 231 Becton, 3780 1 231 Becton, 3780 1 231 Becton, 3784 1 231 Becton, 3784 1 231 Becton, 3784 1 233 Becton, 3784 1 234 Becton, 3784 1 235 Becton, 3784 1 2	Rocboro, N. C. Kaleigh, N. C. Link, Square, N. C. Link, Square, N. C. Martin, S. C. Lanoit, N. C. Lanoit, N. C. Lanoit, N. C. Burlington, N. C. Boniles, N. C. Candler, N. C. Statesvillo, N. C. Wilsion, N. C. Kannapola, N. G.
Ianora, Amalia M Isenhour, H. H Israel, J. L	Fr., C. E. Fr., E. E.		Newton, N. C. Candler, N. C.
Jackson, E. E. Jackson, G. A. Jackson, C. V. Jackson, C. W. Jackson, O. W. Jackson, O. W. Jackson, O. W. Jackson, J. W. James, Janise, J. James, W. E. James, W. E. James, J. J. Jamison, J. J. Jamison, J. J. Jamison, J. J. Jamison, J. J. Jamison, J. J. Jamison, J. J. Johnson, Marvin Bernard Johnson, Marthernard Johnson, Marthernard	Fr., Aero. Fr., Aero. Fr., Agr. Ed. Fr. & Ex. Fr. E & Fr. Fr. E & Fr. Fr. & Fr. Fr., Arch. E. Fr., Arch. E. Fr., Arch. E. Fr., Arch. E. Fr., Arch. E. Fr., Arch. So., Fr. So., E. E. So., Fr., Arch. So., Fr., Arch. So., So., Fr., Arch. So., So., So., So., So., So., So., So.,	105 Alex., 4105           311 Becton., 3799           218 Bagwell, 3353           237 Bagwell, 3393           Fried House           301 Becton, 3769           125 Woodburn Rd.           128 Woodburn Rd.           128 Becton, 3769           128 Woodburn Rd.           128 Woodburn Rd.           128 Becton, 3728           128 Becton, 3728           128 Becton, 3728           129 Becton, 3728           120 Guds, 3218           120 Guds, 2218           206 Vat., 3026           131 Becton, 3317           106 Wat., 3066           208 Gud, 3218           218 Wat., 3036           131 Begwell, 3315           132 Howell, 3335	St. Pauls, N. C. New Bern, N. C. Goldsboro, N. C. Wilkes-Barre, Pa. Johrsmothe, N. C. Bethel, N. C. Marway, N. C. New York, N. Y. Rutland, Vt. Greensboro, N. C. Brooklyn, N. Y. Dunn, N. C. Greensboro, N. C. Greensboro, N. C. Greensboro, N. C. Behama, N. C. Bahama, N. C.

Name	Classification	School Address Dorm. Box No. or St. No.	Home Address
Johnson, Wm. Kamon Johnson, Wm. Raymond Jomes, D. W. Jones, D. W. Jones, D. B. Jones, H. A., III Jones, J. H. Arblur Jones, J. T., Jr. Jones, J. T., Jr. Jones, J. A., Arthur Jones, S. G., Jr. Jones, S. G., Jr. Jones, W. N. Jordan, C. W. Jordan, Mary Ellen (Miss Jordan, P. R., Jr.	Fr., Aero. Fr., M. E. Fr., Gel. E. Fr., Gel. E. Fr., Arch. E. Fr., Arch. E. So., Tex. Fr., Aero. Jr., E. E. So., Aero. Jr., Fo. Fr., Fo. Fr., M. E. Pratt& M.	12 E. Dixis Dr. 134 Becton, 3734 130 Becton, 3730 120 Becton, 3730 224 Alex, 4153 130 Berty, well, 3395 130 Berty, well, 3395 130 Chamberlain Field House 117 Becton, 3717 303 Gold, 3227 224 Becton, 3758 304 Syme, 3585 304 Syme, 3585 305 Sym	Hobgood, N. C. Asheville, N. C. Suffolk, Va. Suffolk, Va. Gramerton, N. C. Caramerton, N. C. Durham, N. C. Durham, N. C. Durham, N. C. Stone Gap, Va. Stone Gap, Va. Southort, N. C. Rabigto, N. C. Rabigto, N. C. Cary, N. C. Siler City, N. C.
Kalet, B. M. Kamber, L. G. Keever, J. A. Keiley, J. B. Keily, J. B. Keily, J. B. Keily, R. W. Kelly, R. W. Kendrick, R. F. Kenndrox, R. F. Kenndrox, R. F. Kenndrox, R. F. Kenndrox, R. F. Kenndrox, R. K. Kenndrox, R. K. Kenndrox, R. K. King, J. S. King, J. J. S. King, J. J. S. King, J. J. S. King, J. J. J. S. King, J. J. J. S. King, J. J. J. J. S. King, J.	So, Tex. Fr., M. E. Fr., M. E. Fr., C. Fr., E. E. Fr., C. Fr., Oc. I. & G. Sr., M. E. So, A. M. E. So, M. E. Fr., Arth. Fr., M. E. Fr., Arch. Sr., M. E. Fr., Arch. So, M. E. Fr., Arch. So, M. E. Fr., Arch. So, M. E. Fr., Arch. So, C. E. So, C. E. So, C. Tex. So, C. Tex.	319         Wite, 5022           100         Oberlin Rd.           15         Bescon, 3817           211         Bagwell, 3363           221         Bagwell, 3364           231         Bagwell, 3364           242         Bescon, 3826           1327         Mordecai Dr.           2513         Clark Ave.           107         Becton, 3707           399         Wat, 3043           203         Welt, 3251           205         Bagwell, 337           205         Bagwell, 337           208         Becton, 7751           209         Beschon, 7761           2010         Baccok Ave.           2010         Baccok Ave.           203         Becton, 7856           204         Bagwell, 3384           210         Baccok Ave.           210         Becton, 7656           2101         Berroy Ave.           Field House         1           2101         Berroy Ave.           114         Bagwell, 3214         Ct.           126         Becton, 7750         510           310         Becton, 7778         310           310 <td>New York, N.Y. Kindenike, N.C. Woodmere, N.Y. Hiddenike, N.C. Heidenike, N.C. Heidenike, N.Y. Carthage, N.C. Goldsborg, N.C. Goldsborg, N.C. Goldsborg, N.C. Gon Falls, Conn. Cannapolis, N.C. Charlotte, N.C. N.C. Star, N.C. New York, N.Y.</td>	New York, N.Y. Kindenike, N.C. Woodmere, N.Y. Hiddenike, N.C. Heidenike, N.C. Heidenike, N.Y. Carthage, N.C. Goldsborg, N.C. Goldsborg, N.C. Goldsborg, N.C. Gon Falls, Conn. Cannapolis, N.C. Charlotte, N.C. N.C. Star, N.C. New York, N.Y.

Name	Classification	School Address Dorm. Box No. or St. No.	Home Address
Langston, E. E. Lanier, J. H. Lanier, R. E. Lassiter, G. Y. Lassiter, M. V., Jr. Lassiter, W. C., Jr.	Pr., Agr., Pr., Agrou, Sp. No Coll LT. SF, Mo Coll LT. SF, Mo Coll LT. SF, M. LE. SF, M. LE. SF, Agr. E. Fr., Agr. E. Fr., Agr. E. Fr., Agr. E. Fr., Agr. E. Fr., Agr. E. So, M. E. Sp. N. Fr., Ch. E. Sp. N. Fr., Ch. C. Sp. N. Fr., Ch. C. Sp. N. Fr., Ch. C. Sp. N. Fr., Ch. C. Sp. N. Fr., M. C. So, Arch. E. Fr., Ind. E. Fr., Tex.	1720 Hillsboro 303 Bagwell, 3369 Wi 700 E. Whitaker Mill Rd. 27 Bagwell, 3359 12 Betton, 3814 201 Bedford Ave. 103 Chamberlain 303 Becton, 3814 303 Becton, 3711 313 Becton, 3781 314 Becton, 3784 116 Becton, 3784 117 Alex, 4106 117 Alex, 4106 116 Woodbourn Rd 216 Alex, 4107 218 Alex, 3048 218 Alex, 3048 218 Alex, 3048 200 Becton, 3726 200 Becton, 3727 228 Bagwell, 3338 118 Wat, 3018 303 Becton, 3711 E. Garner 227 Becton, 3735 324 Becton, 3735	Recky Point, N. C. Wandah, N. C. Rabiergh, N. C. Richmond, N. R. Richmond, Ya. Robbins, N. C. Norfolk, Va. Columbia, S. C. Araboro, N. C. Charlotto, N. C. Duran, N. C. Duran, N. C. Duran, N. C. Bluerton, Ga. Rabiergh, N. C. Riberton, Ga. Rabiergh, N. C. Rabiergh, N. C. Louisburg, N. C. Louisburg, N. C. Faystleville, N. C. Faystleville, N. C.
Lloyd, R. L. Lockhart, J. K. Lomax, R. P. Loong, G. C. Loonis, Kathleen M. (Mr Lore, R. C. Lowin, L. G. Jr. Lowier, H. A. Lowery, W. S. Luczas, B. L., Jr. Luczas, J. S. Lynch, J. R., Jr. Lynch, J. R., Jr. Lynch, J. R., Jr. Lynch, J. R., Jr.	Fr. Aero. Jr., Ch. E. So., C. E. Fr., C. E. Fr., C. E. Fr., E. E. Fr., Tex. So., M. E. Grad., Agr. Ch. So., Tex. Sr., Ch. E. Fr., M. E. So., For.	103 Bagwell, 3303 210 Becton 3744	Kernersville, N. C. Fairmont, N. C. Chapel Hill, N. C. Hillsboro, N. C. Lenoir, N. C. Rosboro, N. C. Roanoke, Va. Albemarlo, N. C. Mansfield, Conn Charlotte, N. C. Mansfold, Conn Charlotte, N. C. Charlotte, N. C. Charlotte, N. C. Greensboro, N. C. Greensburg, Aa

Name	Classification	School Address Dorm. Box No. or St. No.	Home Address
McIntyre, W. B. McKinney, J. V., Jr. McKinnon, W. H. McLawhorn, C. L. McLardon, W. E. McMaster, Margaret J. McMillan, H. D. McMillan, H. D. McMillin, Marcia A. McPherson, W. A., Jr.	Fr., M. E. Fr., Ch. E. Fr., Ch. E. Fr., Agr. Fr., Ch. E. Fr., Agr. Ed. Fr., Agr. Ch. So., Occ. I. & G. Fr., Agr. Ed. Fr., Agr. Ed.	Dorm. Box No. or St. No.           9729 Drovent Ava.           9729 Drovent Ava.           9729 Drovent Ava.           9729 Drovent Ava.           9720 Drovent Ava.           972 Drovent Ava. <td>Red Oak, N. C. Hickory, N. C. Wadesboro, N. C. Washington, D. C. Raleigh, N. C. Stedman, N. C. Wade, N. C. Raleigh, N. C. Northwest, Va. Charlotte, N. C.</td>	Red Oak, N. C. Hickory, N. C. Wadesboro, N. C. Washington, D. C. Raleigh, N. C. Stedman, N. C. Wade, N. C. Raleigh, N. C. Northwest, Va. Charlotte, N. C.
Macklen, H. L., Jr. Macom, J. A., Jr. Madden, D. J. Madden, Lois M. Maddrey, R. W.	Fr., M. E. Grad., M. E. Fr., For. So., Ch. E. Fr., M. E.	232 Bagwell, 3364 Wi 2305 Gold, 2217 M 2005 Harvey 205 Ashe Ave. 206 E. Peace. 206 E. Peace. 206 E. Peace. 207 Bagwell, 3369 2040 Everet Ave. 2240 E Everet Ave. 232 E. Park Dr. 230 Bagwell, 3369 230 Bagwell, 3369 200 Brooks Ave. 207 Bagwell, 339 208 Bagwell, 339 208 Bagwell, 339 208 Bagwell, 339 208 Bagwell, 339 211 Welcher, 421 212 Becton, 3746 208 Bagwell, 3340 208 Bagwell, 3340 209 Wat, 3027 208 Bagwell, 3340 209 Wat, 3027 238 Becton, 3808 207 Alex, 4138 208 Bagwell, 340 208 Bagwell, 340 209 Wat, 3027 201 Becton, 3765 201 Back, 4138 202 Wat, 302 201 Wat, 3019 217 Becton, 3761 210 Clark Ave. Box 565 201 Wat, 3019	lyrtle Beach, S. C. Pocahontas, Va. Austin, Tex. Bridgeport, Conn. Raleigh, N. C.

Name	Classification	School Address Dorm. Box No. or St. No.	Home Address
Millman, A. L. Milloway, W. H. Mills, G. A. Mills, G. A. Mills, S. W. Millsaps, J. C. Mins, W. J. Mitchell, C. Mitchell, J. F. Mitchell, J. R.	Fr., Tex. Fr., Tex. Sr., Ind. E. Fr., E. E. Fr., Aero. Jr., C. E. Fr., Occ. I. & G. So., Tex. Fr., Arch. E. Fr., C. E.	208 Wat., 3026 624 Devereux 321 Bagwell, 3387 .103 Gold, 3203 108 Welch, 3244 Pilo	Greensboro, N. C. Gastonia, N. C. Greensboro, N. C. Watha, N. C. Raleigh, N. C. Statesville, N. C.
			Bethel, N. C. Raleigh, N. C.
Moffitt, B. J. Moniz, J. B. Monix, G. B. Monroe, J. M. Moore, A. W., Jr. Moore, B. H. Moore, F. R. Moore, R. C., Jr. Moran, E. W. P. Moran, E. W. P.	Fr., Oce. I. & G. Sr., Ch. E. Fr., Tex. Sr., M. E. Fr., Agr. Fr., Agr. E. Grad., Agr. Ch. Fr., Ch. E. Fr., Ch. E.		Hamlet, N. C. Southport, N. C. Four Oaks, N. C. urdle Mills, N. C. Kinston, N. C. New Bern, N. C. Henderson, N. C.
Moss, R. W. Mulford, R. E. Munger, E. L. Mullis, J. B. Murakishi, H. Murdoch, W. S. Murdock, J. E., Jr. Museelwhite, H. L. Myers, F. B. Myrick, D. E.	Fr., Tex. Fr., E. E. Fr., Fr., Fr., Fr. Fr., M. E. Grad., Pl. Path. Sr., Tex. Mgt. Fr., M. E. Fr., E. E. So., M. E. Fr., Tex.	109 Welch, 3245 213 Beeton, 3747 1806 Hillsboro 1806 Hillsboro 2510 Vanderbilt Ave. 215 Wat, 3015 Highland Ridge Rd., Rt. 6 211 Gold, 3223 9 YMCA 118 Bagwell, 3318	Kings Mt., N. C. Matthews, N. C. Highlands, N. C. Seabrook, N. J. Salisbury, N. C. Fairmont, N. C. Fairmont, N. C. Pinehurst, N. C. Asheville, N. C.

Name	Classification	School Address Dorm. Bor No. or St. No.	Home Address
Naugler, A. W. Navarro, J. O. Neal, H. J. S. Neal, W. K. Neely, H. M. Newkirk, J. W. Nichols, R. B., Jr. Noah, J. W. Norman, Kathryn W. G Norris, J. R., Jr. Norwood, J. P. Norwood, J. P. Norwood, J. P.	Fr., M. E. So., Tex., Fr., Agr., Fr., Ch. E. Fr., E. E. Fr., E. E. Fr., Aero. rr., Agr., Fr., Acro. Fr., Acro. Fr., Acro. Fr., C. E. Jr., Ch. E. Fr., M. E.	Field House         House           10 Enterprise         1128 Becton, 3723 Ave.           128 Becton, 3724 Ave.         200 Derry, 4416           200 Derry, 4416         Roano           10 Enry, 4416         Roano           10 Enry, 4416         Roano           208 Becton, 3726         206 Growling           208 Becton, 3706         206 Growling           208 Becton, 3706         206 Growling           209 Growling         Ave.           201 Global         104 dott           202 Hilbord         Ave.           203 Growling         Ave.           204 Global         204 Growling           205 Growling         Ave.           206 Growling         Ave.           207 Growling         Ave.           208 Hilbord         201 Growling           209 Growling         Ave.           200 Growling         Ave.           212 Welch, 3260 f         212 Welch, 3267 Weight	Beverly, Mass. Colombia, S. A., Reidsville, N. C. Raleigh, N. C. ke Rapids, N. C. Charlotte, N. C. Magnolia, N. C. Efland, N. C. recensboro, N. C. Raleigh, N. C. Raleigh, N. C. Bucham, N. C.
O'Neal, D. C. O'Neal, D. C. Oppenheimer, R. L., Did n. O'Quin, J. L. Ornsby, M. D. Orr, E. A. Osteen, L. L., Jr. Otterbourg, L. W. Overman, D. T. Overnon, M. Louise Oreov, A. E.	Fr., M. E. Fr., Arch. E. ot complete reg. Fr., C. E. Fr., Tex. Jr., Ch. E. Fr., E. E. Fr., E. E. So., C. E. Pratt & W. So. Tex	511         Wat., 3047         Wils           109         Bagwell, 3309         Wils           227         Becton, 3761         207           207         Becton, 3761         207           207         Becton, 3255         L           11         YMCA         Roc           229         Bagwell, 3361         Roc           229         Alex., 4148	Coinjock, N. C. Coinjock, N. C. aurinburg, N. C. cky Mount, N. C. charjotte, N. C. ntonsburg, N. C. Ahoskie, N. C. Ankara, Turkey
Page, H. M. Palahunik, W. Paldino, N.	Fr., Agr. Ed. Fr., Aero. Fr., Aero.	225 Barwell, 3355 Me Fleid House Me Fleid House Me Fleid House Me 21 Becton, 3822 Me 21 Becton, 3822 Me 21 Wat, 3011 Me 21 Wat, 3011 Me 21 Wat, 3011 Me 21 Wat, 3021 Me 21 Barwell, 3380 Me 21 Barwell, 3380 Me 21 Barwell, 3380 Me 21 Me 21 Wat, 3029 Me 21 Wat, 3029 Me 21 Wat, 3029 Me 20 Wat, 3028 Me 20 Wat, 3028 Me 21 Wat, 3028 Me 22 Wat, 3028 Me 20 Wat, 3028 Me 20 Wat, 3028 Me 21 Becton, 3750 Me 22 Becton, 3750 Win Millbrook Me 302 Barwell, 3368 Me 21 Wather Me 21 Wather Me 21 Becton, 3750 Me 21 Becton, 3750 Me 21 Me 2	Burgaw, N. C. Kees Rocks, Pa. Brooklyn, N. Y.

Name	Classification	School Address Dorm. Box No. or St. No.	Home Address
IPhillips, T. Prinnell, C. J. Prinner, W. M. Prinnix, M. H. Prinnix, M. H. Prinnix, M. H. Prinnix, L. J. Prints, R. L. J. Politser, L. J. Politser, K. J. Politser, K. J. Politser, K. J. Politser, K. H. Porter, B. R. Porter, B. L. Porter, S. Rarhh H. Gritser, T. H. Prowell, R. H. Prowell, R. H. Price, B. D. Prissay, Fukh M. Price, D. A. Jr. Prites, M. A. Jr. Privert, J. M. Prince, H. M. Prince, E. D. Privert, J. M. Prince, L.	Fr., M. E. Fr., Aero, Fr., C. E. So C.U., E. So C.U., E. Fr., C. E. Jr., Arch. E. Fr., C. & D. So, Agr. Ed. Fr., Aero, Fr., Aero, Fr., Aero, Fr., Ch. E. Fr., Ch. E. Fr., Ch. E. So, Gen. E. Fr., Te, So, E. Fr., E. Fr., Ch. E. Fr., Gen. E. So, E. Fr., E.	Dorm. Box No. or St. No.           S22 Bactan, 8800           106 Baryval, 8800           107 Baryval, 8800           108 Baryval, 8378           212 Baryval, 8378           212 Baryval, 8378           220 Alex, 4149           113 Bargwal, 3378           214 Editation Red.           125 Woodburn Red.           126 Woodburn Red.           127 Wat, 3051           128 Wat, 3051           130 Weich, 3270           1310 Weich, 3270           132 Bardon, 3730           132 Bacton, 3750           133 Bacton, 3750           234 Bargwall, 3236           233 Bargwall, 3266           233 Bacton, 3763           234 Bargwall, 3266           235 Bacton, 3767           236 Bargwall, 3266           235 Bacton, 3733           236 Bargwall, 3266           237 Bacton, 3733           238 Bargwall, 3266           238 Bargwall, 3266	Warsnew, N. C. Seneen, S. C. O'Stord, N. Y. Charlotte, N. C. The Jorden, N. Y. Charlotte, N. C. Asheville, N. G. Balisbury, N. C. Kelly, N. C. Balisbury, N. C. Marigh, N. C. Marigh, N. C. Balisbury, N. C. Balison, N. C. Whison, N. C. Charlotte, N. C. Charlotte, N. C. Charlotte, N. C.
Queen, A. Quinn, F. D.	Fr., Agr. Fr., Occ. I. & G.	314 Wat., 3050	Casar, N. C. Montreal, Canada
		122 Bagwell, 3322           313 Bagwell, 3374           213 Bagwell, 3374           213 Bagwell, 3374           217 Wich, 3255           210 Wich, 3243           110 Goid, 3202           2050 Harp Trance           3203 Hillsboro           115 Woodburn Rd.           109 Oberin Rd.           109 Oberin Rd.           110 Gold, 3211           128 Bagwell, 3394           212 Wilch, 3260           111 Gold, 3211           212 Bagwell, 3324           212 Bagwell, 3226           204 Gold, 3216           205 Heith Gold, 3212	

Name	Classification	School Address Dorm. Box No. or St. No.	Home Address
Rigsbee, E. L. Riley, W. S., Jr. Rionda (See de la Rionda	Fr., Agr. Fr., E. E.	Rt. 4, Box 395, Durham 20 Ferndell Lane	Raleigh, N. C.
Ritchie, J. F. Rivera, J. L. Rivers, H. G. Roach, E. R. Roberts, C. P., Jr. Roberts, D. B. Roberts, E. H. Jr. Boberts, R. H. Roberts, R. H. Robinson, J. M. Robinson, J. M. Roddike, J. A. Jr.	So., E. E., Fr., Tex, Fr., Oce. I. & G. So., Ch. E. Fr., Tex, Fr., C. E. So., Gen. E., Fr., E. E. So., Arch. E. So., Ch. E. Fr. M. E.	106         Wat., 2006           209         Lagwell, 3355           209         Lagwell, 3355           2010         Ebon Rd.           300         Berry, 4232           202         Alex, 4134           111         Welch, 3247           705         W. Korth 2           107         Bagwell, 3317           116         Becton, 3784           106         Barwell, 4306           203         Strat, 344           106         Barwell, 4306           203         Strat, 3784           203         Barwell, 4306           203         Strat, 3648           203         Strat, 3648           203         Strat, 3619           203         Strat, 3619           203         Strat, 3619           203         Strat, 3619           210         Bidge, 5624           2111         Bidge, 5624           2117         Alex, 4314           018         Wins, 3707           122         Becton, 3722           216         Becton, 3755           216         Becton, 3763           217         Jages4	Memphis, Tenn. Parmele, N. C. Shelby, N. C. Cameron, N. C. Raleigh, N. C. Reidsville, N. C. Hickory, N. C. Pageland, S. C. ort Bragg, N. C. ton, Salem N. C.
Rowe, A. E	So., Cer. E. Fr., Ch. E. Fr., Arch. E.	.216 Becton, 3750 .223 Bagwell, 3355 	Nebo, N. C. Ayden, N. C. Shelby, N. C.
Sadler, J. D. Saenz, G. B. Safrit, S. W. Sarnie, S. M. Sample, M. B. Samber, H. K. Jr. Samster, L. R. Satteistell, J. J. Sauders, L. R. Sauter, L. R. Sauter, L. R. Sauter, L. R. Sauter, J. J. Sauders, L. R. Schrun, J. G. Schut, J. S. Schut, J. S. Schut, J. S. Schut, J. B. Schum, E. P. Schum, E. R. Selby, R. C. Sellzer, D. M. Sentz, J. M. Sentz, J. M. Sentz, J. M. Sentz, J. M. Sentz, J. S. Sellzer, J. M. Sentz, B. R. Sentz, J. M. Sentz, B. R. Sentz, J. M. Sentz, J. M. Sentz, B. R. Sentz, J. M.	Fr. E. E. Fr., Ind. E. Fr., O. E. So., Tex. Fr., M. E. Fr., For. Fr., M. E. Fr., Ror. Fr., M. E. Fr., M. E. Fr., M. E. Fr., M. E. Fr., Ko. Fr., M. E. Grad, Ru. Soc. Fr., C. E. Jr., C. E. Jr., M. Fr., M. E. Fr., Agr. So., Cer. E. Fr., Agr. So. Cell. C.	317       Wart, 2005         213       Bargwell, 8345         105       Wart, 2005         108       Bargwell, 3384         205       Ashe Ave.         311       Gold, 3225         205       Becton, 3740         206       Becton, 3723         Did not complete reg.       Field House         Field House       Field House         203       Berevill, 3396         Field House       Sign Ashe         203       Alex, 4165         203       Alex, 4165         204       Alex, 4165         205       Alex, 4165         206       Alex, 4165         207       Alex, 4165         208       Alex, 4165         208       Alex, 4165         209       Alex, 4165         200       Alex, 4165         201       Alex, 4165         202       Alex, 4165         203       Alex, 4165         203       Alex, 4165         203       Alex, 4168	Tarboro, N. C. Brooklyn, N. Y. Brooklyn, N. Y. Brooklyn, N. Y. Brooklyn, N. Y. Brooklyn, N. Y. Goldsboro, N. C. Goldsboro, N. C. Boonton, N. J. Goritton, N. G. Garitton, N. G. Ansonia, Como Garitton, N. C. Raleigh, N. C. Charlotte, N. C. Charlotte, N. C. Dudley, N. C. Charlotte, N. C. Charlotte, N. C. Taupa, N. C. Teensboro, N. C. Teensboro, N. C. Teensboro, N. C.

. . . . . . .

Name	Classification	School Address Dorm. Box No. or St. No.	Home Address
Sharp, J. B., Jr. Sharp, J. H. Shary, W. C. Grad Shew, W. C. Grad Sheets, W. T. Sheldon, J. W. Y. Jr. Shelton, W. W., Jr. Shelton, W. W., Jr. Sherrill, R. A., Jr. Sherrill, R. A., Jr. Sherrill, R. M. Jr. Sherrill, R. M. Jr. Sherrill, R. J. Siler, Robert Lee Silverstein, J. A. Sigmon, J. L. Silverstein, J. A. Silverstein, J. B. Sins, J. D. Sins, J. G. Sirota, B. H. Slack, H. C. Smith, A. E. Smith, A. E. Smith, D. H. Smith, G. A. Smith, G. E., Jr. Smith, G. E., Jr.	Grad, For. F. M. E. M. M. E. Fr., Agron. (F.C.) Fr., Agron. (F.C.) Fr., C. E. P.F., Aero. Fr., C. E. P.F., C. E. P.F., C. E. F.F., Agr. F.F., C. E. F.F., C. E. F.F., So., M. E. F.F., So., Aero.	Dorm. Bax No. or St. No. 116 Syme, 5514	ynardville, Tenn. Burlington, N. C. oler Rapids, N. C. Joek Rapids, N. C. Joek Rapids, N. C. Joek Rapids, N. C. Joek Rapids, N. C. Wards, N. C. Statt, Nock, N. C. Kator, Salem, N. C. Kator, Salem, N. C. K. Gilead, N. C. Lincolnton, Ga. M. Gilead, N. C. Joew York, N. Y. Pinetown, N. C. Carty, N. C. Cornelius, N. C. Gilbanon, N. C. Cornelius, N. C.
Smith, W. E. Smith, Walter Graham Smith, Wm. Gilbert Smithson, C. S., Jr. Smythers, W. A. Snavely, H. C. Snider, H. J. Snow, M. B.	Fr., E. E. Fr., Agr. Fr., E. E. Fr., C. E. Fr., Agr. Sr., Aero. Fr., Agr. Ed. So., C. E. Fr., Aero.	237 Alex, 4163 221 Bagwell, 3353 305 Wat., 3041 Ru 308 Wat., 3044 Did not complete reg. 18½ Horne Wir 104 Gold, 3204 312 Berry, 4332 305 Bagwell, 3371	Spindale, N. C. St. Pauls, N. C. therfordton, N. C. Creswell, N. C. Woodlawn, Va. Iston-Salem, N. C. Denton, N. C. Denton, N. C. Elkin, N. C.
Snow, P. L. Snyder, F. C. Softey, C. W. Soles, J. F. Sontag, R. M. Sorreils, C. G. Sparinhour, D. N. Sparks, J. H. Sparrow, T. B.	Fr., E. E. Sr., Arch. E. Fr., Agr. Fr., E. E. Fr., Tex. Fr., C. E. Fr., Aero. Fr., E. E. Fr., Aero. Fr., E. E. Fr., Tex. Sr., Tex. Mfg.	102 Horne, Apt. 9 2513 Clark Ave. 206 Bacton, 3740 109 Oberland 202 Welch, 3250 306 Becton, 3774 110 Bagwell, 3310 129 Alex, 4124 211 Gold, 3223	Raleigh, N. C. ston-Salem, N. C. Cana, N. C. Fair Bluff, N. C. New York, N. Y. Chapel Hill, N. C. Forest City, N. C. Lenoir, N. C. Ruth, N. C. Greensboro, N. C.

Name Classification	School Address Dorm. Bos No. or St. No. Home Address
	227         W. Morgan         Rabigh, N. C.           2008         Hilbstoo         Winston-Salem, N. C.           310         Jack, A. 126         Lawndale, N. C.           311         Alex, A126         Lawndale, N. C.           312         Alex, A126         Lawndale, N. C.           312         Alex, A120         Blamane, N. C.           312         Alex, A120         Alamane, N. C.           312         Alex, A120         Alamane, N. C.           314         Bagwell, 3346         Durham, N. C.           320         Bagwell, 3362         Winteville, N. C.           320         Bagwell, 3301         Pine Level, N. C.           3201         Pine Level, N. C.         2804           3201         Pine Level, N. C.         218           321         Bagwell, 3001         Pine Level, N. C.           321         Bagwell, 3001         Wahington, N. C.           321         Bagwell, 322         Durham, N. C.           322         Bagwell, 323         Wahington, N. C.           322         Bagwell, 324         Monroe, N. C.           322         Bagwell, 324         Monroe, N. C.           324         Bagwell, 324         Monroe, N. C.
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	302         Wat, 3038         Gresniboro, N. C.           313         Baction, 3747         Bath, N. C.           203         Gold, 3215         Four Oals, N. C.           310         Barzwill, 333         Newton Grove, N. C.           212         W. Morgan         Greensboro, N. C.           212         W. Morgan         Roswell, N. M.           Guid Gold, 8213         Enfeld, N. C.

Name	Classification	School Address Dorm. Box No. or St. No.	Home Address
Taylor, R. C.           Taylor, R. L.           Teer, C. L.           Teer, C. L.           Thew, R. F.           Thomas, D. H.           Thomas, N. J.           Thomas, N. F.           Thomas, N. J.           Thomason, J. F.           Thompson, G., Jr.           Thompson, F. E.           Thompson, J. D.           Thompson, T. C. </td <td>Pr., Agr. So., C. B. S., N. C. C. S. S. No. Coll. Cir. P. F., Arch. P. F., Agr. B. P. F., E. E. P. F., M. E. P. F., Agr. Ed. P. F., Agr. Ed. P. F., Agr. Ed. P. F., Agr. Ed. P. F., M. E. P. F., M. E. P. F., M. E. P. F., M. E. P. F., Tex. P. F. E. P. F., Tex. P. F., Tex. P. F., Tex. P. F., M. E. P. F. M. E. E. P. F. M. C. H. E. E. F. F. M. E. E. F. H. H. E. E. F. H. E. E. F. H. H. E. E. F. H. H.</td> <td><ul> <li>313 Wat., 3049 R.</li> <li>103 Chamberlain</li></ul></td> <td>Chapel Hill, N. C. The Denther, N. C. Denther, N. C. Denther, N. C. Charlotte, N. C. Weidon, N. C. Kanapolis, N. C. Kanapolis, N. C. Kanapolis, N. C. Salisbury, N. C. Cameron, N. C. Salisbury, N. C. Cameron, N. C. Salisbury, N. C. Goldshoro, N. C. Goldshoro, N. C. Mew Bern, N. C. West Point, Va. West Point, Va. West Point, Va. Greensboro, N. C. Effand, N. C. Fair Bluft, N. O. Maidgin, N. C. Salisburg, N. C. Salisburg, N. C. Salisburg, N. C. Salisburg, N. C. Salisburg, N. C. States, N. C. Salisburg, N. C. Maidging, N. C.</td>	Pr., Agr. So., C. B. S., N. C. C. S. S. No. Coll. Cir. P. F., Arch. P. F., Agr. B. P. F., E. E. P. F., M. E. P. F., Agr. Ed. P. F., Agr. Ed. P. F., Agr. Ed. P. F., Agr. Ed. P. F., M. E. P. F., M. E. P. F., M. E. P. F., M. E. P. F., Tex. P. F. E. P. F., Tex. P. F., Tex. P. F., Tex. P. F., M. E. P. F. M. E. E. P. F. M. C. H. E. E. F. F. M. E. E. F. H. H. E. E. F. H. E. E. F. H. H. E. E. F. H.	<ul> <li>313 Wat., 3049 R.</li> <li>103 Chamberlain</li></ul>	Chapel Hill, N. C. The Denther, N. C. Denther, N. C. Denther, N. C. Charlotte, N. C. Weidon, N. C. Kanapolis, N. C. Kanapolis, N. C. Kanapolis, N. C. Salisbury, N. C. Cameron, N. C. Salisbury, N. C. Cameron, N. C. Salisbury, N. C. Goldshoro, N. C. Goldshoro, N. C. Mew Bern, N. C. West Point, Va. West Point, Va. West Point, Va. Greensboro, N. C. Effand, N. C. Fair Bluft, N. O. Maidgin, N. C. Salisburg, N. C. Salisburg, N. C. Salisburg, N. C. Salisburg, N. C. Salisburg, N. C. States, N. C. Salisburg, N. C. Maidging, N. C.
Upchurch, G. A. Upchurch, R. P. Urdaneta, A. G.	Fr., Aero. Fr., Agr. So., Tex.	1 Becton, 3803 140 Alex., 4132 123 Bagwell, 3323	Morrisville, N. C. Raleigh, N. C. Colombia, S. A.
Vail, Enola A. Valderrama, L. H. Valencia, S. Vaughn, J. M. Vause, S. P.	So., Aero. So., Occ. I. & G. So., Tex. Jr., Arch. E. Fr., E. E.	515 Gardner St. 307 4th, 3133 201 Bagwell, 3333 316 Becton, 3784 226 Alex., 4155	
Waddell J B	Fr. Agr	228         Bacton, 3762           228         Bacton, 3762           221         Bathistoric           226         Biblistoric           226         Bird           226         Hillsborc           2201         Byrd           2201         Byrd           216         Bagwell, 3348           109         Wat., 3009           529         New Bern Ave.           Field House         312           312         Chamberlain	Fair Bluff, N. C. Fair Bluff, N. C. Raleigh, N. C. Lumberton, N. C. Hope Mills, N. C. Spartanburg, S. C. Raleigh, N. C. Marion, N. C. Franklinville, N. C.

		School Address	2
		Dorm. Box No. or St. No.	Home Address 5
Nama Waller, II. A., Jr. Wallston, D. E. Warton, C. J. Warton, C. J. Warton, C. J. Warton, A. S. Warten, R. M. Warren, R. M. Warren, R. M. Warren, R. D. Warten, R. D. Warten, R. D. Warten, R. J. Washewski, A. L. Washewski, A. L. Washewski, A. L. Washewski, C. S. Watkins, G. S. Watkins, G. S. Watkins, G. S. Watkins, D. T. Watkins, D. T. Watkins, D. T. Watkins, D. T. Watkins, D. T. Watkins, D. T. Watkins, S. J. Watkins, S. J. Watkins, S. J. Watkins, S. J. Watkins, S. J. Weiber, J. T. Weiber, J. R. Weiber, J. R. Weiber, S. A. Weiber, S. A. Weiber, S. A. Weiber, J. J. Weibes, R. C. Weise, R. A. Willes, R. A. Willes, N. M. J. Willes, S. M. Willes, N. M. J. Willes, N. M. J. Wille, W. H., J. Wille, W. H. Wille, W. H., J. Wille, W. H. Wille, W. H., J. Wille, W. H. Wille, W. H. W	Fr., Agr. Ed. Fr., Agr. Ed. Fr., Agr. Ed. Fr., Mag. Ed. Fr., Mag. Ed. Fr., Agr. Ed. Fr., Agr. Ed. Sr., Tex. Mgt. Fr., Agr. Ed. Sr., Tex. Mgt. Fr., Gen. E. Complete reg. Fr., Gen. E. Jr., Ch. E. Fr., Marc. Fr., Gen. E. Jr., Ch. E. Fr., Agr. Fr., Gen. E. Jr., Ch. E. Fr., Agr. Fr., Agr. Fr. Fr. Fr. Fr. Fr. Fr. Fr. Fr. Fr. F	Dorm. Box No. or St. No. 504 Wat. 3040 W 12 Horne Frield House 313 E. Jones 119 Bagwell, 3312 4 Decton, 3306 4 Decton, 3306 4 Decton, 3306 4 Decton, 3781 126 Bagwell, 3322 313 Becton, 3781 127 Becton, 3782 314 Becton, 3783 314 Becton, 3789 115 Bagwell, 3315 128 Becton, 3799 115 Bagwell, 3315 128 Becton, 3799 115 Bagwell, 3315 128 Becton, 3788 128 Becton, 3778 128 Model, 3218 310 Becton, 3778 300 Wolch, 3218 310 Becton, 3778 300 Wolch, 3218 310 Becton, 3778 300 Wolch, 3266 121 Berwell, 3311 6 Enterprise 303 dth, 3129 208 Wat, 3026 601 Hinsdale 6 Enterprise 208 Wat, 3026 130 Hinsdale 6 Enterprise 208 Wat, 3026 131 Hagwell, 3314 131 Becton, 3778 303 dth, 3129 303 dth, 3129 304 dth, 3129 305 dth, 3129 305 dth, 3129 306 Gold, 5230 307 dth, 3129 307 dth, 3129 308 dth, 3129 308 dth, 3026 309 dth, 3129 309 dth, 3129 309 dth, 3129 300	Jacksonville, T.c. Farmville, N.C. Farmville, N.C. Ratehoro, N.C. Roseboro, N.C. Roseboro, N.C. Roseboro, N.C. Roseboro, N.C. Raleigh, N.C. Raleigh, N.C. Raleigh, N.C. Raleigh, N.C. Norwood, N.C. Moncure, N.G. Moncure, N.G. Moncure, N.G. Moncure, N.G. Moncure, N.G. Moncure, N.G. Charlotte, N.C. Montuello, N.Y. Moncure, N.G. Chiraliach, N.C. Chiraliach, N.C. Dover, N.C. Chiraliach, N.C. C. Chiraliach, N.C. Dover, N.C. C. Luciester, N.C. C. Notrotte, N.C. Dover, N.C. C. Notrotte, N.C. C. Notrotte, N.C. C. Notrotte, N.C. C. Notrotte, N.C. C. Raleigh, N.C. Notrotte, N.C. Notrotte, N.C. C. Notrotte, N.C. C. Notrotte, N.C. C. Notrotte, N.C. C. Notrotte, N.C. C. Notrotte, N.C. Notrotte, N.C. Notr
White, W. H., Jr. White, W. J.	Fr., For. So., Arch. E.	202 Wat., 3020 Trailer 304 4th, 5073 State Col.	Louisburg, N. C. Durham, N. C.
Willsomon I W	En Aon	2 Poston 2804	Sima N.C.
Williams, A., Jr.	Fr., Agr.	.113 Bagwell, 3313	Carthage, N. C. Winterville, N. C. Godwin, N. C. Norlina, N. C. Whiteville, N. C.
Williams, John Caswell, J. Williams, J. E. Williams, J. H. Williams, W. M. Williamson, E. M.	r. Fr., Agr. So., Ch. E. Sr., Tex. Mfg. So., Arch. Fr Agr E	303 Berry, 3323 207 Gold, 3219 215 Bagwell, 3347 231 Becton, 3765 131 Becton, 3781 12 Horne 1720 Hillsboro 334 Bagwell, 3400 304 Walch 3964	Rocky Mount, N. C. Wilmington, N. C. Gastonia, N. C. Fort Myers, Fla. Mont Clare S. C.
Williamson, L. A., Jr	Fr., Aero.	.304 Welch, 3264	Ahoskie, N. C.

Name	Classification	School Address Dorm. Box No. or St. No.	Home Address
Willier, T. L.           Willier, A. W.           Willion, B. D., Jr.           Wilson, B. E.           Wilson, G. T.           Wilson, G. T.           Wilson, G. T.           Wilson, J. D.           Winker, W. G.           Winkler, W. G.           Winslow, R. R.           Winslow, H. B.           Wood, J. A.           Wooder, C. H.           Wooder, J. L.           Wooten, S. A.           Woten, N. A.           Wooten, N. A.           Wooten, N. A.           Wototon, H. C.           Wystoff, R. K. A., Jr.	So, Agr. Ed. So, C.E. So, C.E. Fr., Agr. Ed. Fr., Agr. Ed. Fr., Agr. Ed. So, Agr. Ed. So, Agr. Ed. Fr., E.E. So, C. E.E. Sr., C. E. Sr., C. E. Sr., C. E. Sr., C. E. Sr., C. F. Sr., Agr. Jr., Fr., Agr. So, Agr. Ed. So, Agr. Ed. So, Agr. Ed. So, C. E. Fr., Agr. So, C. E. Fr., Agr. So, Tex. So, Tex. So, Tex. So, M. E. Sr., Tr., Agr. B. Sr., Fr., Agr.	2412 Hillsboro 2418 Fairview Rd. 213 Beiton, av 213 Beiton, av 213 Wat, 3049 321 Becton, 3788 201 Welch, 3249 201 Welch, 3249 200 Wat, 3008 200 Wat, 3008 200 Wat, 3008 200 Wat, 3028 201 Gdl, 3278 201	Hullaboro, N. C. Raleigh, N. C. Zionville, N. C. Jancod, N. J. Lingood, N. J. Shan, S. C. Sang, S. S. Sang, S. S. Sang, Littleton, N. C. Tathalong, N. C. Boneo, N. C. Prinaeton, N. C. Prinaeton, N. C. Borneo, N. C.
Yachan, E. D. Yagolnitzer, P. Yates, E. C., Jr. Neiverton, R. L., Jr. Yeiverton, R. M. Young, C. M. Young, C. M. Young, C. M. Young, J. W. Young, J. W. Young, C. S. Yow, R. C.	So., Aero. So., M. E. Fr., C. E. Fr., Arch. E. Fr., Ch. E. Fr., Arch. So., E. E. Fr., C. E.	117 Alex., 4114 307 Calvin Rd. 118 Hillcrest Rd. 118 Hillcrest Rd. 218 Becton, 3752 101 4th, 3111 134 Woodburn Rd.	Raleigh, N. C. Raleigh, N. C. Baltimore, Md. Bakersville, N. C. Raleigh, N. C. Princeton, N. C. Reidsville, N. C.

63
#### ADDENDA TO

#### FACULTY DIRECTORY

	Ext.
Anderson, Roy N. Director Student Personnel. 107 Peele	223
<sup>c</sup> Bartlett, Grady W. Asst. Prof. of Physics. 108 Daniels Residence: 317 Calvin Road.	229
Bennett, Roy R. Specialist Agronomy Extension. 204 Ricks Residence: 2819 Kilgore St.	294
<sup>3</sup> Bogdan, John F.—Applied Research Technologist and Prof. of Tex. Tex. 103 Residence:	289
Boswell, Elmo B. Registration Dept. Holladay Hall	219
Brown, T. C. Assoc, Prof., M. E. Dept. 106 Page	246
Residence: 910 Canterbury Road. Tel. 2 3277. Chalfant, J. W. Assoc. Prof., For. Dept. 304-1911 Residence: 1218 Glenwood Ave. Tel. 8898.	270
Cloyd, Ed. L., Jr. Director Student Housing. 107 Berry Residence: 2224 Hillsboro St. Tel. 5983.	328
Cowan, Mrs. Joy C. Asst. in Catalog Dept. Library Residence: 508 Dixie Trail. Tel. 2-1308.	259
<sup>o</sup> Davis, Philip H. Asst. Prof. Dept. of English. 104 Pullen	237
"Francis, Mrs. Jane W. Steno., Dean of Students. 108 Holladay Residence: 1417 Park Drive.	215
Greenwood, Dorothy P. Instr., English. 3 Pullen	237
Residence: 2620 Canterbury Road. Tel. 2-3829, Harkema, Reinard Assoc. Prof., Zool. 204 Zool	261
Residence: 1720 Chester Road. Tel. 2-1857. Henderson, Shirley Mahone, Registrar's Office, 207 Holladay Hall	219
Residence: 2512 <sup>1</sup> 2 Clark Avenue. Tel. 2-0738. Hull, William D. English. 4 Pullen	237
Residence: 2 Logan Court. Tel. 2-2673. <sup>3</sup> Keller, Anna Pence Registrar's Office. 206 Holladay	219
Residence: 2222 Circle Drive. Tel. 3-2967. *Kriegel, William Wurth Assoc. Prof., Ceramic Engr. Ceramic Office	249
Residence: 1916 Sunset Drive. 'Lewis, Malcolm Instr. (temp.) Mech. Engr. Dept. 103 Page	247
Residence: "McGehee, William Prof. and Head Dept. Psychology-T 112	286
Residence: 2314 Lake Drive. Tel. 2 0797. "Martin, Thomas J., Jr. Instr. (temp.) Mech. Engr. Dept. 108 Page	247
Residence: Matthews, Louise Registration Office. 205 Holladay Residence: 2509 Kenmore Drive. Tel. 6964.	219
Moffie, Dannie JAssoc. Prof. Psychology Dept. T-124	286
Residence: 2610 Van Dyke. *Nash, T. L. Instr. M. E. Dept. 103 Page	246
Residence: 308 Hillcrest. Tel. 2-0459. *Nickell, John Paul Instr. of English. 6 Pullen	237
Residence: 2406 Fairview Road. Tel. 8109. "Pierce, W. H. Asst. Ag. Econ. 209 Patterson	308
Residence: 117 Park Avenue. Tel. 2 3820. Porter, Jos. A., Jr. Asst. Prof. Weav. and Design, Tex. Sch. 201 Tex.	273
Residence:	210

*Rautenstrauch, Ruth—Vocational Appraiser, Psychology Dept. 124 Tompkins	286
Residence: 3002 Lewis Farm Road.	200
	12222
*Rawls, Horace D. Psychometrist, Psychology Dept. T-124	286
Residence: Apt. G 2, Country Club Homes. Tel. 2-0616.	
"Ridout, W. J., Jr. Agr. Engr. Ext. Spec.	292
Residence: Box 5342, State College Station.	
Scherm, Helen E. Secretary Poultry Extension. 209 Ricks	321
Residence: 208 Groveland Ave. Tel. 8263.	021
	010
Schmidt, Robert Assoc. Prof., Horticulture. 306 Polk	318
Residence: 516 Gardner St. Tel. 4235.	
*Sherratt, William A. Instr. (temp.) Mech. Eng. Dept. 103 Page	247
Residence: Route 1, Garner, N. C.	
"Winstead, Mary M. StenoClerk, Psychology Dept. 123 Tompkins	286
Residence: 217 Ashe Avenue. Tel. 2-2545.	200
Residence: 217 Asne Avenue, 101, 2-2040.	

### ADDENDA TO

#### STUDENT DIRECTORY

Name

School Address Classification Dorm. Box No. or St. No. Home Addressu

	Crabbilite autore	2007 11. 2002 110. 07 20. 110.	110//16 /1000 6681
Adains, K. C. Adams, W. G. Adams, W. G. Adams, W. J. Agrimis, J. P. Aken, E. N. Alexander, J. Alexander, J. Alexander, J. Alexander, J. Alexander, J. Alexander, J. Alexander, J. Allexod, T. K. Allison, C. L. Allison, C. L. Allistrock, J. I. Anderson, L. J. Anderson, L. J. Anderson, L. J. Arant, A. Y., Armstrong, C. Arnold, M. A. Yathi, J. Y.	So, Ind. E.           Jun, Ag. Ed.           Jun, Ag. Ed.           Pr., E. E.           Pr., E. E.           Sen, Ch. E.           Pr., Tex.           W.           Sec. C. B.           Pr., Tex.           W.           Sec. C. B.           Pr., Tex.           W.           Pr., Arch. E.           Pr., C. F. E.           Jr.           Pr., C. P.           A.           Pr., Pr., C. E.           Pr., Pr., C. P.           M.           So., Ch. E.           M.           Pr., Tex. E.           Pr., C. E.           Pr., Tex.           J. Pr., Pr., E. E.           A.           Pr., Tex.           J. Pr., Pr., E. E.           A.           J. Pr., Tex.           Pr., Men B.           M., J. Jun., E.           Pr., Men B. </td <td>107 Bagwall, 3307           107 Bagtan, 3707           250 Alernatifier           260 Alernatifier           261 Alernatifier           263 Alernatifier           264 Alernatifier           267 Wara, 3025           2114 Alex, 4111           6 Ferndeil Lane           Fouus Spring, 4212           201 White Oak Rd.           222 Turlington, 4284           232 Turlington, 4284           243 Syme, 35371           115 Turlington, 4284           212 Berry, 4319           213 Syme, 3523           213 Syme, 3523           213 Syme, 3523           214 Turlington, 4284           213 Syme, 3523           213 Syme, 3523           214 Turlington, 4284           215 Syme, 3579           201 Turlington, 4284           201 Turlington, 4286           201 Turlington, 4287           215 Syme, 3579           215 Syme, 3579           216 Syme, 3586           212 Cox Ave           215 Cox           215 Cox</td> <td>Beaufort, N. C. Raleigh, N. C. Perbesta, M. C. Berbesta, M. C. Raleigh, N. C. Raleigh, N. C. Raleigh, N. C. Raleigh, N. C. Raleigh, N. C. Raleigh, N. C. Caroleen, N. C. Caroleen, N. C. Caroleen, N. C. Caroleen, N. C. Caroleen, N. C. Raleigh, N. C. Bernaklin, K. C. Raleigh, N. C. Bernaklin, K. C. Raleigh, N. C. Caroleen, N. C. Caroleen, N. C. Caroleen, N. C. Caroleen, N. C. Caroleen, N. C. Caroleen, N. C. Raleigh, N. C. Raleigh, N. C. Raleigh, N. C. Raleigh, N. C. Raleigh, N. C. Charlotte, N. C. Gastonia, N. C. Prensboro, N. C. Prensboro, N. C. Charlotte, N. C. Charlotte, N. C. Charlotte, N. C. Charlotte, N. C. Charlotte, N. C. Charlotte, N. C.</td>	107 Bagwall, 3307           107 Bagtan, 3707           250 Alernatifier           260 Alernatifier           261 Alernatifier           263 Alernatifier           264 Alernatifier           267 Wara, 3025           2114 Alex, 4111           6 Ferndeil Lane           Fouus Spring, 4212           201 White Oak Rd.           222 Turlington, 4284           232 Turlington, 4284           243 Syme, 35371           115 Turlington, 4284           212 Berry, 4319           213 Syme, 3523           213 Syme, 3523           213 Syme, 3523           214 Turlington, 4284           213 Syme, 3523           213 Syme, 3523           214 Turlington, 4284           215 Syme, 3579           201 Turlington, 4284           201 Turlington, 4286           201 Turlington, 4287           215 Syme, 3579           215 Syme, 3579           216 Syme, 3586           212 Cox Ave           215 Cox           215 Cox	Beaufort, N. C. Raleigh, N. C. Perbesta, M. C. Berbesta, M. C. Raleigh, N. C. Raleigh, N. C. Raleigh, N. C. Raleigh, N. C. Raleigh, N. C. Raleigh, N. C. Caroleen, N. C. Caroleen, N. C. Caroleen, N. C. Caroleen, N. C. Caroleen, N. C. Raleigh, N. C. Bernaklin, K. C. Raleigh, N. C. Bernaklin, K. C. Raleigh, N. C. Caroleen, N. C. Caroleen, N. C. Caroleen, N. C. Caroleen, N. C. Caroleen, N. C. Caroleen, N. C. Raleigh, N. C. Raleigh, N. C. Raleigh, N. C. Raleigh, N. C. Raleigh, N. C. Charlotte, N. C. Gastonia, N. C. Prensboro, N. C. Prensboro, N. C. Charlotte, N. C. Charlotte, N. C. Charlotte, N. C. Charlotte, N. C. Charlotte, N. C. Charlotte, N. C.
	Sen., M. E. Jun., An. Prod.		CKV Mount, N. G.
Baker, L. H. Baker, R. A. Baker, T. F. Ballard, Mrs. I Ballard, L. N. Bannerman, D Barber, J. T. Barber, Y. M. Barbeur, E. S.	Fr., For., Fr., E. E., Fr., Aero. F., Fr., E. E., Frances W., So., Occ. I. & G. Fr., E. E., V. Fr., M. E., Fr., Tex., Jr., Fr., Ag., Fr., Tex., Fr., E. E.	222         Turlington, 4250           33         Turlington, 4262         R           228         Syme, 5561         S           205         Turlington, 4234         1205           205         Filmon         462           228         Syme, 5561         S           205         Filmon         426           205         Filmon         426           205         Filmon         410           205         Filmon         410           201         Alexander, 4150         Wim           105         Syme, 3565         121           2017         Barmetler         1312           2017         Syme, 3576         10           10         Syme, 3636         11	Cliffside, N. C. Sylva, N. C. ocky River, Ohio Jummerville, S. C. Biscoe, N. C. Lauderdale, Fla Goldsboro, N. C. ton-Salem, N. C. ston-Salem, N. C. Moyock, N. C. Enfield, N. C.

		School Address	
Name	Classification	Dorm, Box No. or St. No.	Home Address
Black, D. C. Blackwelder, C. R., Jr. Blackwell, E. T. Bland, J. M. Bland, J. M. Bland, W. A. Blanton, G. K. Blanton, L. F. Blaue, A. F.	Fr., M. E. So., E. E. So., Ag. E. Fr., E. E. Grad., For. Fr., Ch. E. Jun., Dairy Mfg. Fr., Tex.	Dorm. Box No. or St. No.           Dorm. Box No. or St. No.           2008         Hillsbore           2010         Wine Forcest Ed.           308         Syme, 3572           24         Syme, 3572           208         Lochmoore Dr.           202         Gold, 3214           203         Alexander, 4135           204         Berry, 4324           205         Berry, 4324           204         Berry, 4324           333         Bayeett, 3399           318         Turlington, 4280           318         Syme, 3551           219         Syme, 3552           219         Syme, 3552           209         Turlington, 4272           26         Syme, 352           2109         Turlington, 4272           26         Syme, 352           211         Berry, 4312           213         Alexander, 4128	Charlotte, N. C. Concord, N. C. Oxford, N. C. Vilmington, N. C. Greenville, N. C. Cary, N. C. Spindale, N. C. Lincolnton, N. C.
Blue, W. A. Blue, W. H., Jr. Bluer, T. N. Boger, J. P. L. Boger, J. P. L. Boger, B. S., Jr. Bollin, C. R. Boozer, J. W., Jr. Bost, P. R. W. Boswell, A. W. Bouldin, B. R. Boyet, M. B. Boyet, M. B. Boyet, C. F. Boyetet, C. R. Brandy, M. S., Jr.	So., Aero. E. Fr., C. E. Fr., Aero. E. Sen., Tex. Mgt.	2027 Brunn (2017) 2029 Berry, 42822 2114 Turlington, 4276 2029 Hillsboro 22 Gym Bington, 4283 2021 Turlington, 4283 2021 Turlington, 4283 2022 Hullsboro 2021 Turlington, 4284 1057 Hillsboro 20157 Hillsboro 20157 Hillsboro 20157 Hillsboro 20157 Hillsboro 20158 20158 Hillsboro 20158 Hill	cky Mount, N. C. Mayodan, N. C.

		2010 - 2010 - C
	<b>AN 14</b>	School Address
Name	Classification	Dorm. Box No. or St. No. Home Address
Dentley C D	P. C. P	School Address           Dorm. Boz No. or SL No.         Home Address           316 Syme, 3580         Bailey, N. C.           1270 Hillsboro         Bladenbort, N. C.           128 Chamberlain         Radenbort, N. C.           128 Deton, 3757         Pfafftown, N. C.           222 Becton, 3757         Pfafftown, N. C.           222 Cox Ave         Garner, N. G.           22 Cox Ave         Garner, N. G.           22 Cox Ave         Garner, N. G.           218 alexander, 4123         Faison, N. C.           213 Bagwell, 3363         Belhaven, N. C.           224 Syme, 3557         Greensboro, N. C.           225 Syme, 3557         Greensboro, N. C.           226 Turlington, 4298         Charlotte, N. C.           238 Alex, 4198         Roanoke Rapids, N. C.           238 Hex, 4198         Charlotte, N. C.           218 Syme, 3617         Charlotte, N. C.           218 Syme, 3518         Cilffaide, N. C.           218 Syme, 3620         Roanoke Rapids, N. C.           2208 Hope         Store, 1805         Roanoke Rapids, N. C.           218 Syme, 3518         Cilffaide, N. C.         Store, 1805           2208 Hope         Roanoke Rapids, N. C.         Stor           2208 Hope
Brantley, C. B.	Fr., Gen. E.	.316 Syme, 3580 Bailey, N. C.
Bridger, L. C., Jr.	Fr., Tex.	.1720 Hillsboro Bladenboro, N. C.
Bridges, R. H.	Fr., M. E.	125 Chamberlain Raleigh, N. C.
Briggs S. T.	So Ag	223 Becton 3757 Pfefftown N.C.
Duinson W I	En Ag	101 Berry 4201 Anonches N.O.
Drinson, W. J.	FL, Ag.	. 101 Berry, 4501 Arapanoe, N. G.
Britt, W. M.	So., Ag.	222 Cox Ave Garner, N. C.
Brittain, J. V., Jr.	Fr., For.	5 Syme, 3601 Black Mountain, N. C.
Broadwell, F. J., J	r	Greenville, N. C.
Brouden A S	Fr Ac	128 Alexander 4123 Faison N.C.
Ducaka D W Tu	E. F.F.	The riesander, 1100
Drooks, T. W., JI.	E. M. D.	010 0 11 0000 0 11 0
Brooks, I. F.	Fr., M. E.	213 Bagwell, 3363 Belnaven, N. C.
Brooks, W. H.	Fr., M. E.	.225 Syme, 3557 Greensboro, N. C.
Brower, W. A.	Fr., Tex.	123 Syme, 3523 Wadesboro, N. C.
Brown, F. W., Jr.	Jun., Ch. E.	3414 Hillshoro Black Mountain N.C.
Brown J L. Jr	Fr M F	340 Turlington 4208 Charlotta N.C.
Brown I O T	Car Ob D	ooc malington, 4200 Charlotte, N. C.
Drown, J. O. 1	Ben, Oh. E.	220 Turnington, 4204 Roanoke Rapids, N. C.
Brown, J. Q.	Fr., Tex. Mig.	.338 Alex., 4198 Roanoke Rapids, N. C.
Brown, L. A., Jr.	. Jun., C. E.	133 Alexander, 4127 Charlotte, N. C.
Brown, L. H.	Fr., M. E.	710 Bloodworth Raleigh, N.C.
Brown, R. A.	Fr. Gen. E.	118 Syme, 3518 Cliffside, N.C.
Brown R O	Son Daimy Mfor	4 Sumo 2600 Charlette N.C.
Drown, R. O	Sen, Daily Mig.	4 Synte, 3000 Charlotte, N. C.
Bryant, E. R.	Fr., E. E.	21 Syme, 3617 Fieldale, Va.
Bryant, J. R.	So., Gen. E	.2208 Hope Rich Square, N. C.
Buck, W. F	Fr., E. E.	333 Becton, 3801 Roanoke Rapids, N. C.
Buckner, S. H.	Fr., M. E.	6 Becton, 3808 Elon College, N.G.
Buffaloe H L	Sen M E	1307 Hillshoro Ralaigh N C
Puie I T	En C E	202 Desten 2770 Ded Casings M.C.
Dullend W C	E. FL, C. E.	and Becton, arro Red Springs, N. G.
Bullard, W. G.	Fr., Arch. E.	.325 Turington, 4287 Rocky Mount, N. C.
Bulluck, P. R., Jr.	Fr., Ag	203 Syme, 3535 Rocky Mount, N. C.
Bumgardner, E. E	Fr., M. E.	304 Alex., 4170 Winston-Salem, N. C.
Bumgarner, C. S.	Jr. So E E	229 Syme 3561 Millers Creek N G
Bunch J R	Fr M E	227 Syme 3591 Hobbeville N.C.
Douglas W A	En C E	2 Dames 4000 Charlette M.O.
Dundy, W. A		.5 Berry, 4550 Charlotte, N. C.
Bunker, H. W.	Fr., Ag.	.102 Syme, 3502 Mebane, N. G.
Burch, J. P.	Sen., An. Prod.	.209 Gold, 3221 . Mountain Park, N. C.
Burchard, P. E.	Fr., For.	.604 Rosemont Ave Raleigh, N. C.
Burgess, H. C., Jr.	Fr., M. E.	606 E. Lane Raleigh, N. C.
Burkhood C I Jr	Jun E E	319 Becton 3787 Condor N C
Euros H D	So Arr	212 Regreat 2244 Foirmont N.C.
Durns, II. D.	D0., Ag.	Did Dagwen, 0044 Fairmont, N. C.
Burnsed, J. L.	Fr., 1ex.	.314 Turington, 4276 Snaw, Miss.
Burtner, R. L., Jr.	So., M. E.	126 Turlington, 4223 Washington, D. C.
Burton, N. E., Jr.	Fr., Aero. E.	.103 Syme, 3503 Goldsboro, N. C.
Butler, J. A.	Fr. Ag.	St. Mary's St. (Rex Hosp.)
Butts J T	So C E	201 Syme 3533 Fuquey Springs N C
Bund W C	Co Anab F	499 Helifer Deleigh M C
Byru, w. 0		.400 Hamax ·
Coin I B In	Er C E	104 Alay 4104 Winston Salam N.C.
Call, J. D., Jr.	гг., С. Е.	104 Alex., 4104 Winston-Salem, N. C.
Cams, H. M.	Fr., Ag.	15 Syme, 3611 willow Springs, N. G.
Cameron, J. M.	Grad., Exp. Sta	.108 4th, 3118 Ursina, Pa.
Campbell, P. P.	Fr., Aero, E.	.302 Hawthorn Rd. Raleigh, N.C.
Cannon T F.	Fr E E	319 Syme 3583 Canton N.G.
Canns E A	Fr F F	126 Syme 3526 Rocky Mount N C
Cananca H T	En Con F	210 Cume 2592 Weakington MC
Carawan, H. L	Fr., Gen. E.	old Dame, 4000 Washington, N.G.
Carnes, W. H.	Fr., E. E.	213 Berry, 4320 Four Oaks, N. G.
Carpenter, R. L.	Fr., M. E.	.219 Turlington, 4247 Thomasville, N.C.
Carpenter, R. M.		4 Maiden Lane Raleigh, N.C.
Carr. McDonald	Fr. Ag	215 Syme, 3547 Magnolia, N.C.
Carroll E T	Fr Ag	197 Alexander 4199 Hillshore N.G.
Cowell Nows- D	(Mag) Cand Ac Ch	1919 Filmone Dalaint M A
Carron, Norma B.	(mis.) Grad., Ag. Ch.	010 Alexander 4175 Chammer M. M.
Carroll, W. L	Fr., Ag.	303         Hallinx         Knetzen, M.C.           104         Alex., 4104         Willow Springs, N.C.           15         Syme, 3611         Ursina, Pa.           108         4th, 3118         Ursina, Pa.           302         Hawthorn Rd.         Raleigh, N.C.           319         Syme, 3533         Rody Canton, N.G.           319         Syme, 3533         Rody Mathematican, N.G.           313         Berry, 4320         Four Oaks, N.G.           213         Herry, 4320         Four Oaks, N.G.           213         Berry, 4320         Four Oaks, N.G.           214         Maiden Lane         Raleigh, N.G.           215         Syme, 3547         Magnolia, N.G.           216         Syme, 3547         Magnolia, N.G.           217         Jexander, 4122         Hillsborn, N.G.           212         Alexander, 4125         Hillsborn, N.G.           212         Alexander, 4175         Cherryville, N.G.

Name Classification	School Address Dorm. Box No. or St. No. Home Address
Cherry, Jack, Jr. Fr., C. E. Chewning, T. R., Jr. Fr., C. E. Christenhury, N. W. Fr. Ag	1 Syme, 3597         Demacrat. N. C.           0.313 Alexander, 4176         Gold aboro, N. C.           0.314 Turlington, 201         Gold aboro, N. C.           114 Turlington, 201         Wilmington, N. C.           234 Turlington, 211         Wilmington, N. C.           234 Turlington, 221         Booky Mount, N. C.           234 Turlington, 224         Saisbury, N. C.           235 Alexander, 4188         Jacksonville, Fla.           106 Welch, 5241         Lumberton, N. C.           107 Syme, 3607         Shelby, N. C.           108 Turlington, 4294         Winston-Salen, N. C.           107 Syme, 3607         Shelby, N. C.           108 Syme, 3604         Mt. Airy, N. C.           109 Syme, 3564         Mt. Airy, N. C.           101 Alexander, 4216         Mt. Airy, N. C.           103 Syme, 3564         Mt. Airy, N. C.           104 Syme, 3564         Mt. Airy, N. C.           105 Syme, 3533         Ringer Mountain, N. C.           200 Syme, 3534         Rurlington, M. C.           201 Bary, 412         Burlington, M. C.           202 Bare, 3503         Robersonville, N. C.           203 Bare, 132         Castonia, N. C.           204 Bary, 412         Burlington, M. C.           205 Bare, 3
Collier, J. C., Jr. Fr., C. E. Collins, D. A. Fr., M. E. Collins, Max, Jr. Sen., C. E. Collins, T. J., Jr. Fr., Aero. E. Cowbe W. A. Fr. oh. Fr.	005 Wilmington Tam Delsish N.C.

	School Address Dorm. Boz No. or St. No. Home Address
Cunningham, F. II., Jr. Fr., Tex. Currin, R. E., III Fr., Ag. Cutrell, I. G. Did not complete reg.	320 Alexander, 4183         Gastonia, N. C.           125 Syme, 3526         Rocky Mount, N. C.           102 Syme, 3502         Louisburg, N. C.
Cyrus, J. H. So., Ag. Ed.	.102 Syme, 3502 Louisburg, N. C.
Damener, J. D.         Fr., Ag.           Damener, J. D.         Grad, Tacs. Mig.           Davis, D. B.         Grad, Ind. Ec.           Davis, J. N.         So., E. E.           Davis, I. N.         So., E. E.           Davis, J. N.         So., E. E.           Davis, J. N.         So., Acc. E.           Davis, John Harold         Jun. G. E.           Davis, John Harold         Jun. G. E.           Davis, J. W.         Pr., M. E.           Davis, R. K.         Pr., M. E.           Davis, R. C.         Pr., M. E.           Davis, N. S.         Pr., M. E.           Dawaon, J. F.         Pr., Acc.           Deal, J. R.         Pr., Chr. E.           Deson, J. F.         Pr., Acc.           Deson, J. F.         So., Tex. C. M. E.           Deson, H. R. H.         Pr., Tex.           Desser, H. A., Jr.         Pr., Tex.           Desser, J. A.         So., Tex. C. M. E.           Desser, J. A.         So., Tex. C. M. E.           Desser, J. R.         Pr., Tex	102 Syme, 3502     Louisburg, N. C.       104 Syme, 3504     Bessemer City, N. C.       128 Alexander, 4164     Nixburg, Ala.       16 Syme, 3612     Daytona Beach, Fila.       16 March and Strathmer and Strathm
Dymond, W. J.         Fr., G. E.           Bakes, E. K.         So., Ag.           Eakes, S. E.         Son, Ag., Ch.           Eakes, N. A.         Fr., Ag., Ch.           Eaken, T. A.         Fr., Agr., Ch.           Easter, J. W.         Fr., Aero. E.           Edgerton, D. J.         Fr., Tr., Tex.           Edwards, C. J., J.         Fr., Mg.           Edwards, L. E.         Fr., Ag.           Edwards, L. D.         Fr., Ag.           Elliott, T. G.         Spectra Spectra	Freidmutse         Wilkes-Barre, F4           228 Syme, 5560         Clinton, N.C.           5145 Colakwood Ave.         Oxford, N.C.           140 Alexander, 4132         Ivanhoe, N.C.           205 Berry, Allo         Goldsboro, N.C.           206 Berry, 4310         Winston-Salem, N.G.           207 Syme, 3527         Baltimore, Md           217 Syme, 3527         Baltimore, Md           236 Bargy, 4336         Winston-Salem, N.G.           209 Gold, 3235         Marshville, N.G.           236 Bargwell, 3386         Winston-Salem, N.G.           236 Bargwell, 3386         Winston-Salem, N.G.

Name	Classification	School Address Dorm. Box No. or St. No.	Home Address
IEllis, G. L. Ellis, H. H. Elly, E. B. Emory, J. W. IEvars, R. C. IEvans, R. C. IEvans, R. H. IEvans, T. H. IEvans, T. L. IEvans, T. C.	Fr., Ag. Fr., Aero. E. Sen., C. E. So., C. E. Fr., Ag. Sen., Ch. E.	.321 Turlington, 4289 .331 Alexander, 4194 .R-1-B Cameron Ct. Aptz 211 Berry, 4318 .302 Syme, 3566 .332 Syme, 3596	Salisbury, N. C. Wilson, N. C. s. Raleigh, N. C. Robersonville, N. C. Reidsville, N. C. Greenville, N. C.
<ul> <li>Faires, A. M.</li> <li>Fransler, F. I. Jr.</li> <li>Frayssoux, J. E.</li> <li>Frayssoux, W. E.</li> <li>Beidman, Ireng.</li> <li>Friedbard, R. A.</li> <li>Frinch, J. C.</li> <li>Frinch, J. C.</li> <li>Frinch, J. C.</li> <li>Frinch, J. C.</li> <li>Frinch, J. S.</li> <li>Frinch, J. S.</li> <li>Frinch, J. G.</li> <li>Freeman, G. J. R.</li> <li>Footer, R. J.</li> <li>Sotter, F. D.</li> <li>Footer, F. J.</li> <li>Footer, K. J.</li> <li>Forter, K. M.</li> <li>Francis, M. E.</li> <li>Francis, K. E.</li> <li>Freeman, W. Thurman</li> <li>Freeman, W. Thurman</li> <li>Friell, J. W.</li> <li>Fulle, G. R.</li> <li>Fulle, G. R.</li> <li>Fulle, T. W.</li> </ul>	So, Aero, E., , Fr., C. E., , Fr., C. E., , Fr., C. E., , Fr., C. E., , Fr., M. E., , Fr., C. E., So, C. B., , Fr., M. E., Sen, Tex, Mir., , Fr., M. E., Spec. (Tex.) , Spec. (Tex.)	927         Syme, 3559           320 GHilcrest         W           330 Syme, 3594         Yest           321 Alexander, 4152         Yest           321 Alexander, 4152         Yest           321 Alexander, 4279         Yest           321 Alexander, 4279         Yest           321 Barwhiel, 3303         Yest           201 Bagwell, 3303         Yest           201 Bagwell, 3303         Yest           201 Barwell, 3006         Yest           201 Barwell, 303         Yest           201 Tarlington, 4205         Yest           201 Turlington, 4205         Yest           201 Turlington, 4205         Yest           201 Turlington, 4205         Yest           201 Byrne, 5575         Yest           201 Byrne, 5575         Yest           201 Byrne, 5575         Yest           201 Syrne, 5575         Yest           201 Syrne, 5575         Yest           201 Syrne, 5576         Yest           201 Syrne, 5576         Yest           203 Gold, 3227         Yest           213 Shepherd         Yest           303 Gold, 3227         Yest           213 Shepherd         Yest <td< td=""><td>Wallace, N.C. Gastonia, N.C. Gastonia, N.C. Gastonia, N.C. Erooklyn, N.G. Charlette, N.C. Charlette, N.C. Sallayo, N.G. Sallayo, N.G. Sallayo, N.G. Santya, N.G. Santya, N.G. Santya, N.G. Mathewa, N.G. Mathewa, N.G. Warrenton, N.C. Hickory, N.G. Warrenton, N.C. Raleigh, N.C. Raleigh, N.C. Raleigh, N.C. Raleigh, N.C. Raleigh, N.C. Raleigh, N.C. Carlandow, N.G. Charlotte, N.G. Raleigh, N.C. Carlaidy, N.C. Carla</td></td<>	Wallace, N.C. Gastonia, N.C. Gastonia, N.C. Gastonia, N.C. Erooklyn, N.G. Charlette, N.C. Charlette, N.C. Sallayo, N.G. Sallayo, N.G. Sallayo, N.G. Santya, N.G. Santya, N.G. Santya, N.G. Mathewa, N.G. Mathewa, N.G. Warrenton, N.C. Hickory, N.G. Warrenton, N.C. Raleigh, N.C. Raleigh, N.C. Raleigh, N.C. Raleigh, N.C. Raleigh, N.C. Raleigh, N.C. Carlandow, N.G. Charlotte, N.G. Raleigh, N.C. Carlaidy, N.C. Carla
Gadsden, C. M. Galloway, J. H. Gantt, A. E. Gantt, W. M. Gardner, C. E.	So., E. E. Grad., Ag. Ch. So., Ch. E. Fr., M. E. So., Ag.	1821 St. Marys Apt. C-5, Raleigh Apts. 1 Berry, 4334 302 Turlington, 4267 2708 Bedford Ave.	Charlotte, N. C. Raleigh, N. C. Kings Mt., N. C. Albemarle, N. C. Raleigh, N. C.

Name	Classification	School Address Dorm, Box No. or St. No. Home Addres
Chover, S. A., Jr. Gold, Eugene Goldman, Paul Goldston, R. E. Goldston, R. L. Goren, W. A., Jr. Goord, W. A., Jr. Gorman, R. L. Gorman, W. A. Granhan, K. A. Granhan, K. A. Granhan, K. A. Graven, P. M. Greene, R. C.	Classification Fr., Tex, Fr., Acro. E. Fr., Gen, E. Fr., Gen, E. Fr., Gen, E. Fr., Gen, E. Fr., C. E. Fr., C. E. Fr., C. E. Fr., C. E. Fr., Tex, Grad., Arron. C. Solio Fr., Tex, Grad., Arron. C. Solio Fr., Tex, Grad., Arron. C. Solio Fr., Tex, Grad., Arron. C. Solio Fr., C. E. Fr., C. & D. Fr., C. & D. Fr., M. E. Fr., M. E. Fr., M. E. Fr., Geol. E. Fr., Ce, E. Fr., Ke, E. Fr., Ke, E. Fr., Ke, F.	School Address           Dorn. Bas No. or St. No.         Home Address           Darn. Bas No. or St. No.         Home Address           14 Syme, 3610         Shelby, N. C           31 Alexander, 4194         Wilson, N. C           113 Syme, 3613         Carolean, N. C           114 Syme, 3614         Wilson, N. C           115 Syme, 3614         Decatur, Ala           116 Syme, 3614         Decatur, Ala           117 Deton, 3711         Norfolk, Va.           118 Becton, 3711         Norfolk, Va.           114 Turlington, 4221         Gatesville, N. C           115 Becton, 3711         Norfolk, Va.           116 Alexander, 4113         Kannapolis, N. C           2004 Gray, 3122         Burn, N. C           2105 Cambridge Rd.         Charlotte, N. C.           2118 Syme, 3523         Durham, N. C           2118 Syme, 3524         Charlotte, N. C.           2118 Syme, 3505         Charlotte, N. C.           2118 Syme, 3507         Selfade, Va.           2118 Syme, 3508         Greemore, N. C.           2118 Walus, 3012         Balan, N. C.           2118 Syme, 3509         Gatesville, N. C.           2118 Syme, 3517         Fieldale, Va.           2118 Syme, 3529
Guthrie, J. D. Harsor, E. F. Haislee, T. L. B. Halles, F. N. Halladay, W. J., Jr. Hanstead, K. G. Ham, C. A. Hamilton, H. M. Hamilton, H. M. Hamilton, T. J. Hampton, C. W. Hampton, C. J. Hamey, T. J. Hamey, T. J. Hamey, T. J. Hamey, T. J. Hardison, H. A. Hardison, H. A. Hardison, N. Winfi Hardison, F. J.	Fr., For. Jun., M. E. Fr., M. E. Fr., M. E. Fr., M. E. Fr., E. E. Fr., J. E. Fr., J. E. Grad., So, Tex. Grad., So, Tex. Grad., So, Tex. Grad., Ag. N. Grad., Ag. Sh. Grad., Ag. Ch.	329 Turlington, 4291     Gates, N.C.       32414 Hillsboro     Franklin, Nebr.       205 Syme, 3537     Charlotte, N.C.       205 Syme, 3537     Charlotte, N.C.       205 Syme, 3537     Charlotte, N.C.       209 Syme, 3541     Norfolk, Va.       305 Turlington, 4270     Mooresville, N.G.       209 Syme, 3541     Norfolk, Va.       305 Turlington, 4270     Mooresville, N.G.       2019 Syme, 3541     Statesville, N.G.       202 Groveland Ave.     Bethany, Mo.       202 Groveland Ave.     Stelby, N.C.       201 Ath, 3125     Granville, N.G.       201 Ath, 3125     Granville, N.G.       201 Ath, 3125     Granville, Oho       2118 St. Marys     Haleigh, N.C.       218 N. Baylar Ave.     Walke Forest, N.C.       12 N. Boylan Ave.     Statesville, N.C.

		0-11421	
Name	Classification	School Address Dorm. Box No, or St. 1	No. Home Address
Harper, J. P. Harper, L. L., Jr.	Fr., For	415 Dixie Trail 24 Becton, 3825	Andrews, S. C.
Harper, L. L., Jr.	Fr., Ag.	.24 Becton, 3825	
Harrell, G. O.	So., Cer. E.	1517 Hanover	Raleigh, N. C.
Harris, A. R. Harris, C. M.	Fr., For.	214 Syme, 3546 126 Turlington, 4223	Moorestown, N. J. Greensboro, N. C.
Harris E G	Fr E E	121 Syma 2521	High Point, N. C.
Harris, R. C.	Fr., M. E.	131 Syme, 3531 503 N. Wilmington .	Candor, N. C.
Harris, E. G. Harris, R. C. Hart, L. F.	Fr., Ag.	223 Bagwell, 3355	Monroe, N. C.
Hart, S. B. Hartzog, L. S. Hash, L. J.	So., Ch. E.	109 Syme, 3509	Monwoo N C
Hartzog, L. S.	Sen., Ind. E.	5163, Sta. Col. Sta.	Lexington, N. C.
Hash, L. J.	Sen., Aero. E. Fr., E. E.	224 Syme, 3556	Lexington, N. C. Piney Creek, N. C. Bailey, N. C. Edenton, N. C. Raleigh, N. C.
Haskins, Q. F. Hassell, J. L. Hathcock, A. C.	Son Aero E	210 Watauga, 5026	Edenton N C
Hathcock, A. C.	Fr. E. E.	301 Brooks Ave	Raleigh N C.
Hawley, H. L.	Fr., Arch. E.		. Lexington, N. C.
Hayes, N. E.	Fr., E. E.	321 Syme, 3585	Kings Mountain, N. C.
Hawley, H. L. Hayes, N. E. Hayes, R. L.	So., Ag.	.227 New Bern Ave.	Alexander, N. C.
Hayes, R. L. Hayes, T. T., Jr. Haygood, R. C., Jr.	Fr., M. E.	112 Syme, 3512 227 Alexander, 4156	Sanford, N. C. Gastonia, N. C.
Head W L	So., E. E.	131 Bagwell, 3331	Asheville, N. C.
Head, W. L. Hearn, W. M.	Fr E E	171812 Hillsboro	Raleigh, N. C.
Hebert, T. T.	Grad., Pl. Path.	216 E. Aycock	
Hebert, T. T. Hefner, O. D.	Fr., Ag.	Morgan St.	Altapass, N. C.
Hefner, O. D. Hege, C. L. Hehn, J. M.	So., Ag. Ed.	122 Syme, 3522	Advance, N. C.
Hege, C. L. Hehn, J. M. Helms, N. E.	Er Ag Ed	310 Syme, 3574 228 Alexander, 4157	Short Hills, N. J. Monroe, N. C.
Helton, E. H.	Jun., Aero, E.	330 Turlington, 4292	Timberland, N. C.
Helton, E. H. Henderson, A. L.	Fr., E. E.		Monroe, N. C.
Henderson, H. C. Henderson, T. C. Henry, E. R. Henry, J. H. Heritage, T. P. Herlevick, V. W. Hessee, E. W. Hester Q. C.	Fr., For.	214 Alexander, 4143	Pollocksville, N. C.
Henderson, T. C.	Sen., Ag. Ed.	123 Turlington, 4220	Lake Toxaway, N. C.
Henry, E. R.	F., M. E.	135 Turlington, 4230	Spencer, N. C.
Henry, J. H.	So., Un. E	328 Syme, 3592	Asheville, N. C. Burlington, N. C.
Herlevick, V. W.	So., For.	314 Forest Rd.	Monroe, La.
Hessee, E. W.	Fr., Ch. E.	19 Becton, 3820	Monroe, La. Morehead City, N. C.
Hester, O. C.	Fr., Ag.		Bladenboro, N. C.
Hiatt, L. D.	Fr., C. E.	12 Becton, 3814	Thomasville, N. C. Hudson, N. C.
Highemith J A	. Fr., C. E.	233 Alexander, 4161 2710 Everette Ave.	Chapel Hill, N. C.
Hill J D	Er M E	113 Turlington, 4210	Badin, N. C.
Hill, R. J.	Fr., Tex.	305 Turlington, 4270	Mooresville, N. C.
Hill, T. H.	Fr., Aero. E.	303 Turlington, 4268	Marietta, N. C.
Hessee, E. W. Hester, O. C. Hiatt, L. D. Highsmith, L. A. Hill, J. D. Hill, R. J. Hill, T. H. Hill, T. O. Hill, T. O.	Fr., Ch. E.	322 Alexander, 4185	Mt. Airy, N. C.
Hines D H	Ev Cool E	.202 Berry, 4309 5½ Dixie Trail	Charlotte, N. C. Carolina Beach, N. C.
Hillis, J. H. Hines, D. H. Hinkle, R. C., Jr. Hobbs, M. E.	Jun Ch E	322 Syme, 3586	Lexington, N. C.
Hobbs, M. E.	Fr., Ind. A. Ed.	1016 Boylan Dr.	Raleigh, N. C.
Hobson, W. M.	Fr., Ag.	211 Bagwell, 3343	Booneville, N. C.
Hobson, W. M. Hodges, R. S. Hodnett, S. A. Holder, W. C. Holland, S. L.	So., E. E.	304 Bagwell, 3370	Washington, N. C.
Holdon W. C.	Er Tor	321 Turlington, 4283 115 <sup>1</sup> <sub>2</sub> N. McDowell	Durham, N. C. Asheboro, N. C.
Holland S L	Fr. Tex.		Raleigh, N. C.
<ul> <li>Haller, J. F.</li> <li>Holloman, E. K., Jr.</li> <li>Hollowell, W. A.</li> <li>Holmes, J. H.</li> <li>Holmes, S. A.</li> <li>Holton, R. T.</li> <li>Holtzclaw, R. W.</li> <li>Hod C. W.</li> </ul>	So., Arch.	131 Turlington, 4227	Conover, N. C.
Holloman, E. K., Jr.	Jun., M. E.	202 Alexander, 4134	Goldshoro, N. C.
followell, W. A.	. Fr., E. E.	.325 Syme, 3589	Goldsboro, N. C.
Johnes, J. H.	Er C F	228 Turlington, 4256 323 Syme, 3587	Hamlet, N. C. Jonesboro, N. C.
folton R T	So. M. E.	101 Welch, 3237	New Bern, N. C.
Ioltzclaw, R. W.	Jun., M. E.	135 Turlington, 4230	Canton, N. C.
Hood, C. W	Fr., C. E.	.333 Alexander, 4195	Sherrills Ford, N. C.

Name	Classification	School Address Dorm. Box No. or St. No.	Home Address
Iloover, G. R. Ilope, F. F. Horrel, G. J. Horrel, G. J. Horren, Vollins Horton, D. N. Jr. Houston, F. N. Houston, F. N. Houston, F. N. Howard, Bennie, Jr. Howard, E. C. Howard, E. K. Howard, E. K. Howard, E. K. Howard, E. K. Hubbard, J. W., Jr. Huffstetler, S. H. Hunnieutt, R. I. Hunnieutt, R. I. Hunnieutt, R. K. Hunnieutt, R. W. Hunnieutt, R. W. Hunnieutt, R. W. Hunnieutt, R. W. Hunnieutt, R. M. Hunnieut, S. N. Hutchinson, F. J. Hutchinson, F. J. Hutchinson, R. D.	Jun, M. E. So, C. E. Fr., Ag. Fr., E. E. So, C. E. So, C. E. Fr., E. E. Jun, Ind. E. Fr., M. E.	136 Turlington, 4231. Win 238 Spring 3570 2200 2395 Alexander, 4200 2305 Alexander, 4137 230 Alexander, 4137 230 Alexander, 4139 231 Hawthon, 4248 Bes 234 Turlington, 4286 230 Alexander, 4139 231 Sprme, 359 232 Sprme, 359 233 Sprme, 3545 233 Sprme, 5454 231 Sprme, 545 234 Carbon 234 Hulbabor 234 Hulbabor 234 Hulbabor 234 Hulbabor 234 Spreader, 4230 235 Alexander, 4230 236 Spreader, 4230 236 Spreader, 4230 237 Spreader, 4300 238 Alexander, 4230 238 Alexander, 4230 239 Spreader, 4246 238 Turlington, 4246 238 Spreader, 4246 238 Spreader, 4246 238 Spreader, 4246 238 Spreader, 4250 Field House 238 Spreader, 4230 Field House 238 Spreader, 4230 Spreader, 4230 Spre	stor-Salem, N. C. Plainfield, N. J. Bradenton, N. C. Bradenton, Fila. Bradenton, Fila. Bradenton, Fila. Charlotte, N. C. Charlotte, N. C. Wendell, N. C. Jonesboro, N. C. Wendell, N. C. Jonesboro, N. C. Warnanaa, N. C. Warnanaa, N. C. Baufington, N. C. Charlotte, N. C. Burlington, N. C. Charlotte, N. C. Charlotte, N. C. Raleigh, N. C. Charlotte, N. C. Raleigh, N. C. Charlotte, N. C. Raleigh, N. C. Spencer, N. C.
Icard, T. F. Ingram, B. F. Inman, H. H. Inscoe, L. S., Jr.	So., For. Fr., Ch. E. Fr., C. E. So., M. E.	231 Syme, 3563 203 Turlington, 4234 226 Alexander, 4155 206 Syme, 3538	Bradenton, Fla. Lilesville, N. C. Fairmont, N. C. Nashville, N. C.
Jabhusch, A. J. Jackson, R. M. Jackson, T. F., Jr. James, A. L. James, H. B. Johnson, K. M. Jr. Johnson, J. E. G. Johnson, J. E. G. Johnson, J. E. Jr. Johnson, J. F. Johnson, J. F. Johnson, S. A. Johnson, S. A. Johnson, Walter Erskine, Jones, C. A. Jones, C. A. Jones, C. M. Jones, O. R. Jones, C. R. Jones, C. R. Jones, R. W. Jones, R. W.	Fr., Ch. E. Fr., Tex. Sen., Tex. Mfg. Aud. Jun. Gen. E. Fr., E. Fr., Tex. So., Gen. E. Fr., Tex. Jun., An. Prod. Fr., Tex. So., Gen. E. Fr., M. E. Fr., M. E. Fr., M. E. So., E. E. Jun., M. E. So., E. E. So., E. E. Fr., Ch. E. Fr., Tex. Fr., Tex. So., T. E. Fr., Tex. Fr., Fr., Fr., Fr., Fr., Fr., Fr., Fr.,	1714 Park Dr. 122 N. Salisbury 227 Alexander, 4156 102 Watauga, 3002 513 N. Blount 2310 Mayuen, 4207 2310 Mayuen, 4207 234 Turlington, 4252 902 Welch, 3262 902 Welch, 3262 903 Turlington, 4252 903 Turlington, 4254 422 Alexander, 4185 1601 St. Mary's 213 Bagwell, 3344 201 Turlington, 4279 1530 Arington, 4279 2320 Syme, 3558 317 Turlington, 4279 2431 Alexander, 4142 223 Syme, 3618 239 Turlington, 4264	Lorain, Ohio Gastonia, N. C. Mashington, N. C. Raleigh, N. C. Blurita, N. Y. Elurita, N. Y. Guest, C. C. C. C. C. H. C. Glead, N. C. Fountain, N. C. Raleigh, N. C. Burlington, N. C. Raleigh, N. C. Burlington, N. C. Raleigh, N. C. Berlowort, N. C. Breward, N. C. Tarboro, N. C. Berevard, N. C. Tarboro, N. C. Berevard, N. C. Berevard, N. C. Berevard, N. C. Pelham, N. C. Pelham, N. C.

Name	Classification	School Address Dorm. Box No. or St. No.	Home Address
Jordan, Mary Ellen . C	rad., Exp. Stat.	.120 Bagwell, 3320 Win 20 Syme, 3616 Box 5353, Sta. Col. Sta. 1000 Harvey Ro .101 Turlington, 4200	Siler City, N. C.
Kaczynski, H. Kahn, M. Katzenoff, Robert Kearney, M. A. Fearney, M. A. Keiley, W. W. Keiley, W. M. Keiley, W. M. Keiley, W. M. Keiley, W. M. Kendrick, G. H. Kendrick, G. H. Kendrick, G. H. Kendrick, G. H. Kendrick, G. H. King, H. D. King, H. D. King, H. D. King, H. D. King, H. D. King, H. D. King, J. M. Jr. Kiopekly, George Kirby, C. A. Kirby, C. K. Kirby, C. K. Kata, K. S. Konot, H. S. Konot, H. S. Konot, H. S. Konot, M. S. Konot	Sen, For, So, Cer, E. Jun, Ch, E. Fr, Ch, E. Fr, Ch, E. Fr, Ch, E. Fr, Ch, F, Tet, Fr, E. Grad, TF, Tet, So, Cer, E. Jun, Acro, E. So, Ag, Fr, Ch, E. So, Ag, Fr, Ch, E. So, Ag, Fr, Ch, E. So, Ch, E. So, Ch, E. Fr, Arch, Fr, Ch, E. Fr, Arch, Fr, Ch, E. Fr, Arch, Fr, Ch, E. Fr, Arch, So, Ch, E. Fr, Ac, Ch, E. Fr, Ac, Ch, E.	9520 Clark Ave.           055 Syme, 3569           139 Alexander, 4131           254 Alexander, 4137           254 Alexander, 4137           254 Alexander, 4137           251 Alexander, 4137           251 Alexander, 4137           252 Alexander, 4137           250 Syme, 3562           1607 Amblesde Dr.           222 Orele Dr.           222 Syme, 3562           125 Turlinston, 4226           040 Syme, 3509           051 Turlington, 4226           040 Watauga, 3040           225 Turlington, 4226           213 Berry, 4226           214 Cutler           240 Turlington, 4225           214 Cutler           204 Turlington, 4235           213 Berry, 4230           221 Turlington, 4235           213 Berry, 4230           221 Turlington, 4231           2312 Turlington, 4231           2313 Berry, 4230           2314 Clabero           2315 Syme, 3542           2316 Derry, 4231           2317 Turlington, 4241           2318 Syme, 3542           2314 Hilboro           2315 Syme, 3542           2316 Unit, 4254           2317 Unitgton, 4253      <	Trenton, N.J. Baltimoro, M.d. Baltimoro, M.d. Greensboro, N. C. Carlos, N. C. Raleigh, N.C. Raleigh, N.C. Raleigh, N.C. Raleigh, N.C. Magnolia, N.C. Raleigh, N.C. Monroo, N.C. Monroo, N.C. Charlotte, N.C. Charlotte, N.C. Raleigh, N.C. Charlotte, N.C. Raleigh, N.C. Charlotte, N.C. Raleigh, N.C. Charlotte, N.C. Raleigh, N.C. Carlotte, N.C. Charlotte, N.C. Charlotte, N.C. Charlotte, N.C. Carlotte, N.C. Carlotte, N.C. Carlotte, N.C. Charlotte, N.C
Leggette, J. D. LeGrand, W. F. Lentz, J. F., Jr. Leonard, P. T. Lester, R. O.	Fr., For. Sen., Tex. Mfg. Fr., E. E. Fr., E. E. Fr., Ch. E.	Box 465, Six Forks Rd.           124 Forest Rd.           202 Alexander, 4134           3311 Clark Ave.           212 Syme, 3544           202 Turlington, 4253           1522 Carr           120 Woodburn Rd.           313 Syme, 3577           118 Alexander, 4115	Washington, N. C. Shelby, N. C. rehead City, N. C. Lexington, N. C. Woodsdale, N. C.
Levin, R. E. Levye, M. A. Lewis, B. F.	Grad., Tex. Sen., Tex. Mfg. Fr., C. E.	.120 Woodburn Rd. .313 Syme, 3577 .118 Alexander, 4115	New York, N. Y. Providence, R. I. Zebulon, N. C.

Name	Classification	School Address Dorm. Box No. or St. No. Home Address
Lewis, W. II. Lindley, W. P. Lindsuy, W. C., Jr. Linkieum, A. C., Jr. Lippard, L. A. Lippard, L. A. Lippard, L. K. Linker, W. C. Jr. Little, G. B. Lidtle, G. B. Lidtle, G. B. Long, S. S. Long, S. S. Long, S. S. Low, J. C. Jr. Lowen, S. Yukia H. Lowen, Sulvia H. Lowen, Walter Lowen, Wein H. Lowen, S. L. Lamsiden, J. C. Lamshen, G., Jr.	So., M. E. Sen., F. B. Adm.	219         Turlington, 4294         White-ille, N. C.           210         Cowport Dr.         Gastonia, N.C.           211         Comport Pr.         Gastonia, N.C.           283         Turlington, 4254         Durham, N.G.           218         Turlington, 4254         Concoro, N.C.           218         Turlington, 4251         Goneoro, N.C.           218         Turlington, 4260         Asheboro, N.C.           218         Turlington, 4261         Kinston, N.G.           223         Turlington, 4261         High Point, N.C.           223         Turlington, 4261         High Point, N.C.           223         Turlington, 4261         High Point, N.C.           223         Turlington, 4213         Humsville, N.C.           216         Goneoro, N.C.         Sole, Norvegy           225         Woodburn Rd.         Hempstead, N.Y.           211         Turlington, 4213         Burnsville, N.C.           2707         Bedford Ave.         Raleigh, N.C.           2707         Bedford Ave.         Raleigh, N.C.           215         Turlington, 4222         Burnsville, N.C.           215         Turlington, 4222         Burnsville, N.C.           215         Tu
Medratice, R. H. McCorrson, L. C., Jr. McCorrsnick, L. T. McDormick, J. M. McDoullis, J. M. McDullis, J. W. McGuran, W. J. McGuran, W. J. McGuran, W. J. McGuran, W. J. McGuran, W. J. McGuran, W. J. McGentan, C. A. Jr. McKenzie, H. L. McKenzie, M. McKenzie, M. McKentan, J. McKentan, J. McKenzie, J. R. McKenzie, J. R. McKenzie, J. R. McKenzie, J. R. McKenzie, J. R. McKenzie, J. McKenzie, M. McKenzie, J. McKenzie, M. McKairi, G. C., Jr. McKairi, G. C., Jr. McKairi, G. C., Ji McKairi, G. C., McKenzie, J. McKairi, G. C., Ji McKairi, G. C., Ji McKairi, J. McKairi, M. McKairi, M. McKairi, M. McKairi, M. Mc	Fr., Arch. E. Fr., A.e. Jun, M. E. Jun, M. E. Jun, A.E. E. Jun, A.E. E. Grad., Dairy Mfe. Fr., Aero. E. So., E. E. Fr., Speck. Prod. Fr., Fr. E. So., Arch. E. Fr., Tex. So., Arch. E. So., Arch. E. So.	1901 Glenwood Ave.         Chernw, S.C.           282 Alexander, 4186         Durham, N.C.           284 Syme, 5588         Vass, N.C.           284 Syme, 5588         Vass, N.C.           216 Turington, 4213         Garthage, N.C.           216 Turington, 4214         Garthage, N.C.           217 Turington, 4229         Fayetteville, N.C.           217 Turington, 429         Fayetteville, N.C.           218 Thetington, 4214         Matheville, N.C.           218 Thetington, 4229         Fayetteville, N.C.           218 Thetington, 429         Fayetteville, N.C.           218 Thetington, 429         Fayetteville, N.C.           218 Hore, 6365         High Point, N.C.           218 Beton, 3728         Cordwa, N.C.           218 Alexander, 4184         Greensboro, N.C.           218 Alexander, 4129         Hartville, S.C.           217 Alexander, 4129         Hartville, N.C.           218 Alexander, 4124         Marton, N.C.           218 Bagwell, 334         Mehon, N.C.
Maddrey, J. T., Jr. Magill, H. F. Maiden, H. L. Mahpass, G. D. Mangum, G. D., Jr. Mangum, J. O. Mangum, W. E. Manning, F. P. Mariani, Alfred Marion, H. F.	Fr., E. E. Fr., M. E. Fr., M. E. Fr., C. E. Grad., Exp. Stat. Fr., Ind, E. Fr., M. E. Fr., M. E. Fr., M. E. Fr., Aero. E. Fr., Fr., Fr.	106 E.         Baleigh N. C.           203 Trilling form         Coniford Collorer, N. C.           204 Trilling form, 4203         Wilterville, N. C.           205 Trilling form, 4203         Wilterville, N. C.           206 Trilling form, 4203         Wilterville, N. C.           207 N. Blount         Raleigh, N. C.           208 Advander         Porter, N. C.           209 Advance         Porter, N. C.           201 Alexander         Porter, N. C.           202 Syme, 3554         Ponzer, N. C.           202 Syme, 3554         New London, Com.           312 Alexander, 4175         Dobson, N. C.

Name	Classification	School Address Dorm. Box No. or St. No.	Home Address
Marshall, J. G. Marshall, J. T. Martin, Grady Allen Martin, Grover Adlai, Jr. Mason, D. D.	Fr., M. E. Fr., Tex. So., Ag. So., M. E. Grad., Agron	School Address           Dorm. Boz No. or St. No.           216 Turlington, 4273           212 Alexander, 4118           222 Alexander, 4118           223 Dirarington, 4273           213 Dirarington, 4273           214 Dirarington, 4273           215 Dirarington, 4217           210 Turlington, 4217           210 Turlington, 4217           210 Turlington, 4217           221 Syme, 353           221 Syme, 3553           231 Alexander, 4194           210 Turlington, 4231           221 Syme, 3551           231 Alexander, 4194           208 Syme, 3554           208 Syme, 3554           208 Syme, 3558           208 Syme, 3558           208 Syme, 3558           208 Syme, 3558           207 Urulington, 4232           208 Syme, 3578           203 Turlington, 4232           203 Syme, 3578           204 Syme, 3578           205 Syme, 3578           205 Syme, 3574           213 Turlington, 4282	Glenrock, N. J. Gastonia, N. C. tony Point, N. C. Smithfield, N. C.
Massey, P. H., Jr. Masten, F. D. Masters, J. F. Mauney, J. R. May, J. M.	Jun., Veg. Gard. Fr., M. E. So., Cer. E. Fr., Ag. So., M. E.	100 Horne St. 240 Turlington, 4265 Wins 103 Chamberlain Wins 235 Alex., 4162 Kings 409 Chamberlain	Louisburg, N. C. ston Salem, N. C. ston-Salem, N. C. Mountain, N. C.
May, M. C. Mayer, C. S. Meares, M. A. Meares, S. H. Melton, Tom	Sen., Tex. Mfg. Fr., C. E. Jun., M. E. Fr., Aero. E. So., E. E.	219 Turlington, 4247 221 Syme, 3553 331 Alexander, 4194 110 Syme, 3510	Columbus, Ohio Chadbourn, N. C. Mullins, S. C. Bostic, N. C.
Messick, J. E. Meyer, T. J. Mickey, J. S. Migaleddi, P. D. Miller, G. W. Miller, L. E.	So., Cer. E. So., M. E. Fr., E. E. Fr., Gen. E. Fr., Ag.	313 Syme, 3577           16 Dixie Trail           328 Alex., 4191           Wins           319 Turlington, 4281           208 New Bern Ave.           124 Syma 3524	Charlotte, N. C. Charlotte, N. C. ston-Salem, N. C. Bradford, Pa. Cana, N. C.
Miller, M. T. Miller, R. O. Mills, E. R. Millsaps, T. C. Mintz, K. M.	Sen., C. E. Jun., Tex. Mfg. Fr., E. E. So., Aero. E. Fr., Ag.	106         Horne         North 1           116         Woodburn, 5294St.Col.S           226         Syme, 3558         W           120         Syme, 3520           213         Turlington, 4241	Wilkesboro, N. C. t. Concord, N. C. Asheville, N. C. Asheboro, N. C.
Mitchell, Alex Mitchell, Jerry, Jr. Mitchell, J. D. Mitchell, L. H. Mitchell, R. P., Jr.	Fr., Ind. É. So., Ind. E. Fr., Tex. Fr., C. E. So., C. E.	1425 Park Dr. 2407 Stafford Ave. Ch 320 Turlington, 4282 7 Syme, 3603 5 Berry, 4338	Bloomfield, N. J. arleston, W. Va. Aulander, N. C. Kenly, N. C. Reidsville, N. C.
Mize, W. T. Mohorn, V. I., Jr. Montague, E. B. Moore, B. D., Jr. Moore, G. T.	Fr. E. E. Sper. So., C. E. So., E. E. Fr., C. E.	.340 Alexander, 4199 R. 317 Bagwell, 3383 320 Syme, 3584 313 Alexander, 4176 314 Syme, 3578	ed Springs, N. C. Littleton, N. C. Goldsboro, N. C. Stokes, N. C. Oxford, N. C.
Moore, J. E. Moore, J. F. Moore, J. L. Moore, M. S. Moore, T. W.	So., Aero. E. Jun., M. E. Fr., For. Fr., Ch. E.	Rt. 4, Raleigh           110 E. Lane           3218 Bedford Ave.           238 Turlington, 4263           F           321 Turlington, 4283	Kannapolis, N. C. Raleigh, N. C. ayetteville, N. C. Charlotte, N. C.
Moran, P. E., Jr. Morgan, C. R. Morgan, C. W. Morgan, W. M. Morris, S. J., Jr.	Fr., Tex. Fr., Aero. E. Fr., Tex. Fr., M. E. So., C. E.	Agron. Dept. 312 Berry, 4332 303 Turlington, 4268 Apex, N. C. 26 Becton, 3826 F 137 Gardner St.	Danville, Va. Fairmont, N. C. Biltmore, N. C. ayetteville, N. C. Raleigh, N. C.
Morris, S. R., Jr. Morris, W. F., Jr. Morrison, E. B. Morrison, F. D. Morrison, W. D. Jr.	Fr., Aero. E. Grad., M. E. Jun., M. E. Sen., Entom. So., <u>Aero.</u> E.	.338 Turlington, 4297 20 Logan Court 329 Alexander, 4192 312 Turlington, 4274 306 Gold, 3230	Charlotte, N. C. Raleigh, N. C. Charlotte, N. C. Sewickley, Pa. Asheville, N. C.
Morrow, J. M. Mosron, W. J. Moseley, C. D. Moser, W. D. Mullen, B. F., Jr. Mullenger, J. P. Jr.	Fr., Tex. Fr., Tex. Fr., Ch. E. So., Tex. Fr., Tex.	338 Turlington, 4297 20 Logan Court 329 Alexander, 4192 312 Turlington, 4274 306 Gold, 3230 302 Turlington, 4287 201 Berry, 4308 236 Turlington, 4280 Wim 236 Turlington, 4280 Wim 236 Turlington, 4281 Wim 237 Unington, 4259	Albemarle, N. C. Salisbury, N. C. ston-Salem, N. C. Burlington, N. C. ston-Salem, N. C.
Mullis, R. E.	Fr., For.	231 Turlington, 4259	Monroe, N. C.

Name	<ul> <li>Manufacture and the second seco</li></ul>	School Address Dorm. Box No. or St. No.	the second second second second
Murray, Ralph Musselwhite, S. S. Myatt, R. L., Jr.	Fr., Tex. Fr., E. E. Fr., C. E.	.19 Syme, 3615 .105 Berry, 4305 .114 E. Jones	Henderson, N. C. Morven, N. C. Raleigh, N. C.
Naimer, Jack Nance, A. G. Nance, E. T., Jr. S Nance, H. L. Narron, Jarley Neison, T. F. Nessol, W. A. Nickel, R. F. Nintzel, C. H. Nipter, P. W. Jr. Nissen, P. N. Nissen, P. N. Nissen, P. N. Nord, C. B. Northeot, C. A., Jr.	Jun, Tex. Mfg. Fr, C. E. en, Occ. I. & G. Fr, Gen. E. Fr, Gen. E. Fr, Gen. E. Jun, Tex. Mfg. So, Aero. E. Fr, Tex. Jun, Tex. Mgt. Fr, Aero. E. Fr, Cer. E. Fr, Cer. E. Fr, M. E. Fr, M. E. Fr, M. E.	114 E. Jones 115 Turlington, 4281 13 Syme, 3600 Wrights 536 E. Martino, Wrights 536 E. Martino, Wrights 537 E. Martino, Wrights 111 Syme, 3511 223 Becton, 3800 North 135 Turlington, 4231 R. 4 24 Gym, Wilmington J 2 Gym, Wilmington J 2 Gym, Wilmington J 207 Gold, 3219 Ct. Aptis. 305 Alexander, 4171 1821 St. Marys	Bronx, N. Y. Raleigh, N. C. Iston-Salem, N. C. Sion-Salem, N. C. Kenly, N. C. Wilkesboro, N. C. bersonville, N. C. evert City, Conn. Greenville, N. C. Forest City, N. C. Raleigh, N. C. Salisbury, N. C. Norfolk, Va.
Orderig, L. O. O'Briant, R. W. O'Brient, W. L. Odell, J. K. P. Octinger, Albert Ogden, H. A. Olive, Floyd O'Neal, J. F. Osborne, G. E. Osborne, W. M.	So., Cer. E. Fr., E. E. So., Tex. Fr., E. E. So., Aero. E. Grad., Agron. So., Ch. E. Fr., Ag. Grad., Ag. Ed.	<ul> <li>215 Alexander, 4144</li> <li>206 Welch, 3254</li> <li>203 Syme, 3567</li> <li>213 Syme, 3545</li> <li>213 Syme, 3545</li> <li>2804 Hillsboro</li> <li>17 Syme, 0613</li> <li>207 Berry, 4314</li> <li>Trir, Camp. 5365 St. Col. S</li> </ul>	Rawland, N. C. Durham, N. C. Concord, N. C. Wilson, N. C. Charlotte, N. C. McKanie, Ark. Middlesex, N. C. High Point, N. C. ta., Buffaloe, S. C.
Padgett, C. B. Page, Eula M. (Mrs.). Palmer, O. A., Jr. Parker, C. E. Farker, C. H. Parker, G. M. Parker, P. G. Jr. Partin, B. K. Partin, K. K. Partin, K. K. Partin, C. A. Partin, K. M. Patton, C. S., Jr. Patton, A. J. Patton, C. S. Jr. Patton, C. S. Jr. Patton, P. J. Payne, J. M. J. Pearce, P. D. Pearce, P. D. Pearce, R. H. Peebles, G. E. Penland, J. A., Jr.	Grad, Ag. Ed. Grad, Ag. Ch. So, E. E. Jun, An. Prod. Fr. CA.E. So, Ch. E. Jun, Tox. Mfg. Fr., Gen. E. So, Ch. E. Jun, An. Prod. So, Tex. So, Ch. E. Jun, An. Prod. So, Tex. So, Aero. E. Jun, Arch. So, Ind. E. Jun, M. E. Fr., Cer. E. Jun, M. E. Fr., Cer. E. So, Ind. E. So, M. E. So, M. E. So, M. E.	329 Syme, 3593 301 4th, 3127 1141 MH Diero Ave. 113 NHE Diero Ave. 222 Syme, 3554 220 Turington, 4248 131 Alexander, 4126 631 E. Jones 720 N. Boylan 10 Field House 218 Syme, 3615 240 Turington, 4253 240 Turington, 4253 2415 Hildsono 714 South Ave. 714 State Ave. 714 State Ave. 714 State Ave. 715 State Ave. 716 State Ave. 716 State Ave. 716 State Ave. 717 State Ave. 717 Ave. 717 Ave. 716 State Ave. 717 Ave. 717 Ave. 717 Ave. 717 Ave. 718 Ave. 718 Ave. 718 Ave. 719 Ave. 719 Ave. 710	Ellenboro, N.C. Raleigh, N.C. Raleigh, N.C. Cherryville, N.C. Cherryville, N.C. Erwin, N.C. Erwin, N.C. Chadbourn, N.C. Chadbourn, N.C. Cranford, N.J. Franklin, N.C. Charlotte, N.C. Clavitour, N.C. Clavitour, N.C. Clavitour, N.C. Clavitour, N.C. Raleigh, N.C. Zebulon, N.C. Raleigh, N.C. Zabuto, N.Way, N.C. Maligh, N.C. Oxford, N.C. Swannano, N.C.

Name	Classification	School Address Dorm. Box No. or St. No.	Home Address
Peoples, L. J. Perry, C. A. Perry, N. L. Phary, J. M. Phary, J. M. Phary, J. M. Phary, R. L. Phary, R. L. Phillips, P. C. Jr. Phillips, P. C. Jr. Prigue, R. W. E. Prigue, R. W. E. Pitzer, A. K. Pollock, J. G. Potter, C. S. Potter, C. S. Potter, R. S. Potter, R. S. Potter, R. S. Potter, R. S. Potter, C. S. Potter,	So, Fer. So, Cer. E. So, Tex. So, Tex. So, Tex. So, Tex. Fr., E. E. Jun, Ind. E. Grad, E. E. Fr., Acro. E. Fr., Acro. E. Fr., C. Fr., Acro. E. Fr., C. So, Ch. E. So, Arch. E. So, W. C. & M. Fr., Acro. E.	School Address           Dorm. Dor No. or St. No.           Dor M. Dor No. St. 100           Di Turlington, 4213           201 Syme, 3549           Di Syme, 3549           Di Syme, 3549           Di Syme, 3549           Di Turlington, 4217           Di Turlington, 4217           Di Turlington, 4218           Di Baymel, 3527           Di Baymel, 3377           Di Baymel, 3377           Di Baymel, 3376           Di Baymel, 3376           Di Baymel, 3376           Di Baymel, 3360           Di Baymel, 3360           Di Baymel, 3360           Di Baymel, 3377           Di Baymel, 3360           Di Baymel, 3450           Di Baymel, 3400 <td>Oxford, N. C. Raleigh, N. C. Loranger, La, Srunswick, N. G. Concord, N. C. Goncord, N. C. Guennons, N. C. Jurlington, N. C. Hamilet, N. C. Hamilet, N. C. Show Hill, N. C. Show Hill, N. C. Gatesville, N. G. Gatesville, N. C. Charlotte, N. C. Santord, N. C. Charlotte, N. C. Milani, Fla. Santord, N. C. Charlotte, N. C. Milani, Fla. Oxford, N. C. Charlotte, N. C. Charlotte, N. C. Charlotte, N. C. Selma, N. C. Selma, N. C. Selma, N. C.</td>	Oxford, N. C. Raleigh, N. C. Loranger, La, Srunswick, N. G. Concord, N. C. Goncord, N. C. Guennons, N. C. Jurlington, N. C. Hamilet, N. C. Hamilet, N. C. Show Hill, N. C. Show Hill, N. C. Gatesville, N. G. Gatesville, N. C. Charlotte, N. C. Santord, N. C. Charlotte, N. C. Milani, Fla. Santord, N. C. Charlotte, N. C. Milani, Fla. Oxford, N. C. Charlotte, N. C. Charlotte, N. C. Charlotte, N. C. Selma, N. C. Selma, N. C. Selma, N. C.
Queen, J. A., Jr Quinn, G. S.	So., Aero. E. Fr., C. E.	.220 Syme, 3552 .308 Syme, 3572	Lawndale, N.C. Warsaw, N. C.
Rabb, R. L. Raafford, J. E. Raggrada, R. E., Jr. Raggradale, W. D., Jr. Ramesy, C. L. Ramesy, C. L. Rambel, J. H., Jr. Rankin, J. H., Jr. Rankin, J. H., Jr. Rankin, J. H., Jr. Rankin, J. L. Rattelade, G. J. Ratts, J. L. Ratts, J. L. Rawis, H. D. Hay, J. T. Bay, R. L. Ray, R. L. Ray, R. L. Rayford, R. B. Reseris, C. N., Jr. Reece, J. A. Reed, R. W.	$\begin{array}{c} {\rm Jun, An, Prod.}\\ {\rm Fr, Gen, E,}\\ {\rm Fr, Gen, I, \& G,}\\ {\rm Fr, Oc, I, \& G,}\\ {\rm Fr, Oc, I, \& G,}\\ {\rm Fr, Oc, E,}\\ {\rm Fr, Gen, E,}\\ {$	306         Syline, 3012           116         Syme, 3515           210         Berry, 4317           1210         Berry, 4317           120         Berry, 4317           120         Berry, 4317           120         Weich, 3538           120         Weich, 3238           120         Weich, 323           120         Weich, 323           120         Leich, 323           120         Leich, 323           120         Alexander, 4133           120         Bergweil, 3401           120         Weing, 4207           120         Weing, 4207           120         Weing, 4207           120         <	. Lenoir, N. C. Garoleen, N. C. Gastoien, N. C. Warphy, N. C. Murphy, N. C. Murphy, N. C. azbeithon, Yenn, Brooklyn, N. C. Brooklyn, N. C. Brooklyn, N. C. Broidyn, N. C. Raleigh, N. C. Gramerton, N. C. Sramerton, N. C. Stramerton, N. C.

79

		School Address	
Name	Classification	Dorm. Box No. or St. No.	Home Address
Register, G. E. Reid, D. F., Jr., Reid, J. K. S. Reid, J. W. B. Reid, W. W. Reiter, M. L. Reiter, M. L. Rither, M. J. Rice, W. K. Richardson, P. E. Richardson, P. S. Richardson, S. N. Rickenko, K. M. Richardson, S. N. Rickenko, K. M. Richardson, S. N. Rickenko, W. R. Richardson, S. N. Rickenko, W. R. Ricker, J. H. Ricker, J. H. Ricker, J. H. Ricker, K. D. Roberts, C. M. Roberts, S. R. Roberts, S. R. Roberts, S. R. Roberts, S. R. Roberts, S. S. Rodjinson, H. F. Grag Robinson, R. F. J. Rodjinson, W. R. Rodjers, N. P. Rodjinson, K. S. Rollings, J. A. Roberts, S. M. Roberts, S. N. Rodjins, J. A. Robinson, R. S. Rollings, J. A. Ross, S. C. Ross, O. H., Jr. Ross, N. N. Roth, J. P. Rotts, N. P. Rost, S. N. Rott, J. P.	Fr. C E So, W E So, E E Fr., Tex. Fr., Ag Fr., Ag Fr., M E Fr., M E Fr., M E Fr., M E Fr., M E Fr., M E Fr., C E So, E E Fr., Aeco Fr., M E Fr., Acto Fr., M E Fr., Acto Fr., M Fr., Acto Fr., M Fr., Acto Fr., M Fr., Acto Fr., M Fr., M F	212         Alexander, 4141           300         Berry, 4239           131         Turlington, 4227           338         Alexander, 4198           311         Turlington, 4275           313         Turlington, 4275           313         Turlington, 4275           314         Turlington, 4275           315         Turlington, 4275           312         Syme, 3565           1111shorn Hotl, Person         225           230         Syme, 3562           1325         Turlington, 4287           230         Syme, 3562           1326         Turlington, 4281           130         Syme, 3530           221         Alexander, 4152           220         Syme, 3530           231         Alexander, 4154           130         Syme, 3530           231         Alexander, 4154           133         Syme, 3530           231         Alexander,	Magnolia, N.C. Charlotte, N.C. Charlotte, N.C. Charlotte, N.C. Vienna, Md Ellenville, N. Yi Kinaston, N.C. Whitney, S.C. Charlotte, N.C. Raleigh, N.C. Norfolk, Va.I. Charlotte, N.C. Pranklin, N.C. Greenville, N.C. Durham, N.C. Durham, N.C. Durham, N.C. Burlington, N.C. Burlington, N.C. Burlington, N.C. Burlington, N.C. Burlington, N.C. Hampton, Ya. Sannapolis, N.C. Casanington, N.C. Casanington, N.C. Charlotte, N.C. Surington, N.C. Surington, N.C. Surington, N.C. Surington, N.C. Surington, N.C. Surington, N.C. Carbon, N.C. Corbon, N.C. Potsmouth, Yu.
Sampson, J. E.	Sen., Tex. Mfg.	123 Alexander, 4118, Guilfo	rd College, N. C.
Satternield, G. G. Scarsbrook, C. E. Schaffer, F. R. L. Scherr, H. M.	Fr., Gen. E. Grad., Agron. Fr., Ag. E. Sen., Tex. Mfg.	114         Watauga, 3014         2628         Fairview Rd.           Box 5374         102         Turlington, 4201         1           308 4th, 3134         208         New Bern Ave.         209         Alexander, 4139	Surlington, N. C. Selma, Ala. Raleigh, N. C. Asheville, N. C.

Name	Classification	School Address Dorm. Box No. or St. No.	Home Address
Stillwell, J. E. J., Stillwell, J. R. J. Stinson, H. E. Stone, G. H. Stone, G. A. Stone, J. E., Jr. Stone, J. E., Jr. Stone, J. E., Jr. Stone, J. E., Jr. Stuer, N. B., Jr. Stuler, A. A. Stripling, S. A. Stury, J. M. Su, Yen Pin. Sugge, A. W. Sutherland, J. G. Stang, M. I.	Fr., Ag, So., Tex. Fr., Ag, Ed. Fr., Ag, Ed. Fr., Tex. So., Ag, Jun, Arch. E. So., Ag, Fr., M. E. Fr., M. E. Grad, Ag, Ec. Fr. Tex.	.216 Turlington, 4244 235 Turlington, 4261 216 Turlington, 4244 1800 Park Dr	Garner, N. C. Pendleton, N. C. Broadway, N. C. Raleigh, N. C. Bonorille, N. C. Bonorille, N. C. M. Gilead, N. C. Raleigh, N. C. Raleigh, N. C. Balay, N. C. Balay
Tanenbaum, N. E. Tarleton, Bries Tart, C. Y. Jr. Taylor, K. M. Taylor, K. M. Taylor, R. B. Taylor, R. H. Taylor, W. H. Taylor, B. Taylor, B. Taylor	Fr., Ch. E. Sond, A. & Zh. Fr., A. & Zh. Fr., T. C. E. M. Arro, C. B. Fr., Ch. E. Fr., Ch. E. Fr., Ch. E. Fr., Ch. E. Fr., Ch. E. M. Arro, Tex. So, Az. Ch. So, Az. Ch. So, Az. Ch. So, Az. Ch. So, Az. Ch. Fr., Ch. E. Fr., Ch. E. Fr., Ch. E. Fr., Ch. E. So, M. M. Fr., M. E. Fr., Areo. E. So, M. E. Fr., Areo. E. So, M. E.	316 Bagwell, 3382           16 Maiden Lane           Box 5031           400 St. Marya           401 St. Marya           402 St. Marya           403 St. Marya           403 Nab. Diro           111 Alexander, 4108           129 Syme, 3529           224 N. Person           221 M. Foresett, 1755           224 M. Person           231 M. Spresett, 1755           203 Alexander, 4173           212 Syme, 3526           204 Symes, 5368           20514 Clark           204 Symes, 5368           20514 Clark           204 Symes, 5536           2051 Vurlington, 4222           308 Alexander, 4128           400 Kinsey           118 Beeton, 3716           210 Syme, 3542           700 N. Blount           110 Syme, 3542           702 Turlington, 4222           302 Turlington, 4224           303 Turlington, 4224           304 Person 3542           305 Turlington, 4222	New York, N. Y. Monroe, N. C. Raleigh, N. G. Cillion, N. C. Cillion, N. C. Kaleigh, N. C. Wilson, N. C. Wilson, N. C. Woodland, N. C. Woodland, N. C. Boleby, N. C. Shelby, N. C. McFarlan, N. C. Henderson, N. G. Greensboro, N. C. Cameron, N. C. Greensboro, N. C. Cameron, N. C. Greensboro, N. C. Baleigh, N. C. Reidsrille, N. C. Reidsrille, N. C. Reidsrille, N. C. Reidsrille, N. C. Reidsrille, N. C. Reidsrille, N. C. Raleigh, N. C. Reidsrille, N. C. Raleigh, N. C.

Name		School Address Dorm. Box No. or St. No.	
Tody, Sidney Anne Tody, W. B. Treptow, R. L. Trueblood, B. W. Trucker, L. N. Tucker, L. N. Tucker, M. G. Tunnstall, Shelton Turbeville, J. R. Turnage, A. C., Jr. Turnner, M. H.	Jun., W. & D. So., E. E. So., Ag. Fr., M. E. Fr., M. E. Fr., M. E. Fr., M. E. So., Ag. Sen., E. E. Fr., Ag. E. Grad., Cer. E.	226 Syme, 3500 233 Bagwell, 3365 224 Alexander, 4153 224 Turlington, 4252 G-4, Raleigh Apts. 202 Gold, 3214 333 Alexander, 4195 318 Alexander, 4195 318 Alexander, 4181 200 Syme, 3534 207 4th, 3125	Belhaven, N. C. Belhaven, N. C. Rowland, N. C. Lumberton, N. C. Danville, Va. Monroe, N. C. Hester, N. C. Atlanta, Ga. Farmville, N. C. Greenville, N. C. Greensboro, N. C.
lUnderwood, K. W. lUsry, S. B. lUzzell, T. R., Jr.	Jun., Ag. Ed. Fr., C. E. So., Ch. E.	.712 Brooks Ave. .207 Becton, 3741 .315 Alexander, 4178	Raleigh, N. C. Sumter, S. C. Wilson, N. C.
Vanstory, R. M. Vaughan, A. B. Venable, E. R. Venters, C. H. Vereers, J. J., Jr. Vereen, W. J. Vereen, W. J. Vereen, C. W.	Fr., M. E. Fr., M. E. Fr., E. E. Fr., Tex. Fr., C. E. Fr., C. E. Fr., M. E. Fr., Tex. Fr., Az	112         Turlington, 4209         R.           111         Turlington, 4208         212           223         Alexander, 4152         W.           300         Turlington, 4282         221           221         Turlington, 4284         221           300         Turlington, 4282         303           1514         Fairview         312           1514         Fairview         312           118         Turlington, 4215         1324           Mordecai         Dr.         1324	Fayetteville, N. C. Chesterfield, S. C. Bronx, N. Y. New Bern, N. C. Wilmington, N. C. Raleigh, N. C. Blanch, N. C. Phoebus, Va.
Wada, D. O., Jr. Wadaworth, E. T., Jr. Wagnoner, J. E. Wagnoner, F. H. Wagnoner, F. H. Wakeley, J. T. J. Wakeley, J. T. J. Wakeley, J. T. J. Wakeley, J. T. J. Wakeley, B. S. J. Wall, H. G. W. Waller, C. C. Waller, C. C. Warde, B. F. Ward, N. F. Ward, N. F. Waren, D. H. Warren, J. H. Warren, J. H. Warren, G. K. Watson, G. S. Watson, S. S. P. Weatherman, R. C., Jr. Weatherman, R. C., Jr. Weatwer, F. S.	Fr., Gen, E. So, E. E. Fr., Aero, E. Grad, Ru. Soc. Jun, An. Prod. Fr., Aero, E. Grad, Ru. Soc. Jun, A. K. Soc. Fr., Aero, E. Fr., M. E. Fr., C. E. So, Ag. Ed. Fr., Aero, E. So, Ag. Ed. Fr., Aero, E. Grad, Tex, So, Gen, E. Grad, Tex, K. Fr., Aero, E. Grad, Tex, So, Gen, E. Fr., Aero, E. Grad, Tex, So, Gen, E. Fr., Aero, E. So, Gen, E. Fr., Aero, E. So, Gen, E. Fr., Aero, E. So, Gen, E. Fr., Aero, E. So, Gen, E. So, Gen, E. So, Gen, E. So, So, Gen, So, So, Gen, So, So, So, So, So, So, So, So, So, So	1324 Mordécai Dr.           607 W. North           217 Turlington, 4269 M.           218 Turlington, 4269 M.           221 Turlington, 4245 M.           233 Alexander, 4161, Win           301 Syme, 3565 S.           103 Welch, 3239 M.           2238 Circle Dr.           2238 Circle Dr.           2206 Circle Dr.           206 Park Drive           207 Turlington, 4271           2614 Clark           2303 School Drive           2303 Velak, S44178           2303 Velak, S44178           2303 Velak, S44178           2303 School Drive           2303 School J.           2318 Becket, 305           133 Bagwell, 3401           124 Syme, 3504           124 Syme, 3524           238 Alexander, 4119, Win           3128 Stanlope           2611 Gyme, 3542	Raleigh, M.C. Tarboro, N.C. Tarboro, N.C. Annes, Iowa Prime, Iome, Nor- Raleigh, N.C. Baleigh, N.C. Uraham, N.C. Baleigh, N.C. Baleigh, N.C. Baleigh, N.C. Carlensboro, N.C. Kinston, N.C. Wilson, N.C. Klaston, N.C. Kaleigh, N.C. Raleigh, N.C.

Name	Classification	School Address Dorm. Box No. or St. No.	Home Address:
Weeks, J. W. Wich, B. R. Weist, Pred West, Pred West, Pred Westmoreland, R. C. Whitehurst, J. R. Whitehurst, J. R. Whitehurst, J. R. Whitehurst, J. R. Whitehurst, J. R. Whitehur, F. E. Whiteld, F. L. Whitely, H. L. White, Y. D. White, S. D. White, S. D. White, W. P. J. White, W. R. White, R. M. White, R. M. White, R. M. White, R. M. A.	Fr., Tex. Fr., C. E. Fr., Gold E. Fr., So., Ag. Fr., Fr., M. Fr., M. Fr., M. Fr., M. Fr., M. Fr., Ag. Fr., Acro. E. Grad, Ag. EL Fr., E. Fr., E. Fr., E. Fr., E. Fr., E. Fr., C. Fr., E. Fr., Fr., E. Fr., Fr., E. Fr., Fr., Fr., E. Fr., Fr., Fr., Fr., Fr., Fr., Fr., Fr.,	Carry, N. C	Raderor, N. C. Waleigh, N. G. Dioke Rapida, N. G. Watha, N. G. Watha, N. G. Watha, N. G. Watha, N. G. Tarboro, N. G. Burlington, N. G. Troutmans, N. G. Charlotte, N. G. Polkville, N. G. Polkville, N. G. Raleigh, N. G. Shoby, M. G. Radaville, N. G. Shoby, M. G. Radaville, N. G. Show, M. G. Show
Williams, C. G. Williams, C. T. Williams, D. H. Williams, D. M.	Fr., M. E. Fr., C. E. Fr., M. E. Fr., Ag.	121 Jecton, ort. 425 206 Welch, 3254 404 Ell 307 Welch, 3254 404 Ell 308 Turington, 4150 A. Box 5733, Sta. Col. Sta. 318 Alexander, 4182 2013 Alexander, 4182 2006 Bagwell, 3372 2006 Bagwell, 3372 2006 Bagwell, 3372 2006 Bagwell, 3372 2006 Bagwell, 3372 2006 Bagwell, 3372 2006 Bagwell, 3372 2007 Alexander, 4164 210 Watauge, 3001. Roca 238 Alexander, 4164 2117 Turlington, 4220 208 Bagry, 4316. Roca 238 Turlington, 4220 208 Bagry, 4316. Roca 231 Watauga, 3050 208 Bagry, 4316. Roca 231 Watauga, 3505 208 Watau 208 W	Chapel Hill, N. C. zabeth City, N. C. ocky Mount, N. C. Raleigh, N. C.

22.2.2.2.2.2.2

Name	Classification	School Address Dorm. Box No. or St. No.	Home Address
Wooten, R. M., Jr. Wooth, W. A. Wright, D. R., Jr. Wright, P. S. Wright, P. S. Wright, W. K. Wright, W. O.	So., For. Jun., E. E. So., Tex. Sen., Ch. E. Fr., Ag. Fr., M. E. Fr., M. E. So., Tex.	1312 Glenwood 229 Turlington, 4257 327 Syme, 3691 111 Bagwell, 3311 316 Alexander, 4179 105 Alexander, 4105 311 Welch, 3271 207 Alexander, 4138 3515 Neil St. 112 Turlington, 4209	Clarkton, N. C. Kinston, N. C. Jefferson, N. C. Wilkesboro, N. C. Laurinburg, N. C. Sylacauga, Ala. Zebulon, N. C. Charlotte, N. C.
Yates, R. A. Yeh, Loh-Tsiang Yoder, W. M. York, T. L. Norke, J. M., Jr. Young, F. E., Jr. Young, I. C. Young, J. P. Young, R. K.	Fr., C. E. Grad., E. E. Fr., M. E. Sen., Veg. Gard. Fr., E. E. Fr., M. E. Fr., C. E. Spec. Fr., E. E.	130 Alexander, 4125 221 Syme, 3553 203 4th, 3121 222 Alexander, 4151 227 Alexander, 4122 301 Berry, 4321 309 Syme, 3573 106 Bagwell, 3306 316 Alexander, 4179 318 Turlington, 4280 1103 Filmore	Chadbourn, N. C. Chekiang, China Charlotte, N. C. Waynesville, N. C. Tampa, Fla. Oxford, N. C. Durham, N. C. Macon, N. C. Burlington, N. C.

85

Vol. 45

FEBRUARY, 1946

No. 6

ADDENDA TO

# DIRECTORY

## FACULTY, STAFF, AND STUDENTS

1945-1946

PUBLISHED MONTHLY BY THE NORTH CAROLINA STATE COLLEGE OF AGRICULTURE AND EXCINEERING Entered as Second-Class Matter October 16, 1917, at the Post Office at Raleigh, N. C. Under the Act of August 21, 1912.

#### ADDENDA TO FACULTY DIRECTOR

#### 1945-1946

 \*Ailor, William Henry, Jr.—Instr., Ch. Dept. Ext. 266. Residence: 1701 St. Mary's St. Telephone 2-2989.
 \*Anderson, Richard L.—Assoc. Prof., Inst. of Stat. 106-B Patterson. Ext. 313. <sup>010.0</sup> Residence: Dixie Trail. Telephone 2-3157.
 \*Baker, Stawart R.-Instr., Math. Dept. 205 Tompkins. Telephone 226. Residence: 2525 Country Club Homes. Telephone 9816.
 \*Brown, Mrs. Anna Catherine—Steno., Dean of Students. 101 Holladay Hall. Ext. 215. Hall, Ext. 215.
 Bassing and Construction of the second secon \*Cameron, Joseph M. Grad, Sp. Sta. Residence: 312 Chamberlain St. Telephone 2-3086. Gampbell, Lucilla-Sec., Dairy Ext. Office. 103 Polk. Ext. 277.
\*Carroll, Gharles L., Jr. Listr, Math. Dept. 205 Tompkins. Ext. 226. Residence: 3010 Cambridge Rd. Telephone 2-2332.
Clayton, Marrice H. Instr., Math. Dept. 205 Tompkins. Ext. 226. Residence: 28 Shepherd St. Telephone 7088.
\*Contran, W. G. Assoc. Director, Inst. 6 Stat. 106-B Patterson. Ext. 313. Residence: 1003 Brooks Ave.
Coiro, J. J. --1/Sgt., Mil. Dept. Armory. Ext. 232.
Coleman, Lornie W. --Instr., English Dept. 3 Pullen. Ext. 237. Residence: 405 Gardner St. Telephone 3-3269.
Collins, Mrs. E. E. --Instr., Chem. Dept. 109 Withers. Ext. 265. Residence: 2713 Rosedale Ave. Telephone 9715.
Cox, Gertrude M. --Director, Inst. of Stat. 106-B Patterson. Ext. 313. Residence: 1324 Brooks Ave. Telephone 973.
Crawford, Mrs. Elizabeth Valentine-Periodicais, Lib. Library. Ext. 259. 313.

\*Crawford, Mrs. Elizabeth Valentine—Periodicals, Lib. Library. Ext. 259. Route No. 5, Raleight. Telephone 6346.
 Crissman, Lema—Asst. Cashier, Business Office. 106 Holladay. Ext. 278. Residence: 1615/g Hilbstor St. Telephone 3/129.
 \*Gryalexeidence: 1615/g Hilbstor St. Telephone 3/129.
 \*Gryalexeidence: 1605/g Hilbstor St. Telephone 3/129.
 \*Gradence: 1615/g Hilbstor St. Telephone 4/129.
 \*Gradence: 1605/g Hilbstor St. Telephone 4/129.
 \*For St. 200 E. Edenton St. Telephone 4697.
 \*Pulaney, Mrs. Annette Bridges Asst. in Arch. Library. 306 Daniels. Ext. 250.
 \*Pulate. Residence: 2820 Everent Ave.
 \*Pulate. Residence: 2820 Everent Ave.

Residence: 2820 Everett Ave.
 \*Peltner, C. E., Asst, Prof., Eng. Mechanics Dept. 204 C.E. Ext. 303.
 Residence: 901 Canterbury Rr. Telephone 3-2536.
 \*Ferguson, J. C.-Ag. Eng., Ext. Spec., Ag. Eng. Dept. 312 Ricks. Ext. 274.

<sup>21%</sup>. Residence: Dixie Trail Ext. Telephone 5888.
 \*Gee, Robert E., Jr.-Instr., Chem. Dept. 203 Withers. Ext. 265. Residence: 103 W. Peace St. Telephone 8753.
 Green, J. L. Pfc., Mil. Dept. Ext. 233. Residence: 3015 Ruffin St.

 Ilimm, John M.-Director Wesley Foundation. 3 Pullen. Ext. 3-1861. Residence:
 "Ilarding: Reuben M. Grad. Asst., Inst. of Stat. 113 19-11. Residence: (Clayton, N. C. Telephone Clayton 290-6.
 "Hern, Walden M. (Mra). Steno., Basic Div. 105 Peele. Ext. 223.
 "Hern, Walden M. (Mra). Steno., Basic Div. 105 Peele. Ext. 223.
 "Hern, Walden M. (Mra). Steno., Basic Div. 105 Peele. Ext. 223.
 "Hern, Walden M. (Mra). Steno., Basic Div. 105 Peele. Ext. 223.
 "Hern, Walden M. (Mra). Steno., Basic Div. 105 Peele. Ext. 224.
 "Horgent, Lender, Math. Deyler, 2029 Holladay. Ext. 252.
 "Residence: 10 N. Boylan Ave. Telephone 5-084.
 "Honeycutt. Ruth Ball-Instr., Math. Deyl. 205 Tompkins. Ext. 226.
 "Honeycutt. Ruth Ball-Instr., Math. Deyl. 205 Tompkins. Ext. 226.
 "Honeycutt. Ruth Ball-Instr., Math. Deyl. 205 Tompkins. Ext. 226.
 "Honeycutt. Ruth Ball-Instr., Math. Deyl. 205 Tompkins. Ext. 226.
 "Honeycutt. Ruth Ball-Instr., Math. Deyl. 205 Tompkins. Ext. 226.
 Residence: 123 W. Park Dr. Telephone Str. 237.
 "Jordan, Donald F. Instr., Dept. of Math. 205 Tompkins. Ext. 226. Residence: 121 W. Park Dr. Telephone 2.1387.
 "Lee, Residence: 121 W. Park Dr. Telephone 2.1387.
 "Lee, Back-Assoc. Prof., Math. 206 Tompkins. Ext. 226. Residence: 1210 Clark. Telephone 3.2400.
 "Leewis Charles Fraderic-Instr., Math. Dept. 30 Pompkins. Ext. 226. Residence: 205 C. Whitaker Mill Rd. Telephone 3.240.
 "Leewis Charles Fraderic-Instr., Math. Dept. 208 Tompkins. Ext. 228.
 Residence: 205 C. Whitaker Mill Rd. Telephone 3.2400.
 "Lewis Charles Fraderic-Instr., Math. Dept. 208 Tompkins. Ext. 228.
 Residence: 205 C. Whitaker Mill Rd. Telephone 3.2400.
 "Lewis Charles Fraderic-Instr., Math. Dept. 208 Tompkins. Ext. 228.
 Residence: 207 Depherd St. Telephone 3. Hamm, John M .- Director Wesley Foundation. 3 Pullen. Ext. 3-1861. Residence :

 Residence: YMCA.
 McAllister, John A.-Instr., Dept. of English. 3 Pullen. Ext. 237. Residence: 408 Dixie Trail. Telephone 3-2053.
 \*McMillan, Macloim C. Instr., History. 114 Peele. Ext. 200.
 \*Manning, Mrs. John A.-Chem, Lab. Instr. 109 Withers. Residence: 1517 Cherokee Dr. Telephone 5:100.
 Marek, J. W.-Instr., Chem. 310, Withers. 205. Residence: 1513 Cherokee Dr. Telephone 5:2453.
 \*Mason, David D.-Grad. Asst., Inst. of Stat. 102 Patterson. Ext. 313.
 \*Monrow, Robert J. Instr., Inst. of Stat. 102 Patterson. Ext. 313. Residence: 71 Dixie Trail.
 \*Nelson, John G.-L. Col., Signal Corps. Mill. Dept. Ext. 233. Residence: 103 Eton Rd, Telephone 3:3282.
 \*Nolstad, Andi L. 108 Huboro & Dr. Telephone 3:328.
 \*Norten, Mrs. Heien H.-Steno, History & Political Sci. 102 Peelee. Ext. 200. Ext. 200.

Residence: 314 Forest Rd. Palmer, Robert L. M/Sgt. Mil. Dept. Ext. 233. Residence: Louisburg Rd. Telephone 6893. Partrick, Theodore Hall, III.-\$nstr., Math. Dept. 205 Tompkins. Ext.

Residence: A-301 Boylan Apts. Telephone 2-2146. \*Peters, Charles Edward Instr., Math. Dept. 205 Tompkins. Ext. 226. Residence: Western Blvd.

Peterson, D. M.—Şnstr., Math. Dept. 220 Tompkins. Ext. 228. Residence: 1718 Park Dr. Telephone 2-0713.
Petres, Howard A. Itaki, Math. Dek. 200 Tompkins. Ext. 226.
Porter, Robert A.—Grad., Exp. Stat. 107 Patterson. Ext. 313. Residence: 100 Chamberlain St. Telephone 25512.
Poud, John W.—Ext. Dairyman, Dairy Ext. 104 Polk. Ext. 277.
Poud, John W.—Ext. Dairyman, Dairy Ext. 104 Polk. Ext. 277.
Prestridge. George N.—MySt., Mil. Dephone 3-1524.
Purdy, Lewis W.—Instr., Chem. Dept. 115 Withers. Ext. 265. Residence: D.2-A Cameron Ct. Apts. Telephone 3-1524.
Ruddrack W.—Instr., Chem. Dept. 115 Withers. Ext. 265.
Robinn Rod F. Asst. Prof., Inst. 6 Stat. 109-A Patterson. Ext. 313. 313.

313. Residence: 402 Horne St. Telephone 2-2082.
 \*Bolston, J. Albert-Instr., Math. Dept. 205 Tompkins. Ext. 226.
 \*Bolston, J. Albert-Instr., Math. Dept. 205 Tompkins. Ext. 265.
 Resame, Harvey E.-Trainin Colfica Vybradma. Tompkins. Ext. 6123.
 Residence: Sec. A-302 Boylan Apts. Telephone 3-3686.
 Residence: 133 W. Johnson. Telephone 2-2453.
 Sadler, Thomas W., Jr., -Vet. Acc. Business. 105 Holladay. Ext. 295.
 Residence: 403 N. Bloodworth. Telephone 5368. 2172

Residence: 100 N. Blootworth. Telephone 5398.
 Residence: 102 N. Blootworth. Telephone 5398.
 Residence: 215 Alexander.
 Shackdord, James Atkins...Instr., English Dept. 3 Pullen. Ext. 237.
 Residence: 211 Blootworth. Telephone 9144.
 \*Slicer, Douglas H. Instr., English Dept. 3 Pullen. Ext. 237.
 Residence: 110 Out St. Telephone 9144.
 \*Slicer, Douglas H. Instr., English Dept. 3 Pullen. Ext. 6324.
 \*Slicer, Diagname Control St. Telephone 9144.
 \*Slicer, Iota M. St. Telephone 9145.
 \*Suffigure R. L.-Line Coach. Athletic Gym. Fieldhouse. Ext. 6334.
 \*Suiter, Lois M.-Instr. Denlish Dent. 3 Pullen. Det. 997.

 retanouse.
 \*Suiter, Lois M.—Instr., English Dept. 3 Pullen. Ext. 237. Residence: 408 Stacy St. Telephone 6855.
 Taylor, J. D.—Exec. Sec., State Committee, Vets. Ed. 111 Tompkins. Ext. 325.

Ext. 325. Residence: 2019 St. Mary's St. Telephone 2-1791.
\*Verlinden, F. J. Grad, Asst., Inst. of Stat. 113 19-11. Residence: 3414 Hilboro St. Telephone 7814.
\*Wakeley, Jay T.-Orad. Asst., Inst. of Stat. 107 Patterson. Ext. 313. Residence: Box 5562 College Stat. Telephone 4456.
\*Wall, J. Graham Instr., Math. Dept. 205 Tompkins. Ext. 226. Residences Box 5500, N. C.

\*Warren, Mrs. Edward, Jr. Clerk, Basic Div. 105 Peele. Ext. 223. Residence: 2303½ Clark Ave. Telephone 8083.

\*Warrick, W. C .- Agr. Eng. Ext. Spec., Ag. Eng. Dept. 312 Ricks. Ext. 274.

Residence: 302 Vance Apts. Telephone 3-2819.

\*Watts, N. B.—Asst. Sec., YMCA. "Y." Ext. 7184. Residence: 902 W. South St. Telephone 8563.

Whittington, Rosalie J. Sec., V. A. Guidance Center. 112 Tompkins. Ext. 6123.

Residence: 1115 Hillsboro St. Telephone 6250.

\*Wiggins, Mrs. Geraldine Sec., Phys. Ed. Gym. Ext. 218. Residence: C 303 Boylan Apts. Telephone 2-2580.

\*Williams, Mrs. Eleanor L .- Instr., English Dept. 2 Pullen. Ext. 237. Residence: Cary, N. C. Telephone 2573.

\*Wolfowitz, J. Assoc Prof., Inst. of Stat. 105-A Patterson. Ext. 313. Residence: Box 594, Chapel Hill, N. C.

- \*Woodhouse, Charles B. Asst. Ag., U. S. Fish & Wildlife Serc. 202 Zool. Ext. 261. Residence: Louisburg Rd. Telephone 5295.
- \*Vann, Hugh G. Mgr., Greenhouse. Greenhouse. Ext. 240. Residence: 211 Furches St. Telephone 7842.

#### 1945-1946

Name	Classification and Curriculum	Dorm. Room & Box No. or Street No.	Home Address
Akor, W. H., H. J	Jr., Ch. E. Spec. So., Tex. So., M. E. Fr., Geol. E. Fr., Gen. E. Son., Ag. Ed. So., Tex. Jr., Gen. E. Fr., M. E. Fr., M. E. Fr., Tex. Spec., Tex. Spec., Ag. Sr., An. Prod.	308 Gold, 322           123 Turlington, 4220           124 Turlington, 4220           1701 St. Mary's St.           15 Becton, 3867           110 Gold, 3202           110 Gold, 3202           123 Berry, 4320           113 Alexander, 4110           124 Alexander, 4104           123 Maximum State           124 Alexander, 4104           123 Wine, 3588           124 Heaton, 753           123 Heaton, 753           124 Helboro St., 5402           129 Becton, 753           120 Becton, 755           121 Heaton St., 5628           122 Heaton St., 5628           132 Nurlington & 4294           3414 Hillsboro St., 5642           221 W. Jones St.           522 W. Jones St.           529 N. Person St.           1403 Brooks Avc.	Tampa, Fla. s-Kayser, Turkey Charlotte, N. C. Charlotte, N. C. Charlotte, N. C. Mountain, N. C. Shelby, N. C. Shelby, N. C. Shelby, N. C. Burham, N. C. Shelby, N. C. Brooklyn, N. Y. Brooklyn, Y.
Baker, B. W. Ballou, G. W.E. Barbour, C.O. R. Barnhill, H. L. Barnwill, H. L. Barnwill, H. L. Barny, H. H. C. Jr. Baugh, E. B., Jr. Baugh, E. B., Jr. Beaman, R. B. Beaman, R. B. Beaman, R. C. Bender, J. H. Bennett, F. C. J. Binder, C. J. Biackmon, M. L. Blackwood, H. P., Jr. Blackwood, M. Jr. Bodtret, W. Bonter, H. L. Bodtret, W. Bonter, W. J.	$\begin{array}{l} {\rm Spec}, {\rm Ag}, {\rm Fr}, {\rm M}, {\rm E}, {\rm E}, {\rm Fr}, {\rm M}, {\rm E}, {\rm Fr}, {\rm K}, {\rm E}, {\rm G}, {\rm Geol}, {\rm B}, {\rm C}, {\rm Geol}, {\rm R}, {\rm Geol}, {\rm Geol},$	Withdrew 323 Becton, 3791 911 Williamson Dr. 103 Alexander, 4103 Trailer, 5142 205 Syme, 3537 102 Turlington, 4201 3414 Hillsboro St. 333 Becton, 3801	Greenwille, N. C. Four Oaks, N. C. Kour Oaks, N. C. Witimington, N. C. Witimire, S. C. Alexandria, Yaa. Greensboro, N. C. Goldsboro, N. C. Goldsboro, N. C. Goldsboro, N. C. Batokløro, N. Y. Raheigin, N. Y. Raheigin, N. Y. Raheigin, N. C. Erwin, N. C. Erwin, N. C. Erwin, N. C. Promouth, N. C. Promouth, N. C. Philadelphia, Pa. Philadelphia, Pa. Willmington, N. C. Willonin, N. C. Willonin, N. C.

Home Address

Name	and Curriculum	or Street No.	Home Address
Bover W W	Jr C E	.137 Alexander, 4129	Goldsboro, N. C.
Boyette R C	So For	137 Alexander, 4129 No. 6 Dixie Trail, 5512. 16 Becton, 3818 114 Ricks Hall 208 Berry, 4315 407 Gardner St	Arlington, Va.
Boylan W M	Sr M E	16 Becton 3818	New Bern, N.C.
Doglatt, W. M. C.	ad Agreen (Soils)	114 Ricke Hall	Ralaigh N C
Brady, N. C On	au., Agron. (Sons)	200 Denny 421E	Favottorillo N C
Brantley, w. I.	Fr., Ac. E.	400 Geodese Gt	Palaiah N.C.
Bridge, M. P.	Grad. Agron.	407 Gardner St.	Kaleigh, N. C.
Britt, B. T	Fr., For.	221 Turlington, 4249	Murireesboro, N. C.
Britt, W. A.	Fr., Gen. E.	407 Gardner St. 221 Turlington, 4249 1 111 Welch, 3247 107 Alexander, 4106	wendell, N. C.
Brock, B. A. Brockman, J. S.	Mr., M. E.	101 Alexander, 4100	tocky bround, M. O.
Brockman, J. S.	Fr., E. E.	803 N. Blount	Raleigh, N. C.
Brooks, B. B	So., C. E.	.306 Becton, 3774	Hickory, N. C.
Brooks, J. C.	Fr., E. E.	1021 W. South St.	Grimesland, N. C.
Brooks, B. B. Brooks, J. C. Brooks, P. A.	Spec. Ch. E.	803 N. Blount 306 Becton, 3774 1021 W. South St. 108 Watauga, 3008 . F 215 Watauga, 3033 1009 W. Peace St. 106 Watauga, 3006 Roz 128 Alexander, 4123 10 Enterprise St.	lowing Rock, N. C.
Brooks, W. J.	So., Ch. E.	215 Watauga, 3033	Red Springs, N. C.
Browder, H. M., Jr.	Jr., Ch. E.	1009 W. Peace St	
Brown, A. R. Brown, B. M., Jr.	Fr., E. E.	106 Watauga, 3006 Roa	noke Rapids, N. C.
Brown, B. M., Jr.		.128 Alexander, 4123	Charlotte, N. C.
Brown, E. L.	So., Tex.		
Brown, F. C.	Fr. Ag.	621 W. Jones St. 121 Bagwell, 3321 132 Woodburn Rd.	
Brown, Joe, Jr.	Fr., É. É.	121 Bagwell, 3321	Shelby, N. C.
Brown, J. E.	So., E. E.	132 Woodburn Rd.	. Snow Hill, N. C.
Brown, L. W.	Sr., Tex. Mfg.	2226 Hillsboro St.	Chadbourn, N. C.
Brown W T	Jr. Tex C & D	130 Alexander, 4125	Charlote, N. C.
Brown, B. M., Jr. Brown, E. L. Brown, F. C. Brown, Joe, Jr. Brown, J. E. Brown, L. W. Brown, W. T. Brran, J. M., Jr. Budnow, Sagmon	Sr Tex Mat	F-11 Raleigh Apts.	Burlington, N. C.
Budnow, Seaman	Fr. For	2226 Hillsboro St. 130 Alexander, 4125 F-11 Raleigh Apts. 29 Turlington, 4291	Schenectady, N.Y.
Bullock R M	Fr. Ag.	306 Welch, 3266	Charlotte, N. C.
Bullock, R. M. Burcham, M. P.	Fr. Tex.	306 Welch, 3266 228 Alexander, 4157 106 Welch, 3242	Elkin, N. C.
Burgess H L	Fr Ch E	106 Welch, 3242	Draper, N. C.
Burkett P L	Fr C E	330 Turlington, 4292 327 Turlington, 4289	Dott. W. Va.
Burkhardt C F	Fr. Tex	327 Turlington, 4289	Cleveland, Ohio
Burgess, H. L. Burkett, P. L. Burkhardt, C. F. Burnham, W. R. Burris, R. C.	So., Ind. E.	304 Brooks Ave.	
Burris B C	Fr. C. & M.	128 Turlington, 4225	Asheville, N. C.
Burris, K. C. Burris, C. P. Burt, H. B. Butler, E. J. Byerly, O. V. Cacella, A. F. Caggiano, V. D. Caldwell, K. E., Jr. Calikkocaoglu, M. M. Combell, T. D.	Fr. Ag. Ed.	<ul> <li>Brooks Ave.</li> <li>Turlington, 4225</li> <li>Rt. No. 3, Box 134</li> <li>218 N. McDowell St.</li> <li>3 Becton, 3805</li> <li>317 Watauga, 3063</li> <li>N. Watauga, 3063</li> <li>McMe Forest Rd.</li> <li>130 Alexander, 4125</li> <li>304 Becton, 3772</li> <li>301 Becton, 3769</li> <li>3154. Oakwood Ave.</li> </ul>	Newton, N. C.
Burt H B	Fr. M. E.	218 N. McDowell St.	Raleigh, N. C.
Butler, E. J.		3 Becton, 3805	
Byerly, O. V.	Sr., Tex. Mgt.	108 Syme, 3508	Lexington, N. C.
Cacella, A. F.	Sr., Ch. E.	317 Watauga, 3053 .N	lew Bedford, Mass.
Caggiano, V. D.	Jr., E. E.	1500 Wake Forest Rd.	Bronx, N. Y.
Caldwell, K. E., Jr.	So., Tex.	130 Alexander, 4125	Concord, N. C.
Calikkocaoglu, M. M.	Spec.	304 Becton, 3772	. Istanbul, Turkey
Campbell, J. D.	Fr., M. E.	301 Becton, 3769	. Greensboro, N. C.
Campbell, W. C.	Sr., For.	315½ Oakwood Ave.	Staunton, Va.
Carlson C A. Gr	ad. Agron. (Soils)	103 4th, 3113	Cincinnati, Ohio
Calikkocaoglu, M. M. Campbell, J. D. Carmon, C. A. Gr Carlson, G. A. Gr Carnes, J. E., Jr. Carpenter, D. C. Carpenter, T. B. Carroll, J. P. Cartner, Sam Carten, Sam Carten, Sam Case, H. H., Jr. Case, H. H., Jr.	Fr., E. E.	335 Turlington, 4295 Ar	lington Farms, Va.
Carnes J. E. Jr.	Fr., Arch, E.	311 Becton, 3779	Charlotte, N. C.
Carpenter D C	Fr., Arch, E.	311 Becton, 3779	Charlotte, N. C.
Carpenter, T. B.	So., M. E.	212 Gold, 3224	Greensboro, N. C.
Carroll, J. P.	Fr., Ag.	514 N. Bloodworth St	Raleigh, N. C.
Cartner, Sam	Sr., Ag. Ed.	309 Syme, 3573	Mocksville, N. C.
Cartwright, W. H., Jr.	So., C. E.	.107 Syme, 3507E	lizabeth City, N. C.
Case, H. H.	So., M. E.	201 Turlington, 4232	Morristown, Tenn.
Cashion, A. T. Jr.	Fr., M. E.	<ul> <li>315½ Oakwood Ave.</li> <li>313 4th, 313</li> <li>335 Turlington, 4295 Ar</li> <li>311 Becton, 3779</li> <li>311 Becton, 3779</li> <li>312 Gold, 3224</li> <li>514 N. Bloodworth St.</li> <li>509 Syme, 3573</li> <li>107 Syme, 3577 E</li> <li>201 Turlington, 4292.</li> <li>318 Morrison Ave.</li> <li>312 Gold, 3212</li> </ul>	Asheville, N. C.
Cates, D. M.	Fr., Tex.	112 Gold, 3212	Greensboro, N. C.
Cato, R. E.	Fr., C. E.	.312 Becton, 3780	Charlotte, N. C.
Chandler, J. D.	Fr. Aero, E.	2610 Wade St.	Blackstone, Va.
Chapin H T	Jr., C. E.	No. 15 Trailer Camp	Lillington, N. C.
Chapman, P. W.	Jr., E. E.	.306 Becton, 3774	Maiden, N. C.
Charnock, F. P.	So., M. E.	203 Alexander, 4135	Asheville, N. C.
Chase, W. C.	Fr., Ag. E.	201 Turlington, 4232. 318 Morrison Ave. 112 Gold, 3212 312 Beeton, 3780 2610 Wade St. No. 15 Trailer Camp 306 Beeton, 3774 203 Alexander, 4135. 205 Forest Rd. 333 Bagwell, 3399.	Raleigh, N. C.
Cherry, A. R.	Fr., E. E.	.333 Bagwell, 3399	Washington, N. C.
The second se	starter Scherkerster		

· · ·	Classification	Dorm. Room & Box No.	
Name	and Curriculum	or Street No.	Home Address
Vome Chesnut, H. F. Childing, C. W. Childing, C. W. Clark, E. T. Clark, E. T. Clark, E. T. Colra, L. R. Coble, E. R. Coggins, J. J. Collins, F. T. J. Collins, F. T. J. Collins, F. T. J. Conton, N. J. Cook, R. N. Cook, R. N. Cook, R. N.	and curriculum Sr., Ch. E., Fr., M. E., Fr., M. E., Fr., Arch. E., Fr., Arch. Fr., Arch. Fr., Arco. J., K., Ch. Fr., Arco. J., E. E. So., Gen. Fr., Arco. Fr., Arco. Fr., Arco. Fr., Arco. Fr., Arco. Fr., Arco. Fr., Arco. Fr., Arco. Fr., Arco. Fr., Arco.	Dorm. Room & ros. or Street, 550 107 Wetten, 850 107 Wetten, 850 107 Wetten, 850 107 Wetten, 850 108 Wetten, 8788. 108 Begren, 3788. 109 Ged, 8211 100 Ged, 8211 100 Ged, 8211 101 Gold, 8211 102 Berry, 4328 102 Berry, 4328 102 Berry, 4328 102 Berry, 4328 103 Begrend, 3306 128 Metamate, 155 138 Wetten Dr. 158 Begrend, 3315 105 Begrend, 335 105 Begrend, 335 105 Begrend,	Lionie Adaress . Clinton, N. C. Lincolnton, N. C. Wimington, N. C. Bear Lake, Minn. . Oxford, N. C. Wepsonville, N. C. Monroe, N. C. Iston-Salem, N. C. Broekty, N. C. Broekty, N. C. Broktyn, N. Y. Martinsville, N. C. Storker, N. Storker, N. C. Storker, N. C. Storker, N. Storker, N. C. Storker, N. Storker, N. C. Storker, N. C. Storker, N. Storker, N.
Cordell, J. E.		.226 Alexander, 4155	Asheville, N. C.
Corley, Clifton, Jr	Fr., Tex.	.3414 Hillsboro St.	New York, N. Y.
Corriber, M. B., Jr.	Fr. M E.	204 Watawaa 2022	Mooresville, N. C.
Coulter, J. L.	Fr., Ch. E.	116 Forest Rd.	Newton, N. C.
Covil, J. M.	Fr., C. E.	.12 Syme, 3608	Wilmington, N. C.
Coward, J. B.	Fr., E. E.	12 W Divis Dr	Asheville, N. C.
Cox, Margaret C		.5548	· · matergin, m. o.
Craft, A. C.		5548 131 Alexander, 4126 115 Bagwell, 3315 Wi 103 Becton, 3703 206 Gold, 3218 1012 Vance St. 2711 Kilgore Ave. 2711 Kilgore Ave. 2713 Bagwell, 3385 206 Waranga, 3024 1805 St. Mary's St. 5 Berry, 4358 2012 Waranga, 3024	Wilmington, N. C.
Craft, S. I., Jr.	Fr., M. E.	115 Bagwell, 3315 Wi	nston-Salem, N. C.
Credle, S. V.	Fr. C. E.	206 Gold, 3218	Durham, N. C.
Crocker, Wm.		.1012 Vance St.	. Raleigh, N. C.
Croom, P. L	Fr., Ag.	.2711 Kilgore Ave.	La Grange, N. C.
Crouch, F. E.		219 Bagwell, 3351 Roal 319 Bagwell 3385	loke Rapids, N. C.
Crowell, D. L., Jr.		.206 Watauga, 3024	Albemarle, N. C.
Cummings, H. H.	So., Arch. E	.1805 St. Mary's St.	Kinston, N. C.
Cutting, A. E.	So., Tex.	5 Berry, 4358 2212 Hope St. 218 Bagwell, 3350 318 McDowell St. 2514 Clark Ave.	Jacksonville, N. C.
Daniel A M	Fr. Aero E.	218 Bagwell, 3350	Reidsville, N. C.
Daniel, W. E.	Fr., Tex	.318 McDowell St	Leaksville, N. C.
Darnolt, J. O	Jr. M. E.	.2514 Clark Ave.	Charlotte, N. C.
Davis, C. B.	Er Arch E	531 N. Person St. 222 Park Ave.	Richmond Va
Davis, L. J.	Fr., M. E.	221 Becton, 3755 Mo	rehead City, N. C.
Davis, N. E., Jr.	Fr., Aero. E.	222 Park Ave. 221 Becton, 3755 Mo 13 E. Dixie Dr. 305 Turlington, 4270. 329 Bagwell, 3395 F	Wilmington, N. C.
Davis, O. L., Jr.	Fr., Tex.	305 Turlington, 4270.	Mooresville, N. C.
Dawson, Luther	Fr. Tex.	326 Turlington, 4288 F:	avetteville, N. C.
Deal, H. M.	Fr. E. E.	.326 Turlington, 4288 Fi .115 Chamberlain St.	Stony Point, N. C.
Debnam, W. T.		Box 176, Zebulon	Zebulon, N. C.
Decker, T. E.	In Tox Mat	121 Turington, 4218	New York N Y
Deitz, F. R.	So., E. E.	112 Alexander, 4109	Weaverville, N. C.
Dellinger, E. S.	So., Arch. E.	208 Gold, 3220	McAdenville, N. C.
Dellinger, L. E.		.238 Alexander, 4164	Altamont, N. C.
Denny, C. R	Jr., Ch. E.	230 Alexander, 4159 Wi	nston-Salem, N. C.
Demid, J. F.	. Fr., W. C. & M.	.2402 Everett Ave., 5554	Charlotte, N. C.
Dew, J. M.	Fr., E. E.	.313 Bagwell, 3379	Fayetteville, N. C.
Dickens, W. P	Fr., M. E	115 Chamberlain St. Box 176, Zebulon 121 Turlington, 4218 109 Oberlin Rd. 112 Alexander, 4109 208 Gold, 3220. 238 Alexander, 4104 230 Kon Heights, 4159 240 Everett Ave, 5554 313 Bagwell, 3379. 114 Bagwell, 3314	Hannax, N. C.

Name	Classification and Curriculum	Dorm. Room & Bor No. or Street No.	Home Address
Dickerson, J. E. Dichl, J. C. Jr. Dillard, E. U. Dillard, E. U. Dixon, H. C. Dixon, J. V. Doland, E. B. Dorsen, Robert Downs, A. C. M. Dullarey, R. B. Dullaney, R. B. Dullaney, R. B. Dullane, R. A., Jr.	So, E. E. Fr., E. E. Grad. An. Prod. Jr., Tex. Mgt. Fr., M. E. Jr., For. So, E. E. Fr., S. E. Grad. M. E. Fr., C. E.	503 E. Jones St. 10 Enterprise St. 334 Bagwell, 3350 W. Trailer Park, 5574 306 Weich, 3266 310 Bagwell, 3376 M. 303 Watauga, 3039 315 Bagwell, 3351 218 Bagwell, 3350 2320 Evrent Ave. 13 E. Dixie Dr. 8 Maiden Lane	Selma, N. C. inston-Salem, N. C. Clarkesville, Ga. Raleigh, N. C. Glenwood, N. C. Aidland Park, N. J. Miami Beach, Fla. Greensboro, N. C. Benson, N. C. Ellwood City, Pa. Wilmington, N. C.
Edens, C. F. Edgerton, I. W. Edgurdon, E. S., Jr. Edwards, H. L. Edwards, H. L. Edwards, H. J. Edwards, H. D. Edwards, N. R. Edwards, P. H. Efland, T. D. Ellamourf, C. E. D. Ellist, E. R. Ellis, R. R. Ellis, R. M. Ellis, R. J. Ellis, R. J. Ensis, H. W. Enniss, H. W. Enniss, H. W. Enniss, H. W. Enniss, H. W. Enniss, A. G.	Fr, C. E. Grad, Ag, Ec. So, C. E. Fr, E. E. Jr, Ag, Ec. Fr, Ag, Ec. Fr, Arts Ed. Fr., Aero, E. Fr., Aero, E. Fr., M. E. Fr., M. E. So, Arch, E. Fr., E. Jr., Ind. Arch, E. Fr., Tex, So, E. E. Fr., Tex, Fr., Tex, Fr., Tex, Fr., Tex, Fr., M. E. So, Cer, E.	8         Malden Lane           131         Bagwell, 3331           305         Capital Apts.           403         W. Aycock St.           403         W. Aycock St.           403         Wardschaft           403         Wardschaft           403         Wardschaft           403         Wardschaft           403         Wardschaft           205         Bagwell, 3337           217         Becton, 3711           206         Gald, 3219           207         Gald, 3219           207         Gald, 3219           207         Trailer           208         Becton, 3721           209         Matuga, 3021           201         Trailer           205         Becton, 3725           318         Becton, 3729           Fieldhouse         11           302         Syme, 3566           320         Syme, 3584           320         Syme, 3584	Lumberton, N. C. Kenly, N. C. Raleigh, N. C. noke Rapids, N. C. Wilmington, N. C. Princeton, N. C. Princeton, N. C. Bfand, N. C. Effand, N. C. Caparlotte, N. C. Clayton, N. C. FGasburg, Va. Mullens, West, Va. Long Jahao, N. Y. Rockingham, N. C. Radeigh, N. C. Sanatorium, N. C.
Fagan, R. W. Fahrer, R. B. Faison, O. W.	So., Aero. Engr. Fr., Ag.	6 Berry 4239 229 Betein, 3763 204 Woodburn Rd. 1709 St. Mary's St. 125 Alexander, 4120 YMCA 37 Trailer Camp, 5563 37 Trailer Camp, 5563 37 Trailer Camp, 5563 30 Trailer St. 188 Alexander, 4132 103 Welch, 3239 105 Welch, 3234 222 Bagwell, 3388 30 201 Beylor 228 Bayeul, 3388 30 201 Beylor 228 Bayeul, 3388 30 201 Beylor 28 Bayeut, 3388 30 201 Beylor 29 Bayeut, 3284 30 201 Beylor 201 Be	Rock Hill, S. C. Defiance, Ohio Raleigh, N. C.

Name	Classification and Curriculum	Dorm. Room & Box No. or Street No.	Home Address
Foyles, F. R. Franks, L. C. Freese, R. J. Fuerstman, M. M. Fuller, G. A., Jr. Furgurson, G. H., Jr. Furr, W. W.	Fr., Ag. Fr., Tex. Fr., Tex. So., Tex. So., E. E. Fr., E. E. Fr., Aero. E.	201 N. Wilmington St. 1429 Canterbury Rd. King Charles Rd. 118 Alexander, 4115. 113 Watauga, 3013 207 Welch, 3255 2629 Fairview Rd.	La Grange, N. C. Saint Pall, Minn. Charlotte, N. C. New York, N. Y. Hickory, N. C. Durham, N. C. Raleigh, N. C.
Gadarian, Gerard Gagnon, G. W. Gailey, D. W. Gardy, J. H. Gardy, J. H. Gaty, J. H. Gaty, J. H. Gatkina, J. D. Gatkina, J. D. Gatkina, J. D. Gerard, A. P. Gibson, E. R. Gibson, J. M. Gorman, Katharine S. Grandy, C. W., Jr. Grave, R. L. Greene, Baal Griffs, J. R. Griffs, J. R. Grines, J. W., Jr. Grosse, E. H.	Spec, Ag, Eg, Fr., Ch, Eg, So, Ind, Eg, Pr., Ag, Eg, Pr., Ag, Fr., Ag, So, Ch, Eg, So, Ch, Eg, So, ME So, ME So, ME So, Ag, Fo, Fo, Ag, So, Ag,	106         Divise Trail         20004           108         Harpett St.         302         Turlington, 4267           326         Bagwell, 3392         222         Syme, 3564           222         Beton, 3824         312         312           310         E.         North St.         313           311         Syme, 3517         314         314           313         Syme, 3519         203         620         420           320         CoX Ave.         1         121         Filmore         301         Bickett Brod.           303         Diskett Brod.         Ave.         1         115         Watauga, 3015         204         Watauga, 3022         233         Alexander, 4161         610         4014         4104         4	Balder, N. C. Washington, N. C. Asheville, N. C. Greenville, S.C. Fall River, Mass. Greensboro, N. C. Wilson, N. C. Concord, N. G. Monroo, N. C. Monroo, N. C. Monroo, N. C. Monroo, N. C. Monroo, N. C. Morola, N. C. Durham, N. C. Burfalo, N. Y. Juncoluton, N. C. Burfalo, N. Y. Burdun, N. C. Burdun, N. C. Burdu
Haenen, W. H Hagarn, M. L Hall, Ivran Hallenbeck, J. D. J. F. Hallenbeck, J. D. J. F. Hampton, R. H. C. Hampton, H. R. C. Hampton, W. R., Jr. Hamrick, R. J. Hamrick, R. J. Hanneck, D. W. Handey, Arthur, J. Hanse, D. J. Hanse, D. H. Hanse, R. J. Harse, R. J. Harse, R. J. Harse, R. J. Harre, R. J. Harrow, B. D.	Fr., Tex. Fr., M. E. Jr., Ag. Ed. Fr., M. E. Jr., Tex. Mfg. So., E. E. Jr., C. E. Fr., E. E. Grad. Ag. Ec. Grad. Ag. Ec. Grad. Ag. Sc.	130 Becton, 3730	Forest City, N. C. Roanoke, Va. Lawrence, Mass. rehead City, N. C.

#### STATE COLLEGE RECORD

Name	Classification and Curriculum	Dorm. Room & Box No. or Street No.	Home Address
Nome Harriss, K. F. Harrison, W. G., Jr. Harrison, W. G., Jr. Harrison, W. G., Jr. Hartmon, J. R. Hartmon, J. R. Hartmon, J. R. Hawer, R. M., Jr. Haweil, S. J. Hawkins, E. D. Hawkins, Fred Hawkoy, W. H. Hawkins, Fred Hawkoy, W. H. Hedrick, R. W. Heffner, C. E. Heims, H. H., Jr. Heimphill, H. E.		.223 Becton, 3757	Clayton, N.C.
Harris, K. F.	So., Ag. Ch.	213 Syme, 3545	Dallas N C
Harrison, U. A. Jr.		2008 White Oak Rd. 106 Welch, 3242	Burlington N.C.
Hart, R. E.	. Fr., M. E.	106 Weich, 3242 318 Turlington, 4280 315 Syme, 3579 317 Alex, 4180 238 Turlington, 4263 202 Gold, 3214 315 Becton, 3783 Box 83, Zebulon 117 Cox Ave., 5241	Bowman, S. C.
Hartmann, J. R.	Fr., Tex.	.315 Syme, 3579	Greensboro, N. C.
Harvey, A. M	. Jr., 1ex. Mig. Fr. For	238 Turlington 4263	Waterboro S C
Hassell, S. J.	.So., Ag.	202 Gold, 3214	Roper, N. C.
Hauser, R. L.	. Fr., E. E.	315 Becton, 3783	Dobson, N. C.
Hawkins, C. D., Jr.	Sr. M.F.	Box 83, Zebulon	. Wendell, N. C.
Hawkins, Fred	Fr., Ch. E.	117 Cox Ave., 5241 323 Alex., 4186	demonstration M. O.
Hawley, W. H.	Fr., Arch. E.	223 Alex, 4180 He 109 Alex, 4107 221 Syme, 4107 2724 Van Dyke Ave. 330 Becton, 3798 115 Turlington, 4212 222 Bagwell, 3354	Lexington, N. C.
Haynes, M. B., Jr.	. So., E. E.	221 Syme, 4107	Asheville, N. C.
Hedrick, R. W.	So., Arch. E.	330 Becton, 3798	Woodleaf, N. C.
Heffner, C. E.	Spec. (Tex.3	115 Turlington, 4212	Shelby, N. C.
Helms, H. H., Jr.	Fr., E. E.	222 Bagwell, 3354	Waxhaw, N. C.
Hendricks J W Jr	Sr. Tex Mgt.	118 Turlington, 4215	Shelby N.C.
Hennessee, W. E., Jr.	Fr., Geol. E.	202 Wat., 3020	. Salisbury, N. C.
Henry, W. E.	Fr., A. C	G.225 Bagwell, 3357 I	Rocky Point, N. C.
Hewitt G W	Er Geo E	102 Wat. 3002 M	vrtle Beach N C.
Hiers, Doris R.	Grad. Exp. Stat.	and the second s	Moultrie, Ga.
High, S. C., Jr. Gra	ad. Ind. Arts, Ed.	1031 W. South St.	Raleigh, N. C.
Hines A K	Fr., Gen. E.	202 Gold 3214	Enfield N C
Hines, W. A., Jr.	Fr., Gen. E.	222 Bagwall, 3354 1417 Park Dr. 118 Turlington, 4215 202 Wat, 3020 225 Bagwall, 3357 111 Alex, 4108 102 Wat, 3002 Multi Alex, 4108 103 Bagwall, 330 202 Gold, 3214 203 Bagwall, 3320 202 Gold, 3214 203 Bagwall, 3320 203 Bagwall, 3220 203 Bagwall, 3230 203 Bagwall, 3250 203 Bagwall, 3	iston-Salem, N. C.
Hinton, C. L.	Fr., E. E.	303 Becton, 3771	Princeton, N. C.
Hinton, C. L. Hinton, J. W. Hodes, A. D. Hodes, A. D. Hoden, H. M. Holembe, H. M. Holembe, H. M. Holland, J. J. Holland, J. K. Holleman, E. C. Holmes, J. M. Holm, H. M. Holt, H. M.	Ir An Prod	303 Becton, 3711 125 Becton, 3725 215 Syme, 3547 2210 Hope St. CC 319 Bagwell, 3385 330 Syme, 3594 304 E. Hargett 2206 Anderson Dr. 120 Willwert Pd	Boonville N C
Hodes, A. D.	Jr., Tex. Mfg.	.2210 Hope StC	hattanooga, Tenn.
Hodul, P. T.	Fr., For.	319 Bagwell, 3385	New York, N. Y.
Holcombe, H. M.	So., C. E.	.330 Syme, 3594	Fayetteville, N. C.
Holland, J. C., Jr.	So., Ind. E.	2206 Anderson Dr.	Raleigh, N. C.
Holland, M. B.	So., Tex.	120 Hillcrest Rd.	Conover, N. C.
Holleman, E. C.	Fr., Aero. E.	Apex 317 Hyme, 3581 304 Bagwell, 3370	Apex, N. C.
Holt, H. M.	Fr., E. E.	304 Bagwell, 3370	Rockingham, N. C.
Holt, R. D.	Sr., C. E.	226 Syme, 3558	Goldsboro, N. Ç.
Hooks, T. G.	Fr., E. E.	.110 Harrison Ave.	Charlote, N. C.
Hord, E. I., Jr.	Fr., E. E.	2026 Byrd St. 303 Alexander, 4169	Vashington, D. C.
Horne, H. J., Jr.	So., Ch. E.	216 Wat., 3034 Roan	noke Rapids, N. C.
Horne, R. L.	Fr., For.	117 Wat., 3017	Charlotte, N. C.
Hosmer, Asa V.	So. Ch. E.	311 Syme, 3575	Charlote, N. C.
Howard, S. D., Jr.	Fr., Tex.	123 Becton, 3723.	Davidson, N. C.
Howe, T. T.	. So., Tex.	301 Wat., 3037	Durham, N. C.
Howie, L. M.	Fr. E. E.	204 Syme, 3536	thern Pines, N. C.
Huband, E. C., Jr.	Fr., Arch. E.	.307 Bagwell, 3373	Wilmington, N. S.
Huffstetler, C. Q., Jr.	So., E. E.	105 Bagwell, 3305	Gastonia, N. C.
Hultz, B. E.	Sr., Ag. Ed.	106 Becton, 3706 Wit	ston-Salem, N. C.
Hunnicutt, F. J., Jr.	So., For.	130 Becton, 3730	Durham, N. C.
Hunnings, L. D., Jr	Sr., Ag. E.	304 Bagwell, 3370         .1           226 Syme, 3558         .1           110 Harrison Ave.         .2           228 Byrd, 558         .1           128 Byrd, 558         .1           110 Harrison Ave.         .2           228 Byrd, 51, 139 yr.         .1           117 Wat, 3037         .1           118 Syme, 307         .1           118 Syme, 307         .1           130 Hilboro St. R         .500           207 Bagwell, 32305         .500           301 Wat., 3037         .5003           105 Hilboro St. R         .500           301 Bagwell, 32305         .5003           106 Becton, 3760         .501           110 Becton, 3760         .1           120 Hay 8312         .1	New Bern, N. C

12

Name	Classification and Curriculum	Dorm. Room & Box No. or Street No.	Home Address
Hunter, J. S. Hurlock, H. H. Hurst, W. L. Hutchins, E. H.	Fr., M. E. Jr., E. E. Fr., For. Fr., For. Fr., Ch. E.	112 Smye, 3512 323 Turlington, 4285 16 Trailer Camp 311 Gold, 3285 2320 Lake Dr.	Charlote, N. C. Linden, N. J. Newark, Del. Durham, N. C. Raleigh, N. C.
Iguiniz, M. G. Ingle, R. S. Ingold, R. S. Ivey, B. M.	Spec. Sr., Geol. E. Sr., Geol. E. Fr., Arch. E.	105 Bagwell, 3305 316 Wat., 3052 212 Berry, 4319 203 Berry, 4310	Albemarie, N. C. Charlotte, N. C.
Jackson, Raymond Mark, Jacobs, J.W., Jr. Jacobson, H. M. Jacobs, J.W., Jr. Jarvis, R. N. C. Jarvis, W. W., Jr. Johnson, A. B. Johnson, C. A. Johnson, C. F. Johnson, C. F. Johnson, G. H. Jr. Johnson, H. M. Johnson, H. M. Johnson, B. F. Johnson, D. W. Johnson, B. B. Jones, D. W. Jones, D. W. Jones, D. W. Jones, B. F. Jones, B. F. Jones, B. F. Jones, B. K. Jones, M. L., Jr. Jones, W. R. Jones, M. J. Jones, M. J. Jones, W. R. Jones, M. J. Jones, M. J. Jones, W. R. Jones, M. J. Jones, M. Jones, J. Jon	Fr., Tex. Fr., Tex. Srand, An. Prod. So., Ag. Fr., E. E. Fr., E. E. Fr., E. E. Fr., E. E. Grad, Ind. Arts Spec., Tex. Jr., Ag. (Flor.) Fr., E. E. Fr., Tex. Fr., Tex. Fr., Tex. So., Ch. E. Jr., C. E. Fr., Tex. So., Ch. E. Jr., C. E. Fr., Tex. Jr., Ag. Ed.	Box 181-5A, 162, 80. 0           Box 181-5A, 162, 80. 0           Box 2005 Bagewell, 3537           1704 Bickett Blvd.           201 Turlington, 4222           203 Turlington, 4222           204 Tarlington, 4222           205 Cal, Trailer, 5726           310 Weich, 3271           28 Col, Trailer, 5726           310 Weich, 3271           211 Galex, 4106           116 Bagewell, 3146           211 Turlington, 4286           212 Turlington, 4286           210 Bagewell, 3342           210 Bagewell, 3342           2110 Becton, 3710           225 Bacton, 3759           212 Allex, 4128           213 Bayes, 3613           224 Bagewell, 3424           215 Bagewell, 3425           216 Bagewell, 3425           217 Bayes, 418           218 Allex, 418           218 Allex, 418           218 Allex, 418	Charlofte, N. C. Raleigh, N. C. Belmont, N. C. Stattseville, N. G. Henson, N. C. Penson, N. C. Henson, N. C. Benson, N. C. Mc Gilead, N. C. Smithfield, N. C. Monroe, N. C. Zircomia, N. C. Zircomia, N. C. Zircomia, N. C. Zircomia, N. C. Smithfield, N. C. Zircomia, N. C. Zircomia, N. C. Zircomia, N. C. Zircomia, N. C. Smithfield, N. C. Silar City, N. J.
Kabakow, H. M. Karambelas, J. N. Katz, L. R., Jr. Keener, W. B. Kehimann, Martin Kehr, K. E. Keiler, C. R. Keiler, C. R. Kelly, H. B. Kelly, K. V. Fi Kenney, E. R., III	So., Ag. Fr., C. E. Fr., Arch. So., Arch. E. So., Acro. E. Fr., Acro. E. Fr., E. Fr., Tex. Fr., Gen. E. r., Ind. Arts, Ed. Fr., Ch. E.	990 Alex 4140	Bronx, N. Y. Asheville, N. C. Charlote, N. C. High Shoals, N. C. New York, N. Y. Brodbecks, Pa. Memphis, Tenn. Akron, N. C. Clayton, N. C. Raleigh, West Va. Cleveland, Ohio

Name	Classification and Curriculum	Dorm. Room & Box No. or Street No.	Iome Address.
Knott, C. T. Knox, J. A. Koonce, T. R., Jr. Kostukowich, Wm.	Fr., For. Fr., An. Prod. Sr., C. E. So., C. E.	111 Welch, 3247 V 306 Gold, 3230 Ch 122 Bagwell, 3322 Fai 122 Bagwell, 3322	Vendell, N. C. eveland, N. C. ir Bluff, N. C. Bronx, N. C.
Ladd, B. M. Lamm, J. A., J.F. Lamm, M. H. Lam, W. A. Lamd, W. A. Lamd, W. A. Lamd, W. A. Lam, E. S. Lam, E. S. S. Lawson, W. H. Lawrence, W. H. Lawrence, W. H. Lawrence, W. H. Lawrence, W. H. Leitch, J. D. Lemizh, B. R. Lemizh, B. R. Lemizh, B. R. Lemizh, B. R. Lemizh, S. J. Leonard, W. L., Jr. Leven, C. S. Jr. Leven, G. S. Leven, T. C. Lewis, T. C. Lewis, T. C. Lewis, T. C. Lewis, T. D., Jr. Linger, W. R. Liwack, Charlotte (Mrs Lloyard, W. W. Lozard, H. K. Jr. Locard, R. K. Jr. Locard, R. K. Jr. Locard, H. K. Jr. Lockin, K. P. Lockin, S. P. S. Lockin, S. J. J. Lowis, J. P. S. J.	Fr., M. E. So., E. E. Fr., Ch. E. Sr., Ag. Ch. Fr., K. Ed. Sr., Ag. Ch. Sr., Ag. Ch. Sr., Ag. Ch. Sr., Tex, So., AS Sr., Ch. E. Fr., Tex, So., AS Sr., Ch. E. Fr., Tex, So., AS Fr., Tex, So., AS Fr., Tex, So., AS Fr., Ch. E. Fr., Ch. E.	904 Syme, 3536         Wi           100 Wat, 3000         Ali           100 Wat, 3000         Ali           101 Berry, 4301         Chatta           101 Berry, 4301         Chatta           104 Turlington, 4203         Gree           105 Welch, 3272         P           309 Turlington, 2727         Nee           309 Turlington, 4272         Nee           304 Berry, 4324         Ken           305 Syme, 3569         Kir           304 Berry, 4324         Ken           305 Syme, 3569         Kir           118 Syme, 3518         Bi           201 Dagwell, 3301         Lee           207 Turlington, 4227         Nee           208 Tawe, 3560         Rock, 400           207 Turlington, 4271         Kel           208 Syme, 3600         Rock, 400           207 Welch, 3267         Way           307 Welch, 3718         Gree           118 Boton, 5718         Gree           203 Bagwell, 3375         T           204 Bilbord, 3375         T           128 Gold, 3224         P           300 Bagwell, 3375         T           128 Syme, 3505         Bur           128 Syme, 3505	ares ML, N. C. rooklyn, N. Y. Norfolk, Va. Xington, N. C. Norfolk, Va. W York, N. Y. Y Joint, N. C. Raleigh, N. C. Raleigh, N. C. Balville, Ky. nesville, N. C. Raleigh, N. C.
McCall, J. D. McCants, C. H. McCarts, C. H. McCoskey, R. W. McCornick, D. H. McCoravy, C. E. McDevett, F. T., Jr. McDonald, N. A. McDonald, J. H., Jr. McDonald, N. A. McDonald, N. A. McBuffle, Ruth I. McSun, J. H. McKay, R. A. McKay, R. A.	Pr., E. E. Fr., Ag. Fr., E. E. Fr., M. E. Fr., Tex. So., Ch. E. Fr., E. E. So., Gen. E. Fr., C. E. Fr., Occ. I. & G. So., Aero, E. Fr., Tex. Jr., For. Fr., Tex. Fr., C. E.	2205         Gold, 3217         Cl           327         Turington, 4296         A           331         Gold, 3235         Ga           111         Gold, 3235         L           1210         Betton, 3716         L           1210         Betton, 3716         L           1210         Betton, 3716         L           210         Weich, 3258         Wasi           210         Weich, 3258         Wasi           215         Begwell, 3357         Ston,           216         Betty, 438         Li           217         Weich, 3258         Wasi           218         Weich, 3258         Wasi           219         Betton, 4271         Network           210         Weich, 3286         Wasi           313         Betton, 3761         B           329         Betton, 3763         Ston, 3763           320         Weich, 3262         Rock	narlotte, N. C. ensboro, N. C. ske City, Fla. "arkton, N. C. Durham, N. C. Durham, N. C. Raleigh, N. C. Norfolk, Va. Norfolk, Va. g Hope, N. C. Haven, Com. G Hope, N. C. Haven, Com. Cheraw, S.C. ingham, N. C.
Macon, T. G.		206 Bagwell, 3338 Winstor 219 Syme, 3551 M	t. Airy, N. C.

	Classification	Dorm. Room & Box No.	
Name	and Curriculum		Home Address
Magill, F. D.	So. E. E. Sen., For. Fr., Arch. E. Fr., M. E. Jr., Ag. Edo. Son, Tho. Ag. Edo. Son, C. E. Son,	Withfraw         Withfraw           107 Berry, 4307         W           121 Becton, 3721         C           222 Alex, 4134         G           222 Alex, 4134         G           223 Alex, 4134         G           224 Alex, 4134         G           225 Alex, 4134         G           302 Weich, 3262         300 Berry, 4236           306 Berry, 4236         Sector, 4236           2018 Billishoro Strict         430           2016 Tarington, 4236         Sector, 4330           2018 Berly, 4330         Withfree           2016 Objerry, 4330         C           2016 Objerry, 4330         C           2016 Pairitew, Rd.         C           2017 Withfree, 154         C           2018 Pairitew, Rd.         C           2016 Pairitew, Rd.         C           2017 Wat, 4053         Sc.           2016 Pairitew, Rd.         C           2017 Wat, 4053         Sc.           2018 Pairithwore, St.         C	Lenoir, N. C. Jitamaburg, Va. Jreensboro, N. C. Baishington, N. C. Baishington, N. C. Baishington, N. C. Marion, N. C. Marion, N. C. Marion, N. C. Marion, N. C. Jackson, N. C. Jonesville, N. C. Wilson, N. C. Wilson, N. C. Marinet, N. C. Hamiet, N. C. Hamiet, N. C. Hamiet, N. C. Castonia, N. C. Castonia, N. C. Badioro, N. C. Castonia, N. C. Badion, N. C. Raleigh, N. C. Raleigh, N. C. Raleigh, N. C. Badior, N. C. Badior, N. C. Badior, N. C. Badior, N. C. Castonia, N. C. Badior, N. C. Raleigh, N. C. Raleigh, N. C. Raleigh, N. C. Badior, N
Nanney, C. W. Nelson, E. W. Nery, R. A. Nery, H. J. Nesbit, W. R. Nichols, L. B., Jr. Nicholson, M. P. Jr.	Jr., Tex. Mfg. Fr., M. E. Fr., Aero. Jr., Ch. E. Fr., Ag. So., E. E. Fr. Aero.	11 Trailer Camp, 5552U 1715½ Hillshoro St. 333 Alex., 4195 N. 333 Alex., 4195 N. 333 Alex., 4195 N. 106 Welch, 3242. 307 Wat., 3043 61 Trailer Camp. J. 321 Becton, 3789	Topton, N. C. Topton, N. C. Andover, Mass. Andover, Mass. Concord, N. C. Andrews, N. C. Burlington, N. C.

Name	Classification and Curriculum	Dorm. Room & Box No. or Street No.	Home Address:
Norman, J. II.	So., Tex.	330 Alex., 4193	Dobson, N. C.
Normont R E Jr	Fr E E	314 Forest Rd.	. Lenoir, N. C.
Norris, T. A., Jr.	Fr., Tex.	314 Forest Rd. 405 W. Park Dr.	Raleigh, N. C.
Norris, T. A., Jr. Northern, W. L. Nufer, W. L.	Fr., Ag.	114 Syme, 3574 202 Bagwell, 3334	Moyock, N. C.
Nufer, W. L.	So., C. E.	202 Bagwell, 3334	Goldsboro, N. C.
Odham, J. W.	. Sen., Ag. Ed.	110 Wat., 3010 223 Turlington, 4251 219 Syme, 3551 317 Bagwell, 3383 W 122 Syme, 3522 210 Berry, 4317 232 Becton, 3766 Wins	Grifton, N.C.
Oppenheim, N. J.	So., Tex.	223 Turlington, 4251	Brooklyn, N. Y.
Oppenheim, N. J. Osborne, J. L., Jr.	Fr., M. E.	219 Syme, 3551	Lawndale, N. C.
Owen, J. A., Jr	Fr., Ag	317 Bagwell, 3383W	lilmington, N. C.
Owen, J. A., Jr. Owen, S. M. Owen, W. E. Owens, J. B., Jr.	So., Aero.	122 Syme, 3522	Whiteville, N. C.
Owen, W. E.	Fr., Tex.	210 Berry, 4317	Gastonia, N. C.
Padgett, E. G., Jr.		L3A Cameron Ct. Apts. 919 W. Johnson St. 102 Syme, 3502 309 Welch, 3269 Roa 217 Wet 2059 Col	Raleigh, N. C.
Page, R. E., Jr.	Fr., Aero.	919 W. Johnson St	Statesville, N. C.
Pallagut, E. A.	So., M. E.	The arrest data internet	Charlote, N. O.
Palmer, R. H.	So., Tex.	102 Syme, 3502	Ardmore, Pa.
Pardew, W. L.	Fr., Tex.	309 Welch, 3269 Roal 317 Wat., 3053	ring River, N. C.
Parke I P	In Ind F	106 Syme, 3506	
Parks W R	So Aero	Trailer, 5142	
Patton, C. B., Jr.	Fr. C. E.	517 Florence St.	Jonesboro, N. C.
Patton, M. S Se	n., Agron. (F.C.)	24 Becton, 3825	Franklin, N. C.
Paul, O. T	Sp. (Aero.) .	302 Wat., 3038 W	ashington, N. C.
Paylor, W. W.	Fr., For.	128 Turlington, 4225	Longhurst, N. C.
Peacock, B. C.	Fr., E. E.	310 Gold, 3234	Roper, N. C.
Pardew, W. L. Paren, R. J. Parks, J. R. Parks, W. R. Patton, C. B., Jr. Patton, M. S. Paul, O. T. Paulo, T. Paulor, W. W. Peacock, B. C. Pearson, W. S. Geeler, C. M. Jr.	rad., Tex. C. & D.	1408 Benehan St.	Charlote, N. C.
Peolor R L	Er F F	210 Cold 2224	Salishury N.C.
Peeler, C. M., Jr. Peeler, R. L. Peeples, R. C. Perkins, D. D.	Grad. Entom	Trailer, 5142 517 Florence St. 24 Becton, 3825 302 Wat, 3038 W 128 Turlington, 4225 310 Gold, 3234 1408 Benehan St. 321 Syme, 3585 310 Gold, 3234 2716 Rosedale Ave. Withdrow	Tavares, Fla.
Perkins, D. D.		Withdrew	
Perry, L. B.	So., E. E.	Withdrew           111 Syme, 3511           327 Bagwell, 3393           302 Berry, 4322           Sw           216 Bagwell, 3348           213 Berry, 4320           6 Becton, 3808           102 Turlington, 4201           120 Bagwell, 3320           207 Sgme, 3539           208 Gevend, 3539	Charlote, N. C.
Pettinelli, F. J.	Fr., E. E.	327 Bagwell, 3393	Brooklyn, N. Y.
Petty, B. L.	Fr., Arch.	302 Berry, 4322 Sw	repsonville, N. C.
Phillips, Hartwell	So., Gen. E.	216 Bagweil, 3348	Charlotte N C
Phillins, J. W.	Jr An Prod	6 Becton 3808	Mebane, N. C.
Phillips, K. L.	Frad., Dairy Mfg.	102 Turlington, 4201	Raleigh, N. C.
Pickett, E. M	Fr., C. E.	120 Bagwell, 3320 W	Vilmington, N. C.
Pickler, M. J.	Jr., Ag. Ec.	207 Sqme, 3539 Ne	w London, N. C.
Pierce, J. C., Jr.	Aud	207 Sqme, 3539 Ne 216 Polk Hall 308 N. Person St J 113 Becton, 3713 Rot 204 Alex, 4136 104½ E. North St. 214 Forest Rd. n 204 Turlington, 4235 Rot 109 Chamberlin St. 5593 109 Chamberlin St. 5593	
Piland, W. Q.	So., C. E.	.308 N. Person St.	former City N I
Pittman W T	Fr. Ch E	113 Becton 3713 Roc	ky Mount, N. C.
Plaster, J. C.	Grad., Dairy Mfg.	204 Alex., 4136.	Hickory, N. C.
Polier, A. Lewis	Fr., Arch. E.	1041/2 E. North St	Raleigh, N. C.
Ponton, D. R.		214 Forest Rd. n	Raleigh, N. C.
Poplin, J. M.	Fr., For.	204 Turlington, 4235 Ro	cky Mount, N. C.
Porter, R. A.	Grad., Exp. Stat.	.109 Chamberlin St., 5593	Penn Yam, N. I.
Potter I R	Er Ag	1906 S. Lackson St	Grange N.C.
Power, T. H.		210 N. Harrington St.	Decatur, Ga.
Powers, D. E., Jr.	Fr., M. E.	232 Bagwell, 3364	Savannah, Ga.
Powers, R. M.	So., E. E.	.314 Wat., 3050	Moyock, N. C.
Preslar, G. H., Jr.	Fr., M. E.	319 Becton, 3787	Sanford, N. C.
Prim G C	Son FM & FF	115 Poston 2715	Gumberry, N. C.
Privette, J. M.	Fr. Ag. Ed	202 Syme 3534 We	ake Forest, N. C.
Probst. F. P.	Fr., For.	109 Chamberlin St. 5593. 1           303 Turington, 4268           1306 K. Jackson St. 1           210 N. Harrington St. 222 Bagwell, 3364           314 Wat, 3050           319 Beeton, 3787           119 Bagwell, 3319           118 Bagwell, 3319           202 Syme, 3534           202 Syme, 3544           202 Syme, 3544	Richmond, Va.
			- 10 M

Name	Classification and Curriculum		Home Address
Proctor, W. L., Jr. Prout, C. H. Pruitt, A. A. Puckett, F. R. Purlson, E. H.	Jr., Gen. E. Jr., M. E. Grad., For. Fr., For. So., Ag.	407 Carlton Ave., Durham 102 Becton, 3702 103 4th, 3113 2414 Hillsboro St. Rap 322 Alex., 4185	Durham, N. C. Owings, Md. Carteret, N. J. id City, S. Dak. Verona, N. J.
Quay, T. LG Quick, E. M.	rad., Zool. (Ent.) Fr., Gen. E.	.28 Bagwell Ave. .1805 St. Marys St Be	Mt. Holly, N.J. nnettsville, S. C.
Rachley, C. H. Rashita, S. A. Rasmussen, P. B. Ratchford, C. B. Ratchford, C. B. Ratchford, C. B. Ratch, B. W. Rep, L. J., Jr. Rep, L. J., Jr. Rep, L. J., Jr. Reynolds, R. H. Reynolds, R. H. Reynolds, R. H. Reynolds, R. H. Reynolds, R. H. Reynolds, R. J. Ribeurak, E. C. Richardson, R. C. Ribeurak, E. C. Ribeurak, E. C. Ribeurak, C. S. Roberts, H. D. Roberts, H. D. Roberts, M. B. Roberts, B. Rumk, C. S. Rumk, C. S. Rumk, C. S. Rumk, C. J. Rudisill, P. D. Ruffin, T. W. Rummage, L. D., Jr. Russell, R. W. Jr.	Pr., E. E. S., Tex. Fr., S., Tex. Grad., Ag. Ec. Fr., For. Grad., Occ. L&G. So., Ag. So., Tex. So., Tex. So., Tex. So., Tex. So., Tex. Fr., C. E. Fr., C. E. Fr., C. E. Fr., C. E. Fr., C. E. So., Clax. Fr., C. E. Fr., C. E. So., Clax. Fr., C. E. Fr., C. E. So., Clax. So., Clax. Fr., C. E. So., Clax. Fr., C. E. So., Clax. Fr., C. E. Fr., V.	110         Engwell, 3210           121         N. Francy 324, Apt, 11           121         N. Francy 324, Apt, 11           122         N. Francy 726, Apt, 11           103         Turlington, 4202         Fi           113         Becton, 3718	Willard, N. C. Gastonia, N. C. Sastonia, N. C. Raleigh, N. C. Raleigh, N. C. Rober, N. C. Grahana, N. C. Salisbury, N. C. Grahana, N. C. Baligh, N. C. Durham, N. C. Durham, N. C. Durham, N. C. Durham, N. C. Durham, N. C. Durham, N. C. Badegen, N. C. Durham, N. C. Goldsboro, N. C. Goldsboro, N. C. Henderson, N. C. Burbam, N. C. Badagen, N. C. Henderson, N. C. Henderson, N. C. Badagen, N. C. History, N. C. Wilson, N. C. Bison, N. C. Bison, N. C. Bison, N. C. Bison, N. C. Burbarb, N. C. Balagio, N. C. Ba
Sadler, R. E. Salma, J. F. Sambatho, Sam Sambatho, Sam Sandara, M. C. Sanders, W. A., Jr. Savler, L. D. Schenke, F. E. Schegel, F. E., Jr. Schmidt, R. B. Schmidt, R. B. Schmidt, R. B. Schwattz, G. L. Seruggs, C. R.	Sen., Ag. Ed. Sp. Grad., Exp. Stat. Fr., E. E. Fr., Arch. E. Fr., Tex. Fr., E. E. So., Ch. E. Fr., Tex. Jr., Tex. Mgt. Grad. Ag. Ec. So., M. E.	6         Becton, 3808         1           203         Bagwell, 3335         Tess           213         Altex, 414         1           212         Welch, 3260         1           212         Welch, 3260         1           213         Turinington, 4287         1           214         Welch, 3260         1           226         Turinington, 4287         1           216         Berry, 4305, 5206         1           220         Bagwell, 3352         1           216         Gardner St.         220           200         Oberlin Rd.         3352           316         Gardner St.         220           326         Gold, 3132         3           326         Gold, 3229         3	Jurlington, N. C. Jeon Coats, Mex. Aorcester, Mass. Montclair, N. J. Charlotte, N. C. Portsmouth, Va. Richmond, Va. Stony Pt., N. C. Norfolk, Va. Raleigh, N. C. Bronx, N. Y. Baltimore, Md. Ashexville, N. C.

#### STATE COLLEGE RECORD

Name	Classification and Curriculum	Dorm. Room & Box No. or Street No. Home Address
Seatz, L. F.	Grad., Agron. (Soils)	Winchester Idaho
Seley, C. A., Jr.	Fr., M. E. Jr., M. E.	213 Bagwell, 3345 Charlotte, N. C.
Seid, J. M. Seltzer, E. N.	So., FGor.	121 Bagwell, 3331. Brooklyn, N. Y. 22 Becton, 3823 Concord, N. C. Dept. of English Newport News, Va.
Shackford, J. A.	Aud. Sp. (Tex.3	Dept. of English Newport News, Va.
Shapard, E. S. Shapiro, W. II.	Sp. (Tex.3	Box 211, Garner
Sharkey, F. A.	Fr. M E	Box 211, Garner Griffin, Ga. 2210 Hope St. Charlote, N. C. Trailer Camp, 5004 Albemarle, N. C.
Sharpe, E. E.	So., Aero.	114 Wat., 3014 Burlington, N. C.
Shaw, A. T., Jr.	Fr., Arch.	408 N. Wilmington St. Raleigh, N. C.
Sheets, H. D.	Fr. Aero	114 Wat, 3014         Burjington, N. C.           408 N. Wilmington St.         Raleigh, N. C.           502 Jyme, 5896         Chardsdwille, Y. C.           404 Bagwell, 3336         Camp Forrest, Tenn.           304 Bagwell, 3336         Gamp Forrest, Tenn.           305 Hillcrest Rd.         Greenaboro, N.C.           312 Alex, 4185         Fairbarn, M. G.           322 Alex, 4185         Weldon, N.C.           323 Korne, 5866         Shelby, N.C.           321 Alex, 4126         Winston-Salem, N.C.           321 Alex, 4126         Sanburry, N.C.           323 Alex, 638         Sanburry, N.C.           324 Alex, 636         Sanburry, N.C.           325 Alex, 6126         Charlote, N.C.
Shelden, R. E. H	. Jr., C. E.	204 Bagwell, 3336 . Camp Forrest, Tenn.
Shepherd, J. N.,	Jr. Fr., M. E.	303 Hillcrest Rd. Greensboro, N. C.
Sherman, J. W.	Fr. E. E.	322 Alex., 4185 Fairhaven, Mass.
Shetley, T. A.	Fr., Ch. E.	316 Bagwell, 3382 Dallas, N. C.
Shropshire, R. A	., Jr So., Ch. E.	Withdrew N. Wilkesboro, N. C.
Siff, M. S.	So., Tex.	131 Alex. 4126 Winston-Salem, N. C.
Sigmon, W. H.	Fr., Arch.	217 Wat., 3035 Salisbury, N. C.
Simerson, H. Y.	. Sen., Tex. Mfg.	1027 W. South St. Spencer, N. C. Charlots N. C.
Smart, W. W. G.	Jr. Grad. Ag. Ch.	1027 W. South St. Spencer, N.C. 111 Syme, 3511 Charlote, N.C. 309 Bagwell, 3375 Shelby, N.C. 130 Bagwell, 3330 Fayetteville, N.C. 130 Tarlington, 4206 Norwood, N.C. 231 Bagwell, 3363 Aberdeen, N.C. 130 Alay 4131 Hockenserk N.J.
Smith, B. P	Fr., Aero.	130 Bagwell, 3330 Fayetteville, N. C.
Smith, C. G.	Fr., Ag.	109 Turlington, 4206 Norwood, N. C.
Smith, D. R.	Fr., O. E. Fr., Ag.	139 Alex., 4131
Smith, E. C.	So., Ind. E.	1628 Oberlin Rd Norfolk, Va.
Smith, E. D., Jr.	Aud. Sp. (Tex.3) Fr., Aero. Fr., Aero. Fr., Aero. Fr., Aero. Fr., Aero. Fr., Arch. So., (Ch. E. So., (Ch. E. Fr., Ch. E. So., Ch. E. Fr., Ch. E. So., Ch. E. Fr., Ch. E. So., Tex. Fr., Arch. Fr., E. So., Ind. E. So., Ind	123         Differential         Differential           1282         Oberlin Rd.         Norfolk, Va.           111         10282         Charlote N. G.         Charlote N. G.           103         Berry, 8310         Charlote N. G.         Charlote N. G.           105         Becton, 3705         Roberts, N. G.         Coldsboro, N. C.           128         Syme, 3523         Wilmington, N. C.         128         Syme, 3524           128         Wood Internet, 825         Networkson, N. C.         128         Syme, 3523           128         Wood Internet, 825         Networkson, N. C.         127         Turkington, 4273           129         Wood Internet, 825         New York, N. Y.         118         Hecton, N. C.           129         Joachardson, 8203         Allenton, N. C.         128         York, S. G.           1297         Allentor, 8705         Claryton, N. C.         128         Hecton, N. C.           131         Turkington, 4273         Mallerton, N. C.         1297
Smith, H. O.	Fr. E. E.	309 Turlington, 4272 Charlotte, N. C.
Smith, J. E.	So., M. E.	203 Berry, 4310 Charlote, N. C.
Smith, L. M., Jr	Grad., An. Prod.	307 Gold, 3231 Rocky Mount, N. C. 105 Restor 2705 Forest City, N.C.
Smith, P. L.	Fr., Tex.	S <sup>1</sup> / <sub>2</sub> Maiden Lane
Smith, Walton .	So., E.	123 Syme, 3523 Wilmington, N. C.
Smith, Wm. Edw	ard . Fr., E. E. So For	214 Syme, 3546 Dorchester Mass.
Sox, J. L., Jr.		2126 Woodland Ave., Raleigh, N.C.
Spiers, H. R.		133 Becton, 3733 Winston-Salem, N. C.
Spinks, J. D., Jr.		227 Turlington, 4255 New York, N.Y. 211 Turlington 4272 Walkertown N.C.
Stack, V. T., Jr.	So., Ch. E.	.118 Becton, 3718
Stacy, J. E.	So., Ag.	103 Syme, 3503 Allenton, N. C.
Starling C O		125 Becton, 3725 Clayton, N.C. 1907 Alexander Ed Relaigh N.C.
Stewart, J. M.	So. Tex.	130 Woodburn Rd Clifty, Tenn.
Stewart, O. C., J	r. Fr., Ag. Ed.	331 Syme, 3595 Mount Airy, N. C.
Stimpson, J. E., Stockard B B	Jr	304 Berry, 4324 Greensboro, N. C. 135 Turlington, 4230 Thomasville, N. C.
Stout, A. P.	So., Arch, E.	2801 Oberlin Rd
		OF10 Stafford Are Deloigh N C
Streb, W. A.	Fr. Ind. E.	2219 Circle Dr. Raleigh, N. C. 212 W. Morgan St. Morganton, N. C.
		128 Syme, 3528 Savannah, Ga.
Sullivan, H. T.	Fr., M. E.	113 Alex., 4110 Statesville, N. C. 205 4th, 3123 Princeton, N. J.
Summers, L. N.,	Jr	.205 4th, 3123 Princeton, N. J.

Name	Classification and Curriculum	Dorm. Room & Box No. or Street No. Home Address
Surrant, J. G	Fr. Arch E	Trailer Camp, 5333 Ch arlotte, N. C. 203 Syme, 3535 Woodruff, S. C.
Talley, D. M., Jr., Taylor, K. L., Taylor, W. R., Terry, J. M., Thomson, Frank, Jr., Thompson, L. S., Thompson, L. S., Thompson, T. S., Thompson, J. S., Thompson, J. S., Triplet, S. R., Trigdon, W. H., Trosder, H. P., Trosder, G. E., Turington, C. M., Turnage, J. A., Turnage, J. A., Turnbull, R. J., Tyson, M. E., Jr.,	Fr., Gen, E. Fr., E. E. So, Tex, So, Tex, Fr., C. E. Fr., M. E. Fr., C. E. Fr., M. E. Fr., Tex, Fr., M. E. Fr., E. E. Fr., C. E. Fr., C. E. Fr., Tex. Fr., Tex. Fr., Tex. Fr., Tex. Fr., Tex.	130 Woodburn Ed.     San Antenio, Tzexes       130 Syme, 3530     Builington, N. C.       105 Turington, 4204     Builington, N. C.       105 Turington, 4204     Mebane, N. C.       127 Syme, 3527     Mebane, N. C.       128 Syme, 3527     Mebane, N. C.       127 Syme, 3527     Simithfield, N. C.       128 Betton, 7514     Simithfield, N. C.       128 Betton, 7514     Granite Fails, N. C.       128 Betton, 7513     Granite Fails, N. C.       129 Betton, 7513     Gaheboro, N. C.       220 Betton, 7432     South Boston, Ya.       206 Betton, 7432     Elon College, N. C.       206 Betton, 8145     Lumbetton, N. C.       206 Betton, 7432     Betton, 7432       206 Betton, 7432     Buthin, N. C.       2076 South, 2615     Betton, 7432       206 Betton, 7432     Buthin, N. C.       212 Meeton, 3746     Buthin, N. C.       212 Meeton, 3746     Buthin, N. C.
Ocer, M. I.	Spec.	304 Becton, 3772 Istanbul, Turkey
Vaughn, W. O. Veach, E. J. Veach, J. F. Verbeck, A. R. Vick, D. B. Vick, J. W.	So., M. E. So., Ag. So., Gen. E. Fr., For. So., M. E. Fr., C. E.	301 Berry, 4321.     Winston-Salem, N. C.       Cary     Cary, N. C.       220 Syme, 3552.     Thomasville, N. C.       215 Alex, 4144     Staten Island, N. Y.       Academy St., Cary     Sanford, N. C.       206 Gold, 3218     Nashville, N. C.
Wadsworth, T. J. Walcoff, Harry, Ward, M. F. R. Jr. Ward, M. F. R. Jr. Ward, M. F. R. Jr. Ward, M. F. S. Jr. Wardson, J. S. Watson, J. D. Watson, J. D. Weatson, J. D. Webb, L. H. Weeks, J. L. Weeks, J. L. Weinreich, Howard Weiker, C. W. Weiker, C. W. Weis, F. C. Wessell, Hardy. Westbrok, S. E. Westbrok, S. E. Westbrok, S. E. Westbrok, S. E. Weiter, J. H. White, Jack E. Erker. Jr.		<ul> <li>Do Enterprise St. Washington, D.C.</li> <li>28 Shepherd St. Trenton, N.I.</li> <li>125 Alex, 4128 High Point, N.C.</li> <li>126 Syme, 5224 Leakswille, N.C.</li> <li>127 Alex, 4128 High Point, N.C.</li> <li>128 Bagwell, 3371 Rural Hall, N.C.</li> <li>129 Bagwell, 3371 Rural Hall, N.C.</li> <li>120 Bagwell, 3371 Rural Hall, N.C.</li> <li>130 Becton, 3716 Winston-Salem, N.C.</li> <li>130 Becton, 3715 Winston-Salem, N.C.</li> <li>130 Becton, 3715 Winston-Salem, N.C.</li> <li>131 Becton, 3715 Winston-Salem, N.C.</li> <li>232 Bagwell, 3226 New Berr, N.G.</li> <li>233 Bagwell, 3256 New Berr, N.G.</li> <li>233 Bagwell, 3256 New Berr, N.G.</li> <li>234 Bagwell, 3252 New Berr, N.G.</li> <li>235 Bagwell, 3256 Alex, 4157 Lawrence, N.Y.</li> <li>246 Gold, 2216 Albright, W. Va.</li> <li>220 Becton, 378 Sheffield, Alabama Gib Berrest Rd.</li> <li>210 Becton, 3778 Sheffield, Alabama Gib Forest Rd.</li> <li>211 Forest Rd.</li> <li>2154 Alex, 412 Troutman, N.C.</li> <li>211 Welch, 3259 Winston-Salem, N.C.</li> <li>2154 K. Kulz, M.G.</li> <li>211 Hinadale St. Galerji, N.C.</li> <li>221 Handale St. Galerji, N.C.</li> <li>222 Harwell, N.C.</li> <li>234 K. Kalerji, N.C.</li> <li>2355 Treachley, N.C.</li> <li>2355 Rest Rd.</li> <li>2356 Rest Rd.</li> <li>2357 Rores St.</li> <li>2358 Rayeell, N.C.</li> <li>2355 Rayeell, St. Galerji, N.C.</li> <li>2355 Rayeell, N.C.</li> <li>2355 Rayeell, St. Galerji, N.C.</li> <li>2355 Rayeell, N.C.</li> <li>2355 Rayeell, N.C.</li> <li>2355 Rayeell, N.C.</li> <li>2355 Rayeell, St. Galerji, N.C.</li> <li>2355 Rayeell, N.C.</li></ul>

#### STATE COLLEGE RECORD

Name	Classification and Curriculum	Dorm. Room & Box No. or Street No.	Home Address
White, W. E. Whiteside, Elbount, Jr. Whitesides, C. N. Wifenhousz, P. W. Williams, P. M. Williams, I. P. Williams, J. P. Williams, R. G. Williams, R. G. Williams, R. G. Williams, R. G. Williams, R. G. Williams, R. G. Willis, W. Z. Willis, W. Z. J. Willis, W. R. Willis, W. R. Willis, W. R. Willis, W. Z. J. Willis, W. Z. J. Willis, W. J. J. Willis, W. J. J. Willis, W. J. J. Willison, D. H. Wilson, D. H. Wilson, D. J. J. Wilson, D. J. J. Wilson, C. S. J. Wilson, C. S. J. Wilson, W. J. J. Wilson, W. G. Winston, G. B. Word, K. Enneth Wooda, F. W. Wooda, F. W. Wooda, F. W.	Fr., C. E. Fr., E. E. Fr., E. E. Fr., K. E. Fr., C. E. Fr., C. E. Fr., C. E. Fr., C. E. Fr., C. E. Fr., C. E. J. T., E. E. Grad, Ru, Soc. Fr., Acro. E. J. Fr., C. Fr., Acro. J. Fr., C. Fr., Acro. Fr., Acro. Fr., Acro. Fr., Gen. E. Sc., Acro. E. Fr., Gen. E. S., Acro. E. Fr., Gen. E. S., Acro. E. Fr., Gen. E. S., Acro. E. Fr., Gen. E.	6 N. Blootworth St. 201 Syme, 352 203 Chambertain 203 Berry, 425 204 Thambertain 201 Berry, 425 205 Chambertain 201 Berry, 422 201 Beeton, 2786 201 Derry, 422 200 Weich, 2557 Country Club Homes 221 Beeton, 3789 200 Weich, 2557 Country Club Homes 221 Beeton, 3789 200 Weich, 2557 Country Club Homes 221 Beeton, 3789 200 Weich, 2557 Country Club Homes 221 Beeton, 3789 231 Beeton, 3789 233 Beeton, 3767 233 Beeton, 3767 233 Beeton, 4251 235 Syme, 3589 235 Wing, 4356 235 Wing, 4356 246 Alex, 4179 204 Alex, 4179 204 Alex, 4179 204 Alex, 4179	Raleigh, N. C. Cilitton, N. C. Charlotte, N. C. Concord, N. C. Goncord, N. C. Guesord, N. C. Haw River, N. C. Winston Salem, N. C. Winston Salem, N. C. Washnortok, Va. Elm City, N. C. Charlotte, N. C. Charlotte, N. C. Raleigh, N. C. Raleigh, N. C. Raleigh, N. C. Baitmore, M. Bensboro, N. C. Baitmore, M. Bensboro, N. C. Tampa, Pla. Roxboro, N. C. Baitmore, M. C. Carlotte, N. C. Carlotte, N. C.
Yarborough, W. D., Jr. Yarborough, F. L. Yates, H. P. Yotk, W. C., Jr. York, W. C., Jr. York, W. C., Jr. Young, Douglas Young, G. L. Young, W. S. Young, Y. S. Young, W. S. Young, M. A.	. FT., E. E.	Trailer Camp, 5584 12 Enterprise St. 123 Woodburn Rd. 329 Becton, 3797	Greensboro, N. C. Chocowinity, N. C. Louisburg, N. C. Raleigh, N. C. Forest City, N. C. Gibsonville, N. C.
7eckendorf, S. L. Zukerman, B. M.	Sr., Pl. Path. So., For.	105 Syme, 3505 220 Alex., 4149	Newark, N. J. New York, N. Y.