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This general college catalog contains information of particular interest to prospective students and to undergraduates. Students interested in graduate work should request the Graduate School Bulletin from the Office of the Registrar.

The Information section on pages 31 to 62 contains information about admission requirements, expenses, buildings and grounds, housing facilities and ROTC. Educational benefits for veterans and current Selective Service regulations may be found on pages 34 and 35.

The twenty-nine curriculums of the college are listed on pages 89 and 90 and the Schools and their major courses are described in detail beginning on the following pages: Agriculture, page 91; Arts and Sciences, page 102; Chemistry, page 107; Education, page 109; Engineering, page 114; Textiles, page 126.

The courses of the college are listed alphabetically in the Description of Courses section beginning on page 132.

For information on admissions, entrance and placement examinations, and transfer credits write the Director of Admissions. For information on family housing on the campus, write the Manager Housing Project.

New Series, Vol. XXX, January, 1955 No. 1

THE CLEMSON AGRICULTURAL COLLEGE

RECORD

SIXTY-SECOND YEAR

CATALOG NUMBER

1954-1955

Preliminary Announcements 1955-1956

Published quarterly by the Clemson Agricultural College, Clemson, South Carolina. Entered as second-class matter April 25, 1905, at the Post Office at Clemson, South Carolina, under the Act of July 16, 1894, now superseded by the Act of August 24, 1912.

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SUMMER TERM 1954

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Matriculation and Registration	June 15
Classes begin	June 16
Independence Day holiday	July 5
Examinations	August 11, 12
Graduating Exercises	August 14

SESSION 1954-1955

Matriculation, new students	September 6
Registration, new students	September 9
Matriculation and Registration, former students	September 10
Classes begin	September 13
Last day to add a subject	September 25
Last day to drop a subject without penalty	October 9
State Fair holidays begin at 12 noon	October 20
State Fair holidays end at 10 p. m.	October 24
Thanksgiving holidays begin at 1 p. m.	November 24
Thanksgiving holidays end at 10 p. m.	November 28
Christmas holidays begin at 1 p. m.	December 18
Christmas holidays end at 10 p. m.	January 2
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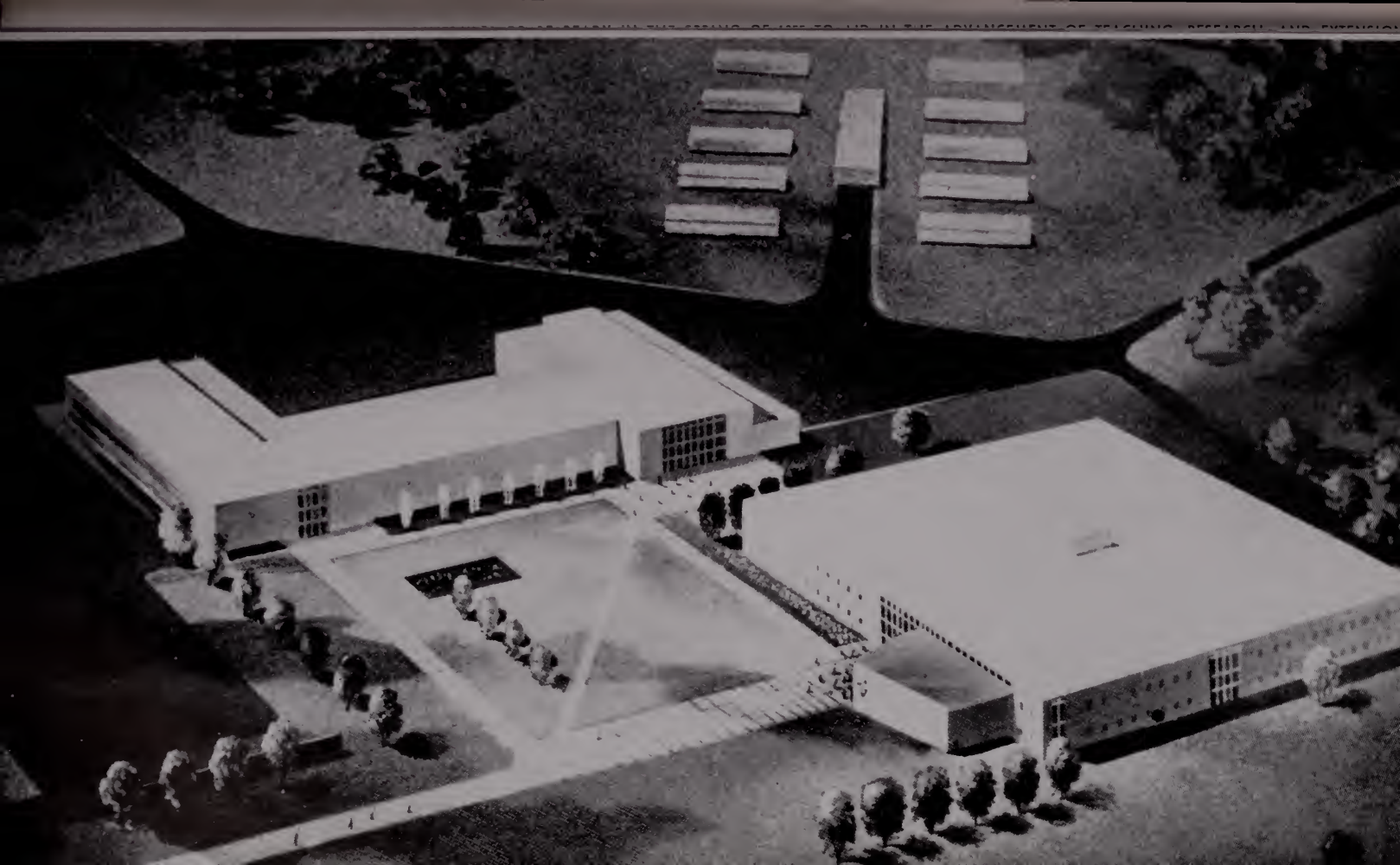
Registration, new students	February 2
Matriculation and Registration, former students	February 3
Classes begin	February 4
Last day to add a subject	February 17
Last day to drop a subject without penalty	March 3
Easter holidays begin at 12 noon	April 7
Easter holidays end at 10 p. m.	April 11
Commencement	June 5

AND ITS EXCELLENT EQUIPMENT ... TION TO AID IN THE STUDY OF CERAMIC ENGINEERING

EVERY CLEMSON STUDENT OCCUPIES THIS MODERN STRUCTURE COMPLETED IN 1951



LIVING QUARTERS FOR STEPHEN GIRARD'S HEIRS

THE LOGGIA AND LOUNGE ARE PARTS OF THE ACTIVITIES CENTER

CLEMSON'S COLORFUL HOMECOMING

SUMMER TERM 1955

Matriculation, new students	June 13
Matriculation and Registration	June 14
Classes begin	June 15
Independence Day holiday	July 4
Examinations	August 10, 11
Graduating Exercises	August 13

SESSION 1955-1956

Matriculation, new students	September 7
Registration, new students	September 12
Matriculation and Registration, former students	September 12, 13
Classes begin	September 14
Last day to add a subject	September 27
Last day to drop a subject without penalty	October 11
State Fair holidays begin at 12 noon	October 19
State Fair holidays end at 10 p. m.	October 23
Thanksgiving holidays begin at 1 p. m.	November 23
Thanksgiving holidays end at 10 p. m.	November 27
Christmas holidays begin at 12 noon	December 21
Christmas holidays end at 10 p. m.	January 3
End of First Semester	January 28
Mid-Year Graduating Exercises	January 29
Matriculation, new students	January 30
Registration, new students	February 1
Matriculation and Registration, former students	February 2
Classes begin	February 3
Last day to add a subject	February 16
Last day to drop a subject without penalty	March 1
Easter holidays begin at 12 noon	March 29
Easter holidays end at 10 p. m.	April 2
Commencement	June 3

1955

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THE CLEMSON AGRICULTURAL COLLEGE RECORD

PART I

Personnel

PART I—Personnel

BOARD OF TRUSTEES

LIFE MEMBERS

R. M. Cooper, *Chairman*.....Wisacky, Lee County
Paul Sanders.....Ritter, Colleton County
T. B. Young.....Florence, Florence County
J. F. Byrnes.....Spartanburg, Spartanburg County
Edgar A. Brown.....Barnwell, Barnwell County
Charles E. Daniel.....Greenville, Greenville County
Winchester Smith.....Williston, Barnwell County

TERM EXPIRES 1956

F. E. Cope.....Cope, Orangeburg County
T. W. Thornhill.....Charleston, Charleston County
J. B. Douthit, Jr.....Pendleton, Anderson County

TERM EXPIRES 1958

Ben T. Leppard.....Greenville, Greenville County
J. F. McLaurin.....Bennettsville, Marlboro County
W. A. Barnette.....Greenwood, Greenwood County

A. J. Brown, *Secretary*.....Clemson

STANDING COMMITTEES OF BOARD

Agricultural: Douthit, *Chairman;* Young, Sanders, Cope, Barnette, McLaurin, Smith.

(This committee is also the Veterinary Committee, the Crop Pest Commission, and the Experiment Station Board of Control.)

Executive: Daniel, *Chairman*; Young, Byrnes, Thornhill, Leppard.

Fertilizer: Cope, *Chairman*; Barnette, Sanders, Douthit, McLaurin.

Finance: Brown, *Chairman;* Douthit, Thornhill, McLaurin, Smith.

STATED MEETINGS OF BOARD

3:00 p. m.—Third Friday in March
3:00 p. m.—Third Friday in June
3:00 p. m.—Fourth Monday in October

BOARD OF VISITORS
1954

R. S. Meadowcroft ..... Charleston
(Hold-over Member)
Ben Adams ..... Union
E. H. Agnew ..... Columbia
J. W. Gaston ..... Duncan
Ben Gramling ..... Inman
F. S. Hanckel ..... Charleston
Lawrence Hester ..... Mt. Carmel
R. M. Jefferies ..... Walterboro
J. C. Kearse ..... Bamberg
B. D. McDonald ..... Kershaw
J. W. Neely ..... Hartsville
C. N. Plowden ..... Summerton
J. A. Spruill, Jr. ..... Cheraw

OFFICERS CLEMSON ALUMNI CORPORATION
1954-1955

President

Frank J. Jervey, '14 ..... Clemson, S. C.

First Vice-President

J. A. Milling, '27 ..... Indianapolis, Ind.

Second Vice-President

C. C. Coward, '19 ..... Baltimore, Md.

Secretary-Treasurer

W. T. Cox, '39 ..... Clemson, S. C.

Assistant Treasurer

A. J. Brown, '12 ..... Clemson, S. C.

Secretary Emeritus

J. H. Woodward, Ex '03 ..... Clemson, S. C.

Board of Directors

Districts	*Term Expires*	*Name*	*Address*
1	—1957—	F. B. Schirmer, '34	Clemson, S. C.
2	—1955—	T. S. Buie, '17	Spartanburg, S. C.
3	—1956—	W. J. Neely, '32	Rock Hill, S. C.
4	—1957—	W. G. Yarborough, '34	Edgefield, S. C.
5	—1955—	R. A. Easterling, '07	Denmark, S. C.
6	—1956—	J. R. White, '42	Walterboro, S. C.
7	—1957—	P. Miley, '27	Charleston, S. C.
8	—1955—	W. G. DesChamps, '38	Bishopville, S. C.
9	—1956—	J. A. Milling, '27	Indianapolis, Ind.
10	—1957—	C. C. Coward, '19	Baltimore, Md.
11	—1955—	H. T. Prosser, '12	New Orleans, La.
12	—1956—	J. M. Wofford, '18	Milford, Kan.
13	—1957—	W. L. Kinard, '44P ('47)	Atlanta, Ga.
14	—1955—	J. B. Cornwell, '43	Bessemer City, N. C.
15	—1956—	C. L. Kehew, '25	Waban, Mass.
At Large	—1957—	D. M. Camp, '47	Bakersfield, Calif.
At Large	—1955—	William Folk, Jr., '37	Greensboro, N. C.
At Large	—1956—	F. J. Jervey, '14	Clemson, S. C.

OFFICERS OF ADMINISTRATION

ROBERT FRANKLIN POOLE, PH.D., D.SC., LL.D., LITT.D.
President

RICHARD JOSEPH WERNER, B.S., COLONEL, INFANTRY, U. S. ARMY
Commandant and Professor of Military Science and Tactics

ANDREW JOSEPH BROWN, B.S.
Treasurer, Secretary of the Board of Trustees

*JAMES CORCORAN LITTLEJOHN, B.S., D.ENG.
Business Manager

GRAHAM HAMILTON HILL
Acting Business Manager

LEE W. MILFORD, M.D.
Surgeon

GUSTAVE ERNEST METZ, B.S., M.A.
Registrar

MILTON DYER FARRAR, PH.D.
Dean of Agriculture

OLEN BRANFORD GARRISON, PH.D.
Director of Agricultural Experiment Station

JESS WILLARD JONES, PH.D.
Director of Agricultural Teaching

DAVID WAYNE WATKINS, B.S., M.A.
Director of Extension

FRANCIS MARION KINARD, A.B., A.M., LITT.D.
Dean, School of Arts and Sciences

DAVID WISTAR DANIEL, A.M., LITT.D.
Dean Emeritus, School of Arts and Sciences

HOWARD LOUIS HUNTER, PH.D.
Dean, School of Chemistry and Geology

FRED HARVEY HALL CALHOUN, PH.D.
Dean Emeritus, School of Chemistry and Geology

WILLIAM HAROLD WASHINGTON, B.S., M.S.
Dean, School of Education

JAMES HAGOOD SAMS, JR., PH.D.
Dean, School of Engineering

SAMUEL BROADUS EARLE, A.M., M.E., LL.D.
Dean Emeritus, School of Engineering
Director Emeritus, Engineering Experiment Station

HOWARD EMMITT GLENN, B.S. in C.E., C.E.
Vice-Director, Engineering Experiment Station

HUGH MONROE BROWN, PH.D.
Dean, School of Textiles

HUBERT JUDSON WEBB, PH.D.
Dean, Graduate School

**RICHARD WILLIAM CARTER, D.V.M.
Director State-Federal Livestock Disease Eradication Program

JOHN WALLACE GORDAN GOURLAY, B.A., B.L.S., A.M.L.S.
Director of the Library

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* Retired October 1, 1954.

** Office: Sandhill Station, Columbia, S. C.
Mailing Address: P. O. Box 1174, Columbia, S. C.

FACULTY *

ROBERT FRANKLIN POOLE
President
Ph.D., Rutgers University; D.Sc., Clemson Agricultural College; LL.D., University of South Carolina; Litt.D., Furman University

ABEL, ARTHUR HAROLD, *Instructor in English.*
A.B., 1947, M.A., 1949, State University of Iowa; Graduate Work, University of Pennsylvania, 1949-1951, 1952-1954.

ADAMS, GREY LITTELTON, *Assistant Professor of Air Science.*
First Lieutenant, United States Air Force; A.B., University of North Carolina, 1949; Air Tactical School, 1949.

ADAMS, LEONARD CALDWELL, *Associate Professor of Electrical Engineering.*
B.E.E., Clemson Agricultural College, 1943; M.S., Oklahoma A & M College, 1950; Graduate Work, University of Florida, 1951-1953, Summer, 1954.

ANDERSON, GRANT WILLIAM, *Associate Professor of Zoology and Veterinary Medicine.*
B.S., D.V.M., Iowa State College, 1932; M.S., Virginia Polytechnic Institute, 1934.

ARMSTRONG, GEORGE MILLER, *Head of Botany and Bacteriology Department; Professor of Botany and Bacteriology.*
B.S., Clemson Agricultural College, 1914; M.A., University of Wisconsin, 1917; Ph.D., Washington University, 1921.

ARMSTRONG, PERCY LAMAR, *Assistant Professor of Mathematics.*
A.B., 1919, M.A., 1920, Southwestern University.

AULL, GEORGE HUBERT, *Head of Agricultural Economics and Rural Sociology Department; Professor of Agricultural Economics.*
B.S., Clemson Agricultural College, 1919; M.S., University of Virginia, 1928; Ph.D., University of Wisconsin, 1937.

AUSTELL, JOSEPH ROBERTS, *Assistant Professor of Air Science.*
Captain, United States Air Force; B.S., Clemson Agricultural College, 1941; Armament School, 1942; Chemical Warfare School, Roylston, England, 1942; Academic Instructors School, 1951; Armament School, 1951; Graduate work, Clemson Agricultural College, 1951-1954.

BAIR, GEORGE ELDRIDGE, *Assistant Professor of English.*
B.A., Haverford College, 1947; M.A., 1948, Ph.D., 1951, University of Pennsylvania.

BALL, WALTER LEE, *Assistant Professor of Electrical Engineering.*
B.E.E., Clemson Agricultural College, 1949; Graduate Work, Clemson Agricultural College, 1952-1953.

BALLENTINE, THOMAS FRANKLIN, *Instructor in Knitting.*
B.S., Clemson Agricultural College, 1954.

BANISTER, ROBERT ALLEN, *Assistant Professor of Drawing.*
B.S., Clemson Agricultural College, 1939; M.S., Bradley University, 1949.

BAUKNIGHT, LEHMAN MEYNARDIE, JR., *Associate Professor of Agricultural Economics.*
B.S., 1935, M.S., 1949, Clemson Agricultural College.

BELL, MARSHALL CORNETT, *Associate Professor of Mathematics.*
A.B., 1933, M.A., 1936, University of North Carolina.

BENNETT, JOHN ZEBULUN,** *Assistant Professor of English.*
A.B., 1947, M.A., 1948, Vanderbilt University; Graduate Work, University of Texas, 1949-1950; University of North Carolina, Summers, 1951-1954.

BERNE-ALLEN, ALLAN, *Head of Chemical Engineering Department; Professor of Chemical Engineering.*
B.S.E., University of Michigan, 1924; Ch.E., 1933, Ph.D., 1936, Columbia University.

BIGGS, GILBERT WARREN, *Associate Professor of Economics.*
B.S., 1946, M.S., 1947, Virginia Polytechnic Institute; Ph.D., Cornell University, 1953.

* Faculty list compiled October 1, 1954.
** On leave.

BOLEN, CLAUDE WALDRON, *Professor of History and Government.*
A.B., Emory and Henry College, 1931; M.A., 1935, Ph.D., 1941, Duke University.

BOND, JOHN HOWARD, *Associate Professor of Bacteriology.*
B.S., 1948, M.S., 1949, Louisiana State University; Graduate Work, University of Texas, 1949-1952.

BOOKER, LEONARD ROWLAND, *Itinerant State Teacher-Trainer Industrial Education.*
B.S., Clemson Agricultural College, 1925; M.S., University of Tennessee, 1932; Graduate Work, Clemson Agricultural College, Summers, 1938, 1939.

BOWEN, WILLIAM CLAYTON, *Associate Professor of Vocational Education.*
B.S., Clemson Agricultural College, 1932; M.S., Colorado A & M College, 1940.

BOYD, VIRLYN ALEXANDER, *Associate Professor of Rural Sociology.*
B.S.A., Berry College, 1941; M.S.A., University of Kentucky, 1948.

BOYKIN, JAMES DECATUR, *Instructor in Zoology.*
B.S., 1950, M.S., 1954, Clemson Agricultural College.

BOYKIN, WILLIAM BAYNARD SIMONS, *Associate Professor of Agronomy.*
B.S., Clemson Agricultural College, 1950; Ph.D., University of Wisconsin, 1954.

BRADBURY, DOUGLAS WILSON, *Associate Professor of Drawing.*
B.M.E., Clemson Agricultural College, 1940; Graduate Work, Virginia Polytechnic Institute, Summer, 1948.

BRADLEY, MARK EDWARD, *Head of English Department, Emeritus; Professor Emeritus of English.*
A.B., Erskine College, 1898; Graduate Work, University of Chicago, Summers, 1904, 1910; University of North Carolina, Summer, 1927.

BRANDT, GRAYDON WILLIAM, *Associate Professor of Dairying.*
B.S., Ohio State University, 1936; M.S., University of Nebraska, 1938; Graduate Work, Ohio State University, 1937-1941.

BRANNON, CARROLL CLEVELAND, *Associate Professor of Dairying.*
B.S., Clemson Agricultural College, 1934; Graduate Work, Clemson Agricultural College, 1949.

BREAZEALE, ROSCOE JEFFERSON, *Instructor in Textile Chemistry and Dyeing.*
B.S., 1947, M.S., 1950, University of South Carolina.

BREWSTER, JAMES PENDLETON, *Professor of Mathematics.*
A.B., 1935, M.A., 1939, Ph.D., 1952, Duke University.

BROCK, DEWEY CLIFTON, *Associate Professor of Industrial Arts.*
B.S., University of South Carolina, 1925; Graduate Work, Clemson Agricultural College, 1947-1949.

BROCK, JOHN LELAND, *Head of Industrial Education Department; Professor of Vocational Education.*
B.S., Clemson Agricultural College, 1927; M.A., George Peabody College, 1936.

BROWN, CHARLES QUENTIN, *Instructor in Geology.*
B.S., 1951, M.S., 1953, University of North Carolina.

BROWN, HUGH MONROE, *Dean, School of Textiles.*
B.A., 1920, M.A., 1921, University of Denver; Ph.D., University of California, 1927.

BROWN, JONAS WILLIAM, *Assistant Professor of Mathematics.*
B.S., North Carolina State College, 1931; M.A., Duke University, 1948.

BROWNLEY, FLOYD IRVING, JR., *Professor of Chemistry.*
B.S., Wofford College, 1939; M.S., Virginia Polytechnic Institute, 1941; Ph.D., Florida State University, 1952.

BURTNER, FRANK ALAN, *Associate Professor of Sociology.*
B.A., M.A., University of Texas, 1939; Graduate Work, University of Texas, Summer, 1940; Harvard University, Summer, 1941; University of North Carolina, 1944; Yale University, 1946-1947; University of North Carolina, 1947-1948.

BYARS, EDWARD FORD, *Assistant Professor of Mechanics and Hydraulics.*
B.M.E., 1946, M.C.E., 1953, Clemson Agricultural College.

CALHOUN, FRED HARVEY HALL, *Dean Emeritus, School of Chemistry and Geology; Professor Emeritus of Geology and Mineralogy.*
B.S., 1898, Ph.D., 1902, University of Chicago.

CAMPBELL, THOMAS ALEXANDER, JR., *Associate Professor of Textiles.*
B.S., Clemson Agricultural College, 1928; M.Ed., Pennsylvania State College, 1947.

CARODEMOS, PETER, *Professor of Chemistry.*
B.S., Tufts College, 1922; Ph.D., Cornell University, 1927; Harvard University, Summer, 1932; Massachusetts Institute of Technology, Summers, 1941, 1949.

CARPENTER, CHARLES HAROLD, *Assistant Professor of History and Government.*
A.B., Lenoir-Rhyne College, 1945; M.A., George Peabody College, 1946; Graduate Work, University of Chicago, 1948—1949; University of North Carolina, 1949-1950, Summers, 1949, 1950.

CARPENTER, KENNETH EUGENE, *Assistant Professor of Air Science.*
Lieutenant Colonel, United States Air Force; B.S., University of Illinois, 1936; M.A., Ohio State University, 1937; Graduate Work, New York University, 1938-1939, Summers, 1946, 1949, 1950; Academic Instructors' School, 1953.

CARSON, ROBERT GORDON, JR., *Associate Professor of Textiles.*
B.S., Clemson Agricultural College, 1939; M.S., Georgia Institute of Technology, 1950; Ph.D., University of Michigan, 1953.

CARTEE, EUGENE FRANKLIN, *Professor of Weaving and Designing.*
B.S., Clemson Agricultural College, 1925; M.S., University of Tennessee, 1937; Graduate Work, Pennsylvania State College, Summer, 1941.

CARTER, CLIFTON WALKER, *Assistant Professor of Drawing.*
B.S., Clemson Agricultural College, 1933.

CASKEY, CLAIRE OMAR, *Assistant Professor of English.*
B.S., Appalachian State Teachers College, 1947; A.M., Duke University, 1948; Graduate Work, Duke University, Summer, 1949; University of North Carolina, 1951-1954.

CAVNESS, WILLIAM DARREL, *Assistant Professor of Military Science and Tactics.*
Lieutenant Colonel, Infantry, United States Army; B.S., Oklahoma A & M College, 1938; Ground Course, Command and General Staff School, 1946; Advanced Infantry Officers Course.

CLARKE, ELWYN LORENZO, *Head of Civil Engineering Department, Emeritus; Professor Emeritus of Civil Engineering.*
B.S. in C.E., 1902, C.E., 1931, University of Illinois.

COCHRAN, JAMES HARVEY, *Head of Entomology and Zoology Department; Professor of Entomology and Zoology.*
B.S., Clemson Agricultural College, 1935; M.S., 1936, Ph.D., 1946, Iowa State College.

COHEN, HENRY RUSSELL, *Assistant Coach.*
B.S., Vanderbilt University, 1917.

COKER, EDWARD CALEB, JR., *Associate Professor of Mathematics.*
B.S., University of South Carolina, 1928; M.A., University of North Carolina, 1930; Graduate Work, Brown University, 1932; University of Chicago, Summers, 1936, 1938, 1939; University of Chicago, 1939-1940.

COLLINGS, GILBEART HOOPER, *Professor of Soils.*
B.S., Virginia Polytechnic Institute, 1915; M.S., University of Illinois, 1917; Ph.D., Rutgers University, 1925.

COOK, JAMES CLINTON, JR., *Acting Head of Mechanical Engineering Department; Professor of Mechanical Engineering.*
B.M.E., 1939, M.M.E., 1951, Clemson Agricultural College; M.S.E., University of Michigan, 1953.

COOK, JAMES RUSSELL, *Associate Professor of Animal Husbandry.*
B.S., Texas Agricultural and Industrial College, 1939; M.S., Iowa State College, 1943.

COOPER, HERBERT PRESS, *Professor of Agronomy.*
B.S., Clemson Agricultural College, 1911; M.S., University of Wisconsin, 1916; Ph.D., Cornell University, 1922.

COOPER, JAMES BRONAUGH, *Associate Professor of Poultry Husbandry.*
B.S., 1935, M.S., 1938, University of Kentucky.

COUCH, JAMES HOUSTON, *Assistant Professor of Forge and Foundry.*
B.S., 1941, M.S., 1954, Clemson Agricultural College.

COX, HEADLEY MORRIS, *Acting Head of English Department; Professor of English.*
A.B., 1937, M.A., 1939, Duke University; Graduate Work, University of Pennsylvania, 1948-1950.

CRAIG, JAMES TELFORD, *Assistant Professor of Agricultural Engineering.*
B.S., Clemson Agricultural College, 1951.

CRAWFORD, GEORGE WOLF, *Associate Professor of Physics.*
B.S., 1947, M.A., 1949, Ph.D., 1951, University of Texas.

CROUCH, SYDNEY JAMES LEONHARDT, *Head of Religion Department; Professor of Religion.*
Scotch College, Western Australia, 1910; Biblical Seminary, New York, 1915; B.D., Hartford Theological Seminary, 1922; Th.D., Union Theological Seminary, Richmond, Virginia, 1937.

CUMMINS, WILLIAM KNEEDLER, *Assistant Professor of Air Science.*
Lieutenant Colonel, United States Air Force; B.S., United States Military Academy, 1941; Advanced Anti-Aircraft Artillery School, 1943; Russian Division, Army Language School, 1948; Air Command and Staff School, 1953; Academic Instructor Course, 1954.

CURTIS, DONALD DEXTER, *Head of Mechanics and Hydraulics Department; Professor of Mechanics and Hydraulics.*
B.E., 1919, M.S., 1931, University of Iowa.

DANIEL, DAVID WISTAR, *Dean Emeritus, School of Arts and Sciences; Professor Emeritus of English.*
A.B., Wofford College, 1892; M.A., Vanderbilt University, 1901; Litt.D., Wofford College, 1914.

DAVIS, CECIL COOK, *Assistant Professor of Economics.*
B.B.A., 1947, M.B.A., 1949, University of Georgia; Graduate Work, University of North Carolina, Summer, 1950.

DAVIS, ROBERT EDWARD, *Assistant Professor of Military Science and Tactics.*
Captain, Signal Corps, United States Army; University of Illinois; RCA and Western Union Communications School, 1948; Signal Corps Officers' Advanced Course, 1954.

DEAN, JORDAN ARTHUR, *Associate Professor of French and Spanish.*
A.B., Wofford College, 1933; M.A., Vanderbilt University, 1934; Graduate Work, University of Illinois, 1937.

DELOACH, WILLIAM MEINERT, *Assistant Professor of Military Science and Tactics.*
Captain, Quartermaster Corps, United States Army; B.C.S., University of Georgia, 1949; Quartermaster Officers' Candidate School, Fort Lee, Virginia, 1943; Associate Basic Course, Quartermaster School, 1950; Associate Company Officers Course, Quartermaster School, 1952.

DINWIDDIE, JOSEPH GRAY, JR., *Associate Professor of Chemistry.*
B.S., Randolph-Macon College, 1942; Ph.D., University of Virginia, 1949.

DOYLE, ROBERT HUGH, *Instructor in Drawing and Designing.*
B.S. in C.E., University of Kentucky, 1952.

DUNAVAN, DAVID, *Associate Professor of Entomology and Zoology.*
B.S., Oregon Agricultural College, 1925; M.S., Iowa State College, 1928; Graduate Work, Cornell University, Summers, 1929, 1931, 1935.

DUNKELBERG, GEORGE HAMLIN,* *Associate Professor of Agricultural Engineering.*
B.S., 1937, M.S., 1938, Iowa State College.

EARLE, SAMUEL BROADUS, *Dean Emeritus, School of Engineering; Professor Emeritus of Mechanical Engineering; Director Emeritus, Engineering Experiment Station.*
A.B., 1898, A.M., 1899, Furman University; M.E., Cornell University, 1902; LL.D., Furman University, 1932.

EDWARDS, JAMES LEON, *Associate Professor of Mechanical Engineering.*
B.M.E., Clemson Agricultural College, 1941; M.S., Pennsylvania State College, 1951.

EFLAND, THOMAS DANIEL,* *Assistant Professor of Knitting.*
B.S., North Carolina State College, 1949.

ELLNER, ANTHONY, JR., *Associate Professor of Architecture.*
A.B., Brooklyn College, 1939; M.A., Columbia University, 1940; B.Arch., Yale University, 1948.

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* On leave.

ELROD, ALVON CREIGHTON, *Instructor in Mechanics.*
B.M.E., 1949, M.M.E., 1951, Clemson Agricultural College.

EPTING, CARL LAFAYETTE, *Acting Head of Social Sciences Department; Professor of History and Government.*
A.B., Newberry College, 1921; A.M., University of South Carolina, 1924; Graduate Work, University of South Carolina, 1926, 1928, 1932-1934, 1953; University of North Carolina, Summers, 1927, 1928.

FAIN, CHARLES CLIFFORD, *Instructor in Ceramic Engineering.*
B.Cr.En., Clemson Agricultural College, 1954.

FARRAR, MILTON DYER, *Dean of Agriculture.*
B.S., Iowa State College, 1925; M.S., South Dakota State College, 1927; Ph.D., Iowa State College, 1933.

FELDER, HERMAN MCDONALD, JR., *Assistant Professor of English.*
A.B., Wofford College, 1930; M.A., Vanderbilt University, 1937; Graduate Work, Duke University, Summers, 1933, 1934, 1946; University of North Carolina, Summer, 1953.

FERNOW, BERNHARD EDWARD, *Professor of Mechanical Engineering.*
A.B., 1904, M.E., 1906, Cornell University.

FERRIER, WALLACE THOMAS, *Professor of Agricultural Economics.*
A.B., Tarkio College, 1910; M.S., Colorado State College, 1930; Ph.D., University of Minnesota, 1938.

FORD, JOHN MARTIN, *Assistant Professor of Civil Engineering.*
B.C.E., Clemson Agricultural College, 1946; M.S., University of North Carolina, 1950.

FREEMAN, EDWIN JONES, *Head of Industrial Engineering Department; Professor of Industrial Engineering and Metallurgy.*
B.S., 1922, M.E., 1939, Clemson Agricultural College; M.S., Virginia Polytechnic Institute, 1942.

GAGE, GASTON, *Head of Yarn Manufacturing Department, Professor of Carding and Spinning.*
B.S., Clemson Agricultural College, 1921; M.Ed., Pennsylvania State College, 1941.

GENTRY, JOHN BAKER, JR., *Professor of Education.*
B.S., Furman University, 1932; Ed.M., Duke University, 1939; Graduate Work, University of Georgia, Summers, 1949, 1950, 1951.

GILES, EDWARD STARKEY, *Assistant Professor of Electrical Engineering.*
B.S., Clemson Agricultural College, 1937.

GILLESPIE, JOHN WILLIAM, *Instructor in Chemistry.*
B.S., 1948, M.S., 1954, Clemson Agricultural College.

GLENN, HOWARD EMMITT, *Vice-Director, Engineering Experiment Station, Professor of Civil Engineering.*
B.S. in C.E., 1922, C.E., 1927, University of Kentucky; Graduate Work, Illinois Institute of Technology, Summer, 1940.

GLENN, JOE DAVIS, JR., *Assistant Professor of Civil Engineering.*
B.C.E., Clemson Agricultural College, 1942; Graduate Work, University of Tennessee, 1947-1948.

GODLEY, WILLIE CECIL, *Associate Professor of Animal Husbandry.*
B.S., Clemson Agricultural College, 1943; M.S., North Carolina State College, 1949; Graduate Work, North Carolina State College, 1951-1953.

GOLDGAR, BERTRAND ALVIN,* *Assistant Professor of English.*
B.A., 1948; M.A., 1949, Vanderbilt University; Graduate Work, Columbia University, Summer, 1950.

GOODALE, BEN EDMUND, *Professor of Dairying.*
B.S., 1922; M.S., 1929, Iowa State College.

GOODIN, CURTIS PAUL, *Assistant Professor of Electrical Engineering.*
B.S., University of Kentucky, 1948; Graduate Work, Georgia Institute of Technology, 1952-1953, Summer, 1954.

GRAHAM, DEE MCDONALD, *Assistant Professor of Dairying.*
B.S., Mississippi State College, 1950; M.S., 1951, Ph.D., 1954, Iowa State College.

* On leave.

GRAHAM, JOHN SMITH, *Assistant Professor of Research and Testing.*
B.S., Clemson Agricultural College, 1943.

GRAVES, CHARLES PARKER, *Instructor in Architecture.*
B.S., 1953, B.Arch., 1954, Georgia Institute of Technology.

GREEN, CLAUD BETHUNE, *Professor of English.*
B.A., 1935, M.A., 1938, University of Georgia; Ph.D., Duke University, 1953.

GREEN, JOSEPH COLEMAN, *Professor of English.*
B.A., 1920, M.A., 1924, Ph.D., 1937, Vanderbilt University.

GUNNIN, EMERY AARON, *Acting Head of Architecture Department; Assistant Professor of Architecture.*
B.S., Clemson Agricultural College, 1950; Graduate Work, Clemson Agricultural College, 1950-1953.

GUNTHER, GEORGE WILLIAM, *Assistant Professor of Architecture.*
B.F.A., Washington University, 1948; M.F.A., Indiana University, 1951.

HAMILTON, MAX GREENE, *Associate Professor of Horticulture.*
B.S., North Carolina State College, 1949; Ph.D., Cornell University, 1953.

HAMMOND, ALEXANDER FRANCIS, *Assistant Professor of Drawing and Designing.*
B.E.E., Clemson Agricultural College, 1949.

HANDLIN, DALE LEE, *Assistant Professor of Animal Husbandry.*
B.S., Kansas State College, 1951; M.S., Texas A & M College, 1954.

HARDEE, AMAYNA MAYNOR,* *Assistant Professor of French and Spanish.*
A.B., 1947, M.A., 1948, University of South Carolina; Graduate Work, University of North Carolina, Summer, 1949; University of California, Los Angeles, 1951-1955.

HARDEN, JOHN CHARLES, JR., *Assistant Professor of Mathematics.*
B.S., Mississippi College, 1947; M.A., University of Tennessee, 1949.

HEYN, ANTONIUS NICOLAAS JOHANNES, *Professor of Natural and Synthetic Fibers.*
B.S., and M.S., 1929, Ph.D., 1931, Utrecht University; College de France, 1932-1933.

HICKS, ERNEST HENRY, *Assistant Professor of Military Science and Tactics.*
Lieutenant Colonel, Ordnance Corps, United States Army; B.S., 1926, M.A., 1929, George Peabody College; Ordnance Officers' Basic Course, 1942; Advanced Ordnance Officers' Course, 1943.

HIND, ALFRED THOMAS, JR., *Professor of Mathematics.*
A.B., 1934, M.A., 1936, Emory University; Ph.D., University of Georgia, 1952.

HOBSON, JAMES HARVEY, *Professor of Chemistry.*
B.S., University of South Carolina, 1939; M.A., 1947, Ph.D., 1953, Emory University.

HODGE, WYLIE FORT DUPRE, *Associate Professor Emeritus of Architecture.*
Clemson Agricultural College, 1907-1909; New York School of Fine and Applied Arts, 1915-1916, 1920-1921; R.R., Gallerie di Firenze, Italy, Summer, 1931.

HODGES, BAXTER HOWARD, *Assistant Professor of Chemistry.*
B.S., Clemson Agricultural College, 1933; Graduate Work, University of North Carolina, Summers, 1935-1939; Virginia Polytechnic Institute, Summers, 1940-1942.

HOLT, ALBERT HAMILTON, *Assistant Professor of English.*
A.B., 1939, M.A., 1947, University of North Carolina; Graduate Work, Vanderbilt University, 1952-1953, Summers, 1951, 1954.

HOWARD, FRANK JAMES, *Director of Athletics and Head Coach.*
B.S., University of Alabama, 1931.

HUBBARD, JULIUS CLIFFORD, JR., *Associate Professor of Weaving.*
B.S., Clemson Agricultural College, 1942; M.S., Georgia Institute of Technology, 1950.

HUDSON, WILLIAM GARRAUX, *Assistant Professor of Mechanical Engineering.*
B.M.E., Clemson Agricultural College, 1946.

HUFF, LORENZ DITMAR, *Head of Physics Department; Professor of Physics.*
A.B., 1927, M.S., 1928, Oklahoma University; Ph.D., California Institute of Technology, 1931.

HUGHES, DAVIS GREGORY, *Assistant Professor of Drawing.*
B.S., Clemson Agricultural College, 1939; M.Ed., University of Georgia, 1952.

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* On leave.

HUMPHREYS, HAROLD WESLEY, *Assistant Professor of Mechanics and Hydraulics.*
B.C.E., North Carolina State College, 1943; M.S., State University of Iowa, 1950.

HUNTER, HOWARD LOUIS, *Dean, School of Chemistry and Geology; Professor of Chemistry.*
B.Chem., 1925, Ph.D., 1928, Cornell University; Massachusetts Institute of Technology, Summer, 1939.

HUNTER, JOHN HENRY, *Assistant Professor of Civil Engineering.*
B. of C.E., University of Virginia, 1944; M.S. in CE., Harvard University, 1949; Graduate Work, Columbia University, Summers, 1951, 1953; University of Illinois, Summer, 1952.

HURST, VICTOR, *Associate Professor of Dairying.*
B.S., 1938, M S., 1940, Rutgers University; Ph.D., University of Missouri, 1948.

JAMESON, LAKE HUGH, *Assistant Professor of Textiles.*
B.S., Clemson Agricultural College, 1942; M.S., North Carolina State College, 1952.

JOHNSON, RALPH BERNARD, *Assistant Professor of Mathematics.*
A.B., Gustavus Adolphus College, 1940; M.A., Teachers College, Columbia University, 1941; M.A., University of Tennessee, 1949; Graduate Work, University of Tennessee, Summer, 1949; George Peabody College, Summers, 1951-1954.

JONES, CHAMP MCMILLIAN, *Associate Professor of Agronomy.*
B.S., Clemson Agricultural College, 1939; M.S., Cornell University, 1940; Ph.D., Michigan State College, 1952.

JONES, JESS WILLARD, *Director of Agricultural Teaching.*
B.S., Clemson Agricultural College, 1937; M.S., 1938, Ph.D., 1953, Cornell University.

JONES, MORRIS WILEY, *Assistant Professor of Electrical Engineering.*
B.E.E., 1947, M.E.E., 1950, Clemson Agricultural College.

JONES, ROBERT MORGAN, *Assistant Coach.*
B.S., Clemson Agricultural College, 1930.

KELLY, LOUIS GRANT, *Associate Professor of Mathematics.*
B.S., Clemson Agricultural College, 1937; M.S., University of Minnesota, 1949; Graduate Work, University of Minnesota, 1949-1950.

KENDRICK, NISBET STOVALL, JR., *Assistant Professor of Physics.*
B.S., North Georgia College, 1949; M.S., Emory University, 1950.

KENNEDY, JOHN LUTHER, JR., *Assistant Professor of Military Science and Tactics.*
Captain, Infantry, United States Army; B.S., United States Military Academy, 1945; Basic Armored Officers' Course, 1945; Advanced Infantry Officers' Course, 1953.

KERSEY, ROBERT NOEL, JR., *Assistant Professor of Electrical Engineering.*
B.S. in E.E., Georgia School of Technology, 1942.

KINARD, FRANCIS MARION, *Dean, School of Arts and Sciences; Professor of English.*
A.B., Wofford College, 1923; A.M., University of North Carolina, 1929; Graduate Work, University of North Carolina, Summer, 1930; Litt.D., Wofford College, 1944.

KING, WILLIS ALONZO, *Professor of Dairying.*
B.S., Clemson Agricultural College, 1936; M.S., 1938, Ph.D., 1940, University of Wisconsin.

KIRKLEY, FRANCIS EDWARD, *Associate Professor of Vocational Education.*
B.S., Clemson Agricultural College, 1929; M.S., University of Kentucky, 1951.

KIRKWOOD, CHARLES EDWARD, JR., *Associate Professor of Mathematics.*
A.B., Lynchburg College, 1935; M.S., University of Georgia, 1937; Graduate Work, University of North Carolina, Summer, 1939; Duke University, Summer, 1940.

KRAMER, EDWARD CHOPIN, *Instructor in Chemistry.*
B.S., Wagner College, 1950; Graduate Work, Virginia Polytechnic Institute, 1952-1954.

LAGRONE, JOHN WALLACE, *Associate Professor of Mathematics.*
B.S., Clemson Agricultural College, 1932; M.A., Vanderbilt University, 1934; Graduate Work, University of Kentucky, 1939-1940.

LAMASTER, JOSEPH PAUL, *Head of Dairy Department; Professor of Dairying.*
B.S., 1913, M.S., 1928, University of Kentucky.

LANDER, ERNEST MCPHERSON, JR., *Professor of History and Government.*
A.B., Wofford College, 1937; M.A., 1939, Ph.D., 1950, University of North Carolina.

LANE, JOHN DEWEY, *Professor of English.*
A.B., Newberry College, 1920; M.A., University of Virginia, 1924; Graduate Work, Columbia University, 1928-1929; Summer, 1923; George Peabody College, Summer, 1935.

LANGSTON, JAMES HORACE, *Professor of Textile Chemistry and Dyeing.*
A.B., Stephen F. Austin State Teachers College of Texas, 1937; M. A., 1939, Ph.D., 1941, University of North Carolina.

LAROCHE, EVAN ALLEN, *Associate Professor of Weaving.*
B.S., Clemson Agricultural College, 1942; M.S., Georgia Institute of Technology, 1951.

LAZAR, JAMES TARLTON, *Associate Professor of Dairying.*
B.S., Clemson Agricultural College, 1943; M.S., Cornell University, 1949; Graduate Work, North Carolina State College, 1951-1953.

LEE, RUDOLPH EDWARD, *Head of Architectural Department, Emeritus; Professor Emeritus of Architecture.*
B.S., 1896, M.Arch., 1928, Clemson Agricultural College.

LEHOTSKY, KOLOMAN, *Associate Professor of Forestry.*
Ing., Bohemian Technical University, Prague, Czechoslovakia, 1928; Ph.D., University of Michigan, 1934.

LEWIS, ALEXANDER DODGE, *Professor of Mechanical Engineering.*
B.S. in M.E., University of Tennessee, 1939; M.M.E., Yale University, 1946.

LINDSAY, JOSEPH, JR., *Head of Textile Chemistry and Dyeing Department; Professor of Textile Chemistry and Dyeing.*
A.B., Erskine College, 1919; M.S., University of Tennessee, 1945.

LINDSEY, TATE JEFFERSON, *Professor of Physics.*
B.A., Mississippi College, 1928; Ph.D., Indiana University, 1936.

LITTLEJOHN, CHARLES EDWARD, *Associate Professor of Chemical Engineering.*
B.S., Clemson Agricultural College, 1940; M.Ch.E., North Carolina State College, 1941; Ph.D., Virginia Polytechnic Institute, 1952.

LONG, JIM THOMAS, *Associate Professor of Electrical Engineering.*
B.E.E., Clemson Agricultural College, 1943; M.S. in E.E., Georgia Institute of Technology, 1949; Graduate Work, Georgia Institute of Technology, 1951-1952.

LOVETT, ROBERT EMERSON, *Associate Professor of Music.*
B.S., Ithaca College, 1949; M.A., Teachers College, Columbia University, 1950.

LOWRY, WALTER LEE, JR., *Head of Civil Engineering Department; Professor of Civil Engineering.*
B.S. in C.E., Virginia Military Institute, 1930; M.C.E., Rensselaer Polytechnic Institute, 1938.

LUNA, BENJAMIN CURTIS, JR., *Assistant Professor of Air Science.*
First Lieutenant, United States Air Force; A.B., University of Alabama, 1949; Air Tactical School, 1949; Air Supply Officer School, 1951; Academic Instructors' School, 1953.

MCCURLEY, HENRY HAWKINS, *Assistant Professor of Military Science and Tactics.*
Captain, Armor, United States Army; B.S.A., University of Georgia, 1942; Basic Course, Horse and Mechanized, 1942; Officers' Motor and Track Vehicle Course, 1948; Advanced Armored Officers' Course, 1950.

MCFADDEN, JAMES BANKS, *Assistant Coach.*
B.S., Clemson Agricultural College, 1940.

MCGARITY, HUGH HARRIS, *Acting Head of Music Department; Associate Professor of Music Education.*
B.F.A., 1940, M.F.A., 1946, University of Georgia; Graduate Work, University of Southern California, Summer, 1947; Florida State University, 1951-1953.

MCGEE, CHARLES MCKAY, JR., *Assistant Professor of English.*
A.B., Furman University, 1934; A.M., Duke University, 1941; Graduate Work, Duke University, 1946.

MCHUGH, CARL MANNING, *Associate Professor of Drawing.*
B.S., Clemson Agricultural College, 1936; Graduate Work, Virginia Polytechnic Institute, Summer, 1948.

McKENNA, ARTHUR ERNEST, *Head of Weaving and Designing Department; Professor of Weaving and Designing.*
Graduate, Rhode Island School of Design, 1922; Bradford-Durfee Textile School, 1925; B.S., Clemson Agricultural College, 1930; M.S., University of Tennessee, 1933.

McLEOD, HERBERT EUGENE, *Instructor in Agricultural Engineering.*
B.S., Clemson Agricultural College, 1951.

McMILLAN, COVINGTON, *Assistant Coach.*
B.S., Clemson Agricultural College, 1930; M.A., George Peabody College, 1933.

MACAULAY, HUGH HOLLEMAN, JR.,* *Assistant Professor of Economics.*
B.S., 1947, M.S., 1948, University of Alabama; Graduate Work, Columbia University, 1951-1953.

MacINTOSH, FRED HENRY, *Associate Professor of English.*
A.B., University of South Carolina, 1936; M.A., Duke University, 1942; Graduate Work, Duke University, 1946, 1947-1948.

MARSHALL, JOHN LOGAN, *Head of Industrial Arts Department; Professor of Industrial Arts.*
B.S., Clemson Agricultural College, 1909; Graduate Work, Bradley Polytechnic Institute, 1919.

MARTIN, JOHN CAMPBELL, *Assistant Professor of Physics.*
B.E.E., Clemson Agricultural College, 1948; M.S., Massachusetts Institute of Technology, 1953.

MARTIN, RHETT FELDER, JR., *Assistant Professor of Air Science.*
Captain, United States Air Force; B.S., Clemson Agricultural College, 1947; Aircraft Maintenance School, 1942; Primary, Basic, Advanced Flying School, 1943; Night Fighter School, 1944; Academic Instructors' School, 1951; Graduate Work: North Carolina State College, 1949; Clemson Agricultural College, Summer, 1949, 1950-1953.

MARTIN, SAMUEL MANER, *Head of Mathematics Department, Emeritus; Professor Emeritus of Mathematics.*
B.S., The Citadel, 1896; Graduate Work, Cornell University, Summer, 1900; Harvard University, Summer 1904; University of Chicago, Summer, 1908.

MARVIN, JOHN HENRY, JR., *Assistant Professor of Yarn Manufacturing.*
B.S., Clemson Agricultural College, 1941.

MATHEWS, ANDREW CLARK, *Associate Professor of Botany.*
A.B., 1928, M.A., 1931, Ph.D., 1939, University of North Carolina.

MAULDIN, WILLIAM LAWRENCE, *Associate Professor of Agricultural Chemistry.*
B.S., Furman University, 1936; M.A., 1939, Ph.D., 1954, University of North Carolina.

MEANS, GEORGE CALVIN, JR., *Associate Professor of Architecture.*
B. of Arch., Western Reserve University, 1947; Graduate Work, Georgia Institute of Technology, Summer, 1952-1954.

MEEKS, CHARLES DAVENPORT, *Assistant Professor of Industrial Engineering.*
B.M.E., Clemson Agricultural College, 1942.

MILLER, JOHN EDWARD, *Associate Professor of Physics.*
B.S., Randolph-Macon College, 1948; M.A., 1950, Ph.D., 1952, University of Virginia.

MILLER, WILLIAM GILBERT, *Professor of Mathematics.*
A.B., Birmingham Southern College, 1931; M.A., 1933, Ph.D., 1951, University of Florida.

MITCHELL, JACK HARRIS, *Professor Emeritus of Chemistry.*
B.S., 1903, M.S., 1904, Alabama Polytechnic Institute; M.S., University of Illinois, 1911.

MONROE, JAMES BEASLEY, *Head of Vocational Agricultural Education Department; Professor of Vocational Education.*
B.S., Clemson Agricultural College, 1915; M.S., Texas A & M College, 1935; Graduate Work, Cornell University, Summer, 1938.

MOORE, ELBERT LEE, *Assistant Professor of Air Science.*
Major, United States Air Force; B.S., Virginia Polytechnic Institute, 1941; Coast Artillery School, 1941; Primary, Basic, Advanced Flying School, 1942; Oxygen Officers' School, 1943; Combat Crew School, 1944; Academic Instructors' School, 1952.

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* On leave.

MOORMAN, ROBERT WARDLAW, *Associate Professor of Mechanics and Hydraulics.*
B.C.E., Clemson Agricultural College, 1940; M.S., State University of Iowa, 1947; Graduate Work, State University of Iowa, 1951-1952, Summers, 1953, 1954.

MORGAN, CHARLES LEE, *Head of Poultry Husbandry Department; Professor of Poultry Husbandry.*
B.S., 1918, M.S., 1927, University of Kentucky; Graduate Work, University of Wisconsin, 1931-1932.

MOSS, ALEX ANDREW, *Assistant Professor of Civil Engineering.*
B.C.E., Clemson Agricultural College, 1948; Graduate Work, Clemson Agricultural College, 1949-1951.

MOTES, MARSHALL MILFORD, *Assistant Professor of Military Science and Tactics.*
Major, Quartermaster Corps, United States Army; B.S., Clemson Agricultural College, 1938; Infantry School, Officers' Advanced Course, 1943; Quartermaster School Officers' Basic Course, 1948; Post Graduate Course, Institutional Management, Cornell University, 1949; Officers Advanced Course, Quartermaster, 1951.

MUSSER, ALBERT MYERS, *Head of Horticulture Department; Professor of Horticulture.*
B.S., University of Florida, 1918; Graduate Work, Michigan State College, 1930, 1933.

NEWMAN, ROBERT COLEA, JR., *Assistant Professor of Air Science.*
Major, United States Air Force; B.S., University of Maryland, 1949; Academic Instructor Course, 1954.

NORMAN, ABSALOM WILLIS, *Assistant Coach.*
A.B., Roanoke College, 1913.

NOWACK, ROBERT FRANCIS, *Assistant Professor of Mechanics and Hydraulics.*
B.S., Carnegie Institute of Technology, 1948; M.S., University of Pittsburgh, 1952; Graduate Work, Virginia Polytechnic Institute, Summer, 1954.

NUTT, GEORGE BASS, *Head of Agricultural Engineering Department; Professor of Agricultural Engineering.*
B.S., Mississippi State College, 1930; M.S., Iowa State College, 1940.

NYGARD, WALTER EDWIN, *Assistant Professor of Military Science and Tactics.*
Major, Signal Corps, United States Army; B.S., United States Military Academy, 1943; Army Security Agency, Advanced Officers' School, 1948; Advanced Signal Corps Officers' Course, 1953.

O'HANLON, JOSEPH PATRICK, *Assistant Professor of Military Science and Tactics.*
Captain, Corps of Engineers, United States Army; B.S., United States Military Academy, 1945; M.S., Massachusetts Institute of Technology, 1949; Engineer Officers' Advanced Course, 1951.

OWINGS, MARVIN ALPHEUS, *Professor of English.*
A.B., Wofford College, 1931; M.A., 1932, Ph.D., 1941, Vanderbilt University.

PARK, EUGENE, *Assistant Professor of Mathematics.*
A.B., University of Georgia, 1939; M.A., Lehigh University, 1941; Graduate Work, University of Wisconsin, 1947-1948.

PERRY, ROBERT LINDSAY, *Assistant Professor of Mechanical Engineering.*
B.M.E., 1947, M.M.E., 1953, Clemson Agricultural College.

PITNER, JOHN BRUCE, *Head of Agronomy Department; Professor of Agronomy.*
B.S., 1938, M.S., 1939, Mississippi State College; Ph.D., University of Wisconsin, 1944.

POE, HERBERT VERNON, *Associate Professor of Electrical Engineering.*
B.S. in E.E., North Carolina State College, 1944; M.S. in E.E., Texas A & M College, 1950.

POLK, HENRY TASKER, *Associate Professor of Chemistry.*
B.S., 1931, M.S., 1933, University of Kentucky; Ph.D., Cornell University, 1938.

POLLARD, FRANK HOWELL, *Professor Emeritus of Chemistry.*
B.Chem., 1916, Ph.D., 1922, Cornell University.

PRICE, D. C., *Instructor in Dairying.*
B.S., Clemson Agricultural College, 1950.

PURSER, DAVID INGRAM, *Assistant Professor of English.*
B.A., Furman University, 1937; M.A., Duke University, 1942; Bread Loaf School of English, Summers, 1951-1954.

RAINEY, WILLIAM THOMAS, JR., *Associate Professor of Textile Chemistry and Dyeing.*
B.S., Davidson College, 1939; Ph.D., University of North Carolina, 1949.

RAUSCH, KARL WILLIAM, *Professor of Mechanical Engineering.*
B.S. in M.E., 1920, M.E. 1923, Case School of Applied Science.

READ, NORWOOD GRAY, *Assistant Professor of Military Science and Tactics.*
Lieutenant Colonel, Armor, United States Army; B.S., Missouri Valley College, 1940; Officers' Candidate School, Fort Knox, Kentucky, 1942; Advance Refresher Course, Fort Knox, Kentucky, 1952.

REED, ALBERT RAYMOND, *Associate Professor of Physics.*
A.B., Wofford College, 1925; M.S., University of South Carolina, 1931; Graduate Work, University of North Carolina, Summers, 1931, 1933.

REED, CHARLES ALBERT, *Professor of Physics.*
A.B., 1926, M.S., 1929, Ph.D., 1948, University of Oklahoma.

RHODES, SAM ROSEBOROUGH, *Professor Emeritus of Electrical Engineering.*
B.L., 1900, M.S., 1901, Furman University; B.S., 1907, E.E., 1928, Clemson Agricultural College.

RHYNE, JOHN WILLIAM, JR., *Instructor in Chemistry.*
B.S., The Citadel, 1949; Graduate Work, University of California, 1950, University of Massachusetts, 1951-1954.

RHYNE, ORESTES PEARL, *Head of Modern Language Department; Professor of Modern Languages.*
A.B., Lenoir-Rhyne College, 1907; A.B., 1908, A.M., 1909, University of North Carolina; Ph.D., Johns Hopkins University, 1913; University of Heidelberg, Summer, 1914; Resident in Leipzig, 1922.

RICHARDSON, JOEL LANDRUM, *Assistant Professor of Textiles.*
B.S., Clemson Agricultural College, 1942.

RITCHIE, ROBERT RUSSELL, *Professor of Animal Husbandry.*
B.S., 1926, M.S., 1938, Iowa State College.

ROBINSON, GILBERT CHASE, *Head of Ceramic Engineering Department; Professor of Ceramic Engineering.*
B.Cer.E., North Carolina State College, 1940.

ROGERS, ERNEST BRASINGTON, *Associate Professor of Agricultural Engineering.*
B.S., Clemson Agricultural College, 1948; M.S., Texas A & M College, 1952.

ROSENKRANS, DUANE BENJAMIN, *Professor of Botany.*
A.B., Upper Iowa University, 1911; M.A., University of Wisconsin, 1917.

ROSTRON, JOSEPH PRUGH, *Assistant Professor of Civil Engineering.*
A.A., Pasadena Junior College, 1935; B.S. in C.E., Southern Methodist University, 1941; Graduate Work, Clemson Agricultural College, 1947-1951.

RUSH, JOHN MILLARD, *Associate Professor of Bacteriology.*
A.B., Indiana University, 1928; M.S., Illinois University, 1935; Ph.D., Purdue University, 1947.

RUTLEDGE, RAY WATSON, *Associate Professor of Botany.*
B.S., Union University, 1923; M.A., George Peabody College, 1924; Ph.D., University of Chicago, 1930.

SALLEY, JAMES RAWORTH, JR., *Instructor in Chemistry.*
B.S., College of Charleston, 1937; M.S., Clemson Agricultural College, 1953.

SAMS, JAMES HAGOOD, JR., *Dean, School of Engineering.*
B.S., Clemson Agricultural College, 1924; E.E., Cornell University, 1926; M.S., 1931, Ph.D., 1937, University of Michigan.

SANDERS, PAUL, *Assistant Professor of Military Science and Tactics.*
Captain, Armor, United States Army; B.S., Clemson Agricultural College, 1943; Officers Candidate School, 1943; Armored Officers' Basic Course, 1949; Armored Officers' Advanced Course, 1954.

SCHILDHAUER, ADOLPH FREDERICK, *Visiting Professor of Mechanical Engineering.*
B.S., Case Institute of Technology, 1921.

SCHIRMER, FRANK BONNELL, JR., *Head of Chemistry Department; Professor of Chemistry.*
B.S., Clemson Agricultural College, 1934; Ph.D., Cornell University, 1939.

SEFICK, HAROLD JOHN, *Associate Professor of Horticulture.*
B.S., 1935, M.S., 1937, Rutgers University; Graduate Work, Michigan State College, 1941-1942, Fall, 1948.

SENN, TAZE LEONARD, *Associate Professor of Horticulture.*
B.S., Clemson Agricultural College, 1939; M.S., University of Maryland, 1950.

SHACKELFORD, MACFARLAND, *Assistant Professor of Physics.*
B.S., Virginia Polytechnic Institute, 1920.

SHELDON, DAWSON CLEMENT, *Head of Mathematics Department; Professor of Mathematics.*
B.S., State College of Washington, 1925; M.A., 1927, Ph.D., 1929, University of California.

SHELLEY, ROBERT CLIFTON, *Associate Professor of Agronomy.*
B.S., Clemson Agricultural College, 1940; Graduate Work, Mississippi State College, 1950-1951.

SHIGLEY, JOSEPH EDWARD, *Head of Drawing and Designing Department; Professor of Machine Design.*
B.S. in E.E., 1931, B.S. in M.E., 1932, Purdue University; M.S., University of Michigan, 1946.

SIMPSON, FRANCIS MARION, *Visiting Professor of Agricultural Economics.*
B.S., University of Illinois, 1909.

SLOOPE, BILLY WARREN, *Assistant Professor of Physics.*
B.S., University of Richmond, 1949; M.S., 1951, Ph.D., 1953, University of Virginia.

SMITH, ROBERT WILLIAM, *Assistant Coach.*
B.S., Furman University, 1934.

SNELL, ABSALOM WEST, *Associate Professor of Agricultural Engineering.*
B.S., Clemson Agricultural College, 1949; M.S., Iowa State College, 1952.

SPEER, WILLIAM ARTHUR, *Associate Professor of Architecture.*
B.S., Clemson Agricultural College, 1937.

STAKELY, JAMES OWEN, *Assistant Professor of Architecture.*
B.S. in Arch., Georgia School of Technology, 1926; Graduate Work, Georgia Institute of Technology, Summer, 1954.

STANLEY, EDWARD LEMUEL, *Associate Professor of Mathematics.*
B.S., East Tennessee State College, 1930; M.S., University of Tennessee, 1935; Graduate Work, George Peabody College, Summer, 1938; University of Missouri, Summers, 1940, 1941, Spring, 1941; Michigan State College, Summer, 1949.

STARKEY, LAWRENCE VINCENT, *Head of Animal Husbandry Department; Professor of Animal Husbandry.*
B.S., University of Illinois, 1914; M.S., University of Wisconsin, 1917; Graduate Work, University of Wisconsin, 1930.

STENSTROM, EDWARD FARNUM, *Associate Professor of Industrial Engineering.*
B.S., Clemson Agricultural College, 1943; B.I.E., University of Florida, 1954.

STEPP, JAMES MARVIN, *Professor of Agricultural Economics.*
A.B., Berea College, 1937; M.A., 1938, Ph.D., 1940, University of Virginia.

ST. HUBERT, ROBERT LAMONTAGNE, *Visiting Professor of Architecture.*
Ecole des Beaux Arts, Paris; University of Paris.

STOCKMAN, ENOCH DARR, *Assistant Professor of Religion.*
A.B., Newberry College, 1931; B.D., Southern Lutheran Seminary, 1934.

STRIBLING, BRUCE HODGSON, *Associate Professor of Vocational Education.*
B.S., Clemson Agricultural College, 1918; M.S., Ohio State University, 1945.

STUART, CHARLES MORGAN, *Assistant Professor of Mathematics.*
A.B., Wofford College, 1920; M.A., Duke University, 1935; Graduate Work, University of South Carolina, 1938, 1945.

SULLIVAN, JOHN RUSSELL, *Assistant Professor of Mathematics.*
A.B., 1939, M.A., 1949, Georgetown University; Graduate Work, University of North Carolina, 1950-1952, Summer, 1953.

SUTTON, JAMES FRANKLIN, *Associate Professor of Mechanical Engineering.*
B.M.E., Clemson Agricultural College, 1944; M.S. in M.E., University of Michigan, 1948; Graduate Work, University of Michigan, 1948-1949.

TARRANT, WILLIAM EDWARD, SR., *Associate Professor of Weaving.*
B.S., Clemson Agricultural College, 1927; M.Ed., Pennsylvania State College, 1947.

TAYLOR, RUPERT, *Professor of English.*
A.B., 1903, A.M., 1906, University of Arkansas; Ph.D., Columbia University, 1911.

TAYLOR, DONALD AUSTIN, *Assistant Professor of Military Science and Tactics.*
Captain, Corps of Engineers, United States Army; B.S., Wofford College, 1939.

THODE, FREDERICK WILBUR, *Associate Professor of Horticulture.*
B.S., Clemson Agricultural College, 1940; M.S., Cornell University, 1951.

THOMPSON, JOHN LESTER, *Assistant Professor of Yarn Manufacturing.*
B.S., Clemson Agricultural College, 1942.

THOMSON, DANIEL PARK, JR., *Associate Professor of Yarn Manufacturing.*
B.S., Clemson Agricultural College, 1927; M.A.Ed., University of Florida, 1952.

THURSTON, JAMES NORTON, *Head of Electrical Engineering Department; Professor of Electrical Engineering.*
B.E.E., Ohio State University, 1936; S.M., 1943, Sc.D., 1950, Massachusetts Institute of Technology.

TINGLEY, FREEMAN THAYER, *Professor of Electrical Engineering.*
B.S., 1922, E.E., 1935, Bucknell University; M.S., University of Illinois, 1929.

TODD, BOYD JOSEPH, *Associate Professor of Agricultural Economics.*
B.S., 1946, M.S., 1948, Clemson Agricultural College; Graduate Work, North Carolina State College, Summer, 1949.

TREVILLIAN, WALLACE DABNEY, *Associate Professor of Economics.*
B.S., 1940, M.A., 1947, Ph.D., 1954, University of Virginia.

TRIVELY, ILO ALLELY, *Professor of Civil Engineering.*
B.S., in C.E., 1928, M.S. in C.E., 1941, University of Nebraska.

TULL, LLOYD HARRISON, *Professor of Air Science; Associate Commandant of Cadets*
Colonel, United States Air Force; B.S., Georgia Institute of Technology, 1926; Air Force Tactical School, 1940; Armed Forces Staff College, 1947.

TUTTLE, JACK EDWIN, *Assistant Professor of History and Government.*
B.A., 1940, M.A., 1948, Pennsylvania State College; Graduate Work, University of South Carolina, 1949-1951.

VAN BLARICOM, LESTER OSCAR, *Associate Professor of Food Technology.*
B.S., 1938, M.S., 1940, Ch.E., 1954, Oregon State College.

VOGEL, HENRY ELLIOTT, *Assistant Professor of Physics.*
B.S., Furman University, 1948; M.S., University of North Carolina, 1950.

WADE, JAMES DONALD, *Assistant Coach.*
B.S., Clemson Agricultural College, 1952.

WAITE, EDWIN EMERSON, JR., *Associate Professor of Sociology and Psychology.*
B.S.,Middlebury College, 1929; M.A., Duke University, 1940.

WALTERS, JOHN VERNON, *Associate Professor of Textiles.*
B.S., 1933, M.S., 1952, Clemson Agricultural College.

WARE, ROBERT EDWARD, *Associate Professor of Entomology and Zoology.*
B.S., Iowa Wesleyan College, 1929; Graduate Work, Iowa State College, Summers, 1931, 1932, 1938, 1940.

WARNHOFF, EDWARD HERMAN, JR., *Associate Professor of Entomology and Zoology.*
B.S., Clemson Agricultural College, 1946; M.S., Texas A & M College, 1947; Graduate Work, Oklahoma A & M College, 1950-1952.

WASHINGTON, WILLIAM HAROLD, *Dean, School of Education; Professor of Vocational Education.*
B.S., Clemson Agricultural College, 1920; M.S., Iowa State College, 1922; Graduate Work, Georgia School of Technology, Summer, 1925; George Peabody College, 1932-1933, Summers, 1928, 1929, 1951.

WATSON, CHARLIE HUGH, *Assistant Professor of English.*
A.B., Wofford College, 1933; A.M., Duke University, 1945.

WATSON, SAMUEL MCIVER, JR., *Professor of Mechanical Engineering.*
A.B., Elon College, 1936; B.S., 1937, M.S., 1942, North Carolina State College.

WEBB, HUBERT JUDSON, *Dean, Graduate School; Head of Agricultural Chemistry Department; Professor of Agricultural Chemistry.*
B.S., Clemson Agricultural College, 1933; Ph.D., Cornell University, 1938.

WEBB, WILLIAM EDWARD, *Assistant Professor of History and Government.*
A.B., Hampden Sydney College, 1943; M.A., Duke University, 1947; Graduate Work, University of Virginia, 1949-1951, Summers, 1951-1954.

WERNER, RICHARD JOSEPH, *Professor of Military Science and Tactics, Commandant of Cadets.*
Colonel, Infantry, United States Army; B.S., Texas A & M College, 1925; Infantry School, 1936; Command and General Staff College, 1936; National War College, 1949.

WHEELER, RICHARD FERMAN, *Associate Professor of Animal Husbandry.*
B.S., 1941, B.S., 1947, Clemson Agricultural College; M.S., Mississippi State College, 1949; Ph.D., University of Wisconsin, 1954.

WHITE, THOMAS ARLINGTON, *Professor of Vocational Education.*
B.S., 1924, M.S., 1929, North Carolina State College; Ph.D., Cornell University, 1933.

WHITNEY, JOHN BARRY, JR., *Associate Professor of Botany.*
B.S., University of Georgia, 1935; M.S., North Carolina State College, 1938; Ph.D., Ohio State University, 1941.

WHITTEN, WILLIAM CLYDE, JR., *Assistant Professor of Textiles.*
B.S., Clemson Agricultural College, 1947; M.S., Georgia Institute of Technology, 1950.

WILLIAMS, JACK KENNY, *Associate Professor of History and Government.*
A.B., Emory and Henry College, 1940; M.A., 1947, Ph.D., 1953, Emory University.

WILLIAMS, WILLIAM BRATTON, *Associate Professor of Weaving and Designing.*
B.S., 1925, M.S., 1950, Clemson Agricultural College.

WILSON, HAROLD BETTS, *Assistant Professor of Textiles.*
B.S., Clemson Agricultural College, 1941.

WILSON, HUGH HAYNES, *Associate Professor of Ceramic Engineering.*
B.S., 1948, M.S., 1949, North Carolina State College; Ph.D., Ohio State University, 1954.

WILSON, MILNER BRADLEY, JR., *Associate Professor of English.*
A.B., Wofford College, 1924; A.M., Columbia University, 1936; Graduate Work, University of North Carolina, Summer, 1954.

WINTER, JAMES PAUL, *Assistant Professor of English.*
A.B., Marshall College, 1930; M.A., Columbia University, 1932; Graduate Work, Columbia University, 1932-1933, Summers, 1939, 1940, 1950-1954; Tulane University, Summer, 1935; New York University, Summers, 1936, 1938.

WOOD, KENNETH LEE, *Assistant Professor of Physics.*
B.S., Carson Newman College, 1932; M.S., University of Tennessee, 1934; Graduate Work, Duke University, Summer, 1940.

WOOD, ROY, *Assistant Professor of Economics.*
B.A., 1943, M.A., 1948, University of Virginia; Graduate Work, University of Virginia, 1947-1948.

WRAY, CHARLES VICTOR, *Associate Professor of Textiles.*
B.S., Clemson Agricultural College, 1940; M.S., Georgia Institute of Technology, 1954.

YOUNG, JOSEPH LAURIE, *Assistant Professor of Architecture.*
B.Arch., University of Texas, 1950; Graduate Work, Georgia Institute of Technology, Summers, 1952-1954.

INSTRUCTIONAL ASSISTANTS *

Branham, Richard Austin, B.S., *Physics.*

Barretta, Louis Salvatore, SFC, U. S. Army, *Military Science and Tactics.*

Corbin, John Kenneth, B.S., *Physics.*

Cruz, Calvin Joseph, B.S., *Chemistry.*

Day, William Joseph, B.S., *Chemistry.*

Eason, H. K., B.S., *Textiles.*

Freeman, Edwin Armistead, B.C.E., *Civil Engineering.*

Gilland, Richard Boyd, M/Sgt., U. S. Army, *Military Science and Tactics.*

Hoover, Edward Auther, B.S., *Industrial Education.*

Howard, Andrew Swofford, B.S., *Physics.*

Mann, Philip Rogers, B.A., *Chemistry.*

Newton, Alfred Franklin, B.S., *Education.*

Pennell, James Edgar, B.S., *Chemistry.*

Philips, John Chase, B.A., *Chemistry.*

Rogers, Warren Bryson, III, B.S., *Physics.*

Routh, William Eugene, B.A., B.S., *Chemistry.*

Wages, Willard, M/Sgt., U. S. Army, *Military Science and Tactics.*

Wilson, Woodrow Leroy, SFC, U. S. Army, *Military Science and Tactics.*

* List of Instructional Assistants compiled October 1, 1954.

STANDING COMMITTEES OF THE FACULTY
1954-1955

ADMISSIONS:
Vickery, *Chairman;* Boyd, Gentry, Hobson, Langston, Lewis, Stanley.

ATHLETICS:
Milford, *Chairman;* Gage, Moorman, Morgan, T. W., Ritchie; F. J. Howard, Coach, *ex officio;* G. H. Hill, acting Business Manager, *ex officio;* G. E. Metz, Registrar, *ex officio.*

BUILDINGS AND GROUNDS:
Watson, D. J. *Chairman;* Glenn, H. E., Hill, H. H., Huff, Musser, Nutt, Sams, Webb, H. J.

CALENDAR:
Cox, W. T., *Chairman;* Allen, M. C., Cannon, G. R., Crouch, Hill, H. H., Holtzendorff, McFarland, Metz, Morgan, T. W., Oliveros, Raynal, Miss Shanklin, The Commandant, Editor of the Tiger, President of the Senior Class, President of Tiger Brotherhood, President of Blue Key, President of Central Dance Association.

CATALOG:
Vickery, *Chairman;* Brown, A. J., Bradbury, Kinard.

CONCERT SERIES:
Metz, *Chairman;* Burtner, Califf, Hunter, H. L., Liberty, Lovett, McGarity, Miss Shanklin, Vickery, Watson, D. J., President of Mu Beta Psi, President of the Senior Class, Editor of the Tiger.

CURRICULA:
Kinard, *Chairman;* Brown, H. M., Farrar, Hunter, H. L., Jones, J. W., Metz, Sams, Sheldon, Washington, Webb, H. J.

DEFICIENT STUDENTS:
Kinard, *Chairman;* Cook, J. R., Gentry, LaGrone, McKenna, Polk, Stanley, Tingley, Vickery, Watson, C. H.

ETHICS AND RELIGION:
Crouch, *Chairman;* Allen, M. C., Cannon, G. R., Holtzendorff, McFarland, Oliveros, Raynal, Stockman.

EVALUATION OF TRANSFER CREDITS:
Owings, *Chairman;* Gage, *Vice-Chairman;* Vickery, *Secretary;* Ball, Berne-Allen, Epting, Felder, Lindsay, J., Lindsey, T. J., Means, Morgan, C. L., Nutt, Polk, Rosenkrans, Sheldon, Stribling, B. H., Trively, Watson, S. M.

FOOD AND NUTRITION:
LaMaster, *Chairman;* Lease, Hill, G. H., Milford, Morgan, C. L., Musser, Nutt, Patrick, Starkey, Van Blaricom; Luther Fields, Mess Officer, *ex officio.*

GRADUATE WORK:
Webb, H. J., *Chairman;* Anderson, Arndt, Aull, Brown, H. M., Collings, Cook, J. M., Dinwiddie, Farrar, Freeman, Garrison, O. B., Gentry, Glenn, H. E., Green, J. C., Heyn, Huff, Hunter, H. L., Jones, J. W., King, Lander, Littlejohn, C. E., Miller, J. E., Miller, W. G., Rainey, Sams, Schirmer, Taylor, R., White.

KRESS RESEARCH:
Brown, H. M., *Chairman;* Carodemos, Crawford, Lindsay, J., Sheldon, Stepp, Tingley, Webb, H. J., White; J. W. G. Gourlay, Director of the Library, *ex officio;* G. H. Hill, Acting Business Manager, *ex officio.*

LIBRARY:
Owings, *Chairman;* Aull, Berne-Allen, Bolen, Booker, Bryan, Carpenter, Collings, Dinwiddie, Felder, Goodman, Lindsay, J., Reed, C. A., Rosenkrans, Stanley, Taylor, R., Watkins, Whitney; J. W. G. Gourlay, Director of the Library, *ex officio.*

LOANS:
Hill, G. H., *Chairman;* Brown, A. J., Cox, W. T., Howard, Vickery.

PUBLIC LECTURES:
Bolen, *Chairman;* Cloaninger, Freeman, Green, J. C., Goodale, Lane, Langston, Lindsey, T. J., Stribling, B. H.

PUBLICATIONS AND RADIO:
Lane, *Chairman;* Califf, *Secretary;* Bryan, Cox, W. T., Eleazer, Mattison, Stribling, S. C.
(J. D. Lane, Faculty Adviser for student publications.)

RESEARCH, PLANNING AND DEVELOPMENT:
Brown, H. M., *Chairman;* Arndt, Brownley, Crawford, Heyn, LaMaster, Monroe, Musser, Nutt, Robinson, G. C., Sams, Watson, D. J.

SCHEDULE:
LaGrone, *Chairman;* Austell, Brownley, Epting, Gage, Hicks, Huff, McGee, Monroe, Rogers, E. B., Trively, Vickery, Whitney.

SCHOLARSHIP AWARDS:
Metz, *Chairman;* Brown, A. J., Gage, Hunter, H. L., Kinard, Rutledge, Shigley, Sloope, White.

SCHOLARSHIP AND HONORS:
Sheldon, *Chairman;* Brown, C. Q., Curtis, Gentry, King, Lindsay, J., Long, MacIntosh, McKenna, Monroe, Schirmer, Senn.

SOCIAL FUNCTIONS:
Cox, W. T., *Chairman;* Brewster, Cox, H. M., Curtis, Green, J. C., Hill, G. H., Hodges, Holt, Holtzendorff, Hughes, Lazar, Means, Miles, Nowack, Park, Tingley, Vogel, Walker, Williams, W. B., The Commandant.

STUDENT GOVERNMENT:
Goodale, *Chairman;* Armstrong, Brock, J. L., Lane, Marshall, Metz, Owings, The Commandant.

STUDENT ORGANIZATIONS (Including Honor Societies):
Schirmer, *Chairman;* Brock, J. L., Burtner, Cloaninger, Collings, Freeman, Goodale, Marshall, J. L., Sheldon, Vickery.

STUDENT WELFARE:
Lane, *Chairman;* Aull, Bell, Campbell, Coker, Cook, J. C., Hill, G. H., Hunter, H. L., Jones, R. M., LaMaster, Mauldin, Metz, Moorman, Sams, Washington.

UNIFORMS:
Hill, G. H., *Chairman;* Brown, A. J., Cannon, G., Cartee, Liberty, The Commandant, Senior ROTC Quartermaster Instructor, Douthit, J. B., Trustee Member.

VISITORS:
Cox, W. T., *Chairman;* Califf, Goodale, Hill, G. H., Hill H. H., Holtzendorff, Sams, Miss Shanklin, Watson, D. J., The Commandant.

Y.M.C.A.:
Aull, *Chairman;* R. F. Poole, President, *ex officio;* Cloaninger, Earle, Goodale, Green, J. C., Kinard, Littlejohn, J. C., Douthit, J. B., Trustee Member; Young, T. B., Trustee Member; Folger, T. A., Alumni Member; Henry, J. A., Alumni Member; President of Y. M. C. A., *ex officio;* Holtzendorff, P. B., Jr., General Secretary of Y. M. C. A., *ex officio.*

OTHER OFFICERS AND ASSISTANTS *

WALTER THOMPSON COX, B.S.—
Assistant to the President, Director of Public Relations and Alumni Affairs

ROBERT COLE BRADLEY, B.S.—
Associate Director of Public Relations and Alumni Affairs

JOHN WIETERS CALIFF, JR., B.S.—
Associate Director of Public Relations and Alumni Affairs for Information

BERRYMAN BRENT BREEDEN, A.B.—
Associate Director of Public Relations for Athletics

JACOB HENRY WOODWARD.....*Alumni Secretary, Emeritus*

VIRGINIA EARLE SHANKLIN, A.B.....*Secretary to the President*

KENNETH NOTLEY VICKERY, B.S.....*Assistant Registrar, Director of Admissions*

REGINALD JUSTIN BERRY, B.S.—
Assistant to the Registrar and IBM Consultant and Supervisor

HELEN COKER, A.B.....*Recorder*

ROBERT BLANDING JOHNSON, B.S.....*Admissions Counselor*

NETTIE COX WOODLE.....*Transcript Clerk*

SIDELLE BOUKNIGHT ELLIS, B.S., B.S. in L.S...*Assistant Circulation Librarian*

JOHN GOODMAN, B.S., A.B. in L.S.....*Assistant Librarian*

LOIS JONES GOODMAN, B.S.....*Cataloger*

CORNELIA AYER GRAHAM, B.S.....*Librarian*

JOHN B. HOWELL, JR., B.A., B.A. in L.S., M.S.....*Circulation Librarian*

~~JOHN DAVID MARSHALL, B.A., M.A.~~.....*Reference Librarian*

~~MARGY HANTKOPF NOWACK, A.B.~~.....*Acquisitions Librarian*

MURIEL GIPSON RUTLEDGE, B.S....*Archives and Special Collections Librarian*

MARY CONRAD STEVENSON, A.B.....*Head, Catalog Department*

MARY ELAINE SCHAAP, A.B.....*Government Documents Librarian*

EUGENE PERRITT WILLIMON, B.S.....*Executive Secretary, Athletic Association*

EARL SPENCER LIBERTY, A.B.—
Assistant Business Manager and Director of Purchasing

VIRGINIA POOLE, A.B.....*Assistant to the Business Manager*

KENNEY RIXIE HELTON.....*Assistant Business Manager and Internal Auditor*

HENRY HUGHES HILL, JR., B.S.—
Assistant Business Manager and Director of Housing

TRESCOTT NEWTON HINTON, B.A.....*Accountant*

* List of other officers and assistants compiled October 1, 1954.

Joseph Shelor Walker, B.S. ..... *Cashier*
Helen Morrison ..... *Assistant to the Treasurer*
Kenneth James Irving, Chief Warrant Officer, U. S. Army ..... *Adjutant*
Joseph Roberts Austell, Captain, U. S. Air Force ..... *Adjutant*
Lofton Gilmore Jones, Master Sergeant, U. S. Air Force ... *Sergeant Major*
Calvin Cecil Oliver, Master Sergeant, U. S. Army ..... *Sergeant Major*
Henry Wordsworth Rimmer ..... *Provost Officer*
Irene Julian, R.N. ..... *Director of Nurses*
Myrtle Dean ..... *X-Ray and Laboratory Technician*
Gladys Mitchell, R.N. ..... *Clinical Supervisor*
David Joseph Watson, B.S. ..... *Supt. of Buildings and Grounds*
William Ernest McGuire ..... *Asst. Supt. of Buildings and Grounds*
Earl H. Swain, B.S. ..... *Chief Plant Engineer*
Paul Cochran, B.S. ..... *Plant Engineer*
James Cleveland Carey, Jr., B.S. ..... *Landscape Gardener*
Norman Roy Boggs ..... *Asst. to Supt. of Buildings and Grounds*
Luther Fields, Jr., B.S. ..... *Mess Officer*
Margaret Crowther Cochran, B.S. ..... *Dietitian*
Aldrich A. Atkinson, B.S. ..... *Assistant to Mess Officer*
Fred Leonard Zink, Jr. ..... *Manager, Clemson House*
Preston Brooks Holtzendorff, Jr., LL.B. ..... *General Secretary, Y. M. C. A.*
John Roy Cooper, B.S., M.A. ..... *Associate Secretary, Y. M. C. A.*
Marion Carroll Allen, B.A., B.D. ..... *Pastor, Baptist Church*
Stephen J. McFarland, C.S.P. ..... *Pastor, Catholic Church*
Robert Lovall Oliveros, B.A., B.D. ..... *Rector, Episcopal Church*
Enoch D. Stockman, A.B., B.D. ..... *Pastor, Lutheran Church*
George Russell Cannon, A.B., B.D. ..... *Pastor, Methodist Church*
Charles Edward Raynal, Jr., A.B., B.D. ..... *Pastor, Presbyterian Church*
Sydney J. L. Crouch, B.D., Th.D. ..... *Minister to Presbyterian Students*

THE CLEMSON AGRICULTURAL COLLEGE RECORD

PART II

Information

PART II—Information

GENERAL INFORMATION

Clemson is a land-grant college, a state institution, and one of the A. and M. colleges which emphasizes agriculture and mechanical industries. Clemson is fully accredited by the Southern Association of Colleges and Secondary Schools.

The twenty-nine curriculums under the Schools of Agriculture, Arts and Sciences, Chemistry, Education, Engineering, and Textiles form a background of training for the hundreds of occupations in which Clemson graduates engage. In addition to the training for a specific occupation, each curriculum is broadened to include fundamental training in the occupational area as well as the worthwhile values of general education. Although the College is organized on the university plan of various schools, it retains its entity through the inter-relationships of schools and departments in providing a well-balanced educational program.

The enrollment of Clemson has grown from 446 students in the opening of the college in 1893 to a pre-war peak of 2,381 and a post-war peak of 3,360 for the first semester, 1949-1950. Since the opening of the college 32,479 students have attended Clemson and of this number 11,420 have been awarded the bachelor's degree.

REQUIREMENTS FOR ADMISSION

Entrance Requirements. The requirements for entrance to Clemson include graduation from an accredited high school with at least 16 units. Of the units presented for admission it is suggested, though not required, that at least three be in English, one and one-half in algebra, and one in plane geometry.

Students who cannot fulfill the requirements outlined above may be considered for admission as follows:

(1) Applicants who have qualified for a South Carolina High School Certificate by examination are given very careful consideration. The final decision is dependent upon the quantity and quality of such work as has been completed in high school as well as upon the fact that the applicant has qualified for the certificate.

(2) Mature students who cannot meet the formal requirements indicated above but who have an adequate educational background

for scholastic work in college may qualify for admission by passing the entrance examinations. Further information will be furnished on request.

Application Blanks. Blanks to be used in applying for admission may be obtained from the Director of Admissions, Clemson College, Clemson, South Carolina.

Placement Tests. Placement tests, required of all students, are given within a day or two after matriculation. The placement tests consist of examinations on basic information in mathematics and English. The purpose in giving the tests is to determine which students are in need of review courses in mathematics and English before attempting college courses in these important subjects. It is in the interest of the student that he is required to take such a review course if he does not make a qualifying score on the placement test. Such students may begin taking their other freshman subjects, but will postpone freshman mathematics, English, or both, until after they complete satisfactorily the review course or courses required. All new students will be required to take the placement tests, but those who have previously completed college courses in mathematics and English will not be required to take the review courses in these subjects.

Admission to Advanced Standing. Work that has been completed in other colleges will be carefully considered and evaluated in terms of equivalent courses in the curriculum at Clemson selected by the student. The applicant must present for consideration: (a) a statement of honorable dismissal from the institution last attended, (b) an official transcript of his record, including entrance credits and (c) an official statement that he is eligible to return to the institution last attended. College credits given by transfer are provisional and may be cancelled at any time if the student's work is unsatisfactory. A student coming from another institution must spend at least one regular session in the College before he is eligible to apply for a degree.

Matriculation. Students upon arrival at the College at the opening of the session must report at once to the Registrar's Office. New students will be directed in the procedure necessary to complete their enrollment. A student's matriculation with the College is equivalent to his pledge to conform to the rules of the institution. Any admission gained or matriculation made irregularly is subject to cancellation.

EDUCATIONAL BENEFITS FOR VETERANS

Public Law 550. Eligible veterans who have served in the active service in the Armed Forces for ninety days or more during the period beginning June 27, 1950, and who have been discharged or released from active service under conditions other than dishonorable, may qualify for a program of education or training under Public Law 550, "Veterans' Readjustment Assistance Act of 1952".

In general each eligible veteran shall be entitled to education or training for a period equal to one and a half times the duration of his active service in the Armed Forces during the basic service period with a maximum period of entitlement of thirty-six months.

Information and forms for the filing of applications for assistance are provided by the Veterans Administration.

Each eligible veteran enrolled in a program of education under this act will receive an allowance for the expenses of his subsistence, tuition, fees, supplies, books and equipment. For veterans enrolled on a full-time basis, allowances will be computed at the rate of $110 per month, if the veteran has no dependent, or at $135 with one dependent, or $160 with more than one dependent.

A South Carolina veteran qualified under Public Law 550 and living in the dormitories will make, during the year, four payments of $193.15 to the college for room, board, laundry, tuition and all fees. Similarly, a South Carolina veteran living off the campus or in a housing unit will make, during 1954-1955, four payments of $52.20 to the college for tuition and fees. These quarterly payments are due at entrance, November 10, February 3 and March 30. Arrangements for payments other than as scheduled above must be made with the College Treasurer prior to the date the payment is due.

Veterans enrolled under Public Law 550 must carry a minimum of 14 semester credit hours to qualify for full benefits. Veterans enrolled for remedial courses in English and mathematics must carry a minimum of 12 semester credit hours in addition to the remedial course or courses in order to qualify for full benefits.

Public Laws 16, 346 and 894. For veterans qualified for benefits under Public Law 16, 346 or 894, the Veterans Administration pays tuition, fees and the cost of necessary books and supplies. The veteran pays his own living expenses but the subsistence checks to be received by the veteran will more than reimburse him for the

cost of living in the barracks at Clemson. Qualified veterans living in the college dormitories will make payments of $281.90 per semester to the college for room, board, and laundry.

Veteran Status. Veterans with more than twelve months' active service in the Armed Forces are not required to participate in the cadet program at Clemson.

SELECTIVE SERVICE REGULATIONS

Registration. For the benefit of students who become eighteen years of age during the school year, provision has been made for such students to register for selective service in the Registrar's Office on the campus. The registration is then sent through channels to the registrant's local board.

Deferment. Students enrolled at Clemson who are subject to the provisions of the Selective Service Act may qualify for deferment to continue their education in several ways.

(1) Students enrolled in either Air or Army ROTC at Clemson College may be deferred from induction, after their first semester freshman year, until after graduation. Mere enrollment in the ROTC itself is no guarantee against induction. The cadet must further remain in good standing in both military and academic courses and continue to demonstrate his potential for becoming an effective officer.

(2) Any student who is called for induction during his school year, is entitled to one statutory postponement to enable him to complete his school year. Thus, a student entering in September and called for induction during the year is deferred to enable him to complete the school year ending in June provided he has not previously received a postponement.

(3) Students may qualify for deferment to enable them to progress to the next class on the basis of their rank in the previous class. Thus, freshmen in the upper half of their class may be deferred for the sophomore year, sophomores in the upper two-thirds for the junior year and juniors in the upper three-fourths for the senior year.

(4) Students may qualify for deferment by attaining the required score of 70 on the Selective Service Qualification Test.

EXPENSES

Settlement of College Fees. The Treasurer of the College is the fiscal officer and all transactions relating to payments must be conducted through him. Remittances may be made in cash, money order, cashier's check, or by personal check payable to A. J. Brown, Treasurer. All remittances made by mail should be addressed to the Treasurer, Clemson College, Clemson, South Carolina. A personal check which is given in payment of dues and is returned by the bank unpaid subjects the student to having his enrollment cancelled.

At least one half the cost of semester tuition and fees and living expenses is required at entrance and any balance is due on dates indicated in the schedule of payments. Each Cadet is required to have a complete uniform and payment for articles needed is required and approximate cost is shown in the uniform schedule listed below.

Refunds. No refunds will be made on semester's tuition and fees after five weeks attendance during the semester. Refunds for periods of attendance during the semester of less than five weeks will be based upon a charge of 20% for less than two weeks, 40% between two and three weeks, 60% between three and four weeks and 80% between four and five weeks.

Living expense items will be refunded on a pro rata basis, holidays excepted, for periods unused in excess of two weeks.

Non-Resident Students. The State Law requires that all non-resident students pay the Out-of-State tuition. The bona fide residence of the parent or legal guardian, determines the residence of the student. A student accepted as a non-resident student shall continue to be considered as such until submission of evidence that parent or guardian has become a bona fide resident of South Carolina, or, if the student is of age, submission of an affidavit and acceptable evidence, other than attending school, that he is a bona fide resident of South Carolina. Any change in resident status will become effective the first of the semester following submission of satisfactory evidence of the change.

Schedule of Payments. The college reserves the right to adjust expenses to current costs. The 1954-1955 payments for regular cadets for tuition, fees, and living expenses, including board, room, and laundry are indicated below:

First Semester	*South Carolina Student*	*Non-Resident Student*
Tuition	$ 50.00	$ 150.00
Fees	54.40	54.40
Living Expenses	281.90	281.90
Total First Semester	$ 386.30	$ 486.30

A minimum payment of one half of the above charges is required upon entrance and any balance is due November 10.

Second Semester	*South Carolina Student*	*Non-Resident Student*
Tuition	$ 50.00	$ 150.00
Fees	54.40	54.40
Living Expenses	281.90	281.90
Total Second Semester	$ 386.30	$ 486.30

A minimum payment of one-half of the above charges is required upon entrance and any balance is due March 30.

Uniforms. Clemson Cadets wear a distinctive gray uniform and all new cadets are required to purchase or have in their possession, the prescribed uniform garments. Serviceable garments which will last the student throughout the semester may be accepted by the Commandant in lieu of new garments. The garments are made to measurements and no garment will be ordered unless paid for in advance. After the first year, the cadet will be required to purchase only needed uniform articles. Based on prior usage factors, the minimum requirements for each successive year will be $25 to $50. In this connection, parents are advised that those students who are successful in entering ROTC receive from the United States Government a cash payment, near the end of the session, as commutation of uniform. The present rate of commutation is $25 each for the freshman and sophomore years and $50 each for the junior and senior years.

The cost of the complete uniform for the 1954-1955 session is as follows:

1 Trousers Belt	$ .50
1 Service Cap	3.90
1 Service Coat	28.20
1 Mackinaw	26.25
6 Gray Shirts	13.00

2 Service Trousers	34.60
1 Raincoat	8.00
3 Summer Trousers	7.95
Plus 3% S. C. Sales Tax	3.67
Total	$126.07

Insignia are purchased by the individual in addition to the above major items.

Books and Supplies. The cost of books is not included in the figures given above. The cost of freshman books and supplies varies according to the student's major course. The cost of books and supplies at the beginning of the regular session will range from sixty to seventy dollars exclusive of drawing instruments and supplies.

Day Cadets. All students, except veterans and day cadets, are required to live in the college barracks. Cadets whose parental home address is within twenty miles of Clemson, and who will reside at this address, may apply for permission to attend Clemson as a day cadet. Application for permission to enroll as a day cadet should be made in letter form to the Commandant. As a day cadet the student is assigned to a cadet unit and is subject to discipline, administration and training under the Cadet Regulations, including the wearing of the uniform.

South Carolina day cadets or veterans living off the campus or in a housing unit will pay during the 1954-1955 session $104.40 per semester for tuition and fees.

Lost or Damaged Articles:

The College will not be liable for articles lost or stolen in the barracks.

The College will not be liable for lost or damaged laundry unless reported within two days after the date upon which the laundry was due to be delivered, and then not more than the actual depreciated value of such articles as have been lost or damaged.

Student Banking Accounts. For the convenience of students the College operates a banking department in the Treasurer's Office where money can be deposited and withdrawn as the occasion may demand. This service is purely local. Students are urged to deposit their money in the bank and not to keep it in their rooms.

Optional Expenses. It is not possible to give an estimate of a student's expenditures for such amusements as dancing, moving

pictures, etc. This depends largely upon the disposition of the young man. The College endeavors to reduce to a minimum the temptation to spend money needlessly, but the authorities cannot be responsible for a student's private expenditures. This must be a matter between him and his parents.

Transcripts. Official transcripts of scholastic records are issued on request. One transcript is furnished free; additional copies are issued for one dollar each. Remittances for transcripts should be made payable to the treasurer, Clemson College, but should accompany transcript requests and should be mailed to the registrar.

FINANCIAL ASSISTANCE

The College is in need of funds to lend worthy students. Donations for this or other purposes may be made to the Board of Trustees of Clemson College, or to the Trustees of the Clemson Alumni Foundation. The President of the College or the Secretary of the boards named above will be glad to communicate with any person who is interested in establishing such a fund.

Student Aid. A number of young men secure positions as waiters in the mess hall, for which service they are paid at the rate of about fifteen dollars a month. These positions are filled by the Mess Officer, to whom all correspondence should be addressed.

LOAN FUNDS

Georgianna Camp Foundation Fund. A fund established in memory of Georgianna Camp, deceased, wife of W. B. Camp, Class of 1916, and mother of W. B. Camp, Jr. and Donald M. Camp of the Class of 1947. The fund shall be used to assist worthy students who are seeking a college education and who could not reasonably be expected to obtain that ambition through their own efforts and other sources of financial assistance available to them. The fund is established to provide for loans to Clemson College students primarily but shall not be considered exclusively for those attending Clemson College.

George Cherry Foundation. Mrs. Mary Cherry Doyle has donated $1,000 to aid worthy and needy students from Oconee County and that part of Anderson County including Pendleton. This fund is not available for first-year students.

Clemson Student Loan Association Fund. A number of interested teachers, officers, alumni, and friends of Clemson College have contributed $2,500, to be loaned to worthy Clemson students.

Daniel Memorial Loan Fund. Interest on $10,000 given by Daniel Construction Company as a memorial to the late James Fleming Daniel and Fred Adams Daniel, father and brother respectively of the officers of the corporation.

William Wilson Finley Loan Fund. The sum of $1,000 has been deposited with the college to be used as a loan fund to students living in counties traversed by the Southern Railway or the Blue Ridge Railway.

Ben and Kitty Gossett Scholarship Fund. A trust fund of $10,000 administered by the President of the College and Trustees of the Clemson College Foundation, the interest from which is available for loans. First consideration is to be given to young men whose families are employed in the textile mills of South Carolina.

David Jennings Fund. A fund established by Mr. David Jennings of the Class of 1902, in memory of his mother, Martha Glen Jennings, his father, Henry Burritt Jennings, and brother, Henry B. Jennings, Jr. A sum of money not to exceed the income shall be used to aid worthy and deserving students with preference given to those pursuing textile courses.

The S. R. Rhodes Loan Fund. A fund has been established by Engineering alumni as a memorial to Professor S. R. Rhodes, retired Head of the Electrical Engineering Department. This fund can be loaned to worthy, needy students in Electrical Engineering in either the junior or senior year to assist them in completing their work at Clemson.

Application should be made to the Head of the Department of Electrical Engineering.

Wade Stackhouse Loan Fund. A gift of $20,000 from Dr. Wade Stackhouse of Dillon, whose father, the late Hugh Milton Stackhouse, was a trustee of Clemson, has been deposited with the college. The fund is designed to furnish assistance through loans to ambitious Clemson graduates who give promise of becoming leaders in research.

SCHOLARSHIPS

Alexander P. and Lydia Anderson Fellowship. Mr. and Mrs. Anderson have given to the Clemson Agricultural College the sum of $12,500 for the purpose of establishing a fellowship fund. The income from this trust fund is to be used for the purpose of awarding annually a scholarship or fellowship to one or more Clemson graduates for advanced work in biological sciences including

bacteriology and entomology. This fellowship, providing the sum of $350, was awarded in 1954 to Cecil Jerome Walters of St. George, South Carolina.

American Enka Corporation Scholarship. A scholarship of $400 to be awarded annually to a junior majoring in the field of textiles. The award will be made on the basis of need, ability and evidence of good character. In 1954 this scholarship was awarded to Clarence Westmoreland Davis of Abbeville, South Carolina.

Blackman-Uhler Scholarship. Two scholarships of $500 each to be awarded to a freshman in Textile Chemistry and Dyeing, selected for the year 1953-1954 and each alternate year thereafter. For the year 1953-1954 only, a junior was selected which may be continued his senior year if eligible. The award is made on the basis of need, ability and evidence of good character. For the school year 1953-1954 the scholarships were awarded to Samuel Gregg Thompson, a Junior from Clemson, South Carolina and to William Bailey Bennett, a Freshman from Anderson, South Carolina.

Borden Agricultural Scholarship. The Borden Company Foundation awards annually the sum of $300 to the eligible Senior achieving the highest average grade on all college work preceding the senior year. To be eligible for this award, the student must have included in his curriculum two or more Dairy subjects. In 1954, this award was given to James Kermit Henderson of Clemson, South Carolina.

Celanese Fellowship. A graduate fellowship awarded annually to an outstanding student to enable him to pursue research in the field of Textile Chemistry. The fellowship carries a yearly stipend of $1,500 in addition to a sum of money to cover the cost of tuition, fees and research material.

Dow Corning Fellowship. A graduate fellowship awarded annually to an outstanding student to enable him to pursue research in the field of Textile Chemistry. The fellowship carries a yearly stipend of $1,500 in addition to a sum of money to cover cost of tuition, fees and research supplies.

Interchemical Corporation Scholarship. A scholarship of $500 to be awarded annually to a junior in Textile Chemistry or Textile Engineering. The award is to be made on the basis of need, scholarship ability, character and leadership potential. At the discretion of the College, students majoring in general chemistry, physics or other related fields of study may be considered and the scholarship

moneys may be divided into two scholarships of $250 each. In 1954 two scholarships of $250 were awarded to Henry Richard Kuemmerer of Walhalla, South Carolina and Thomas Edward Boyce of Joanna, South Carolina.

Keever Starch Scholarship. A scholarship of $400 to be awarded annually to a textile engineering student. In 1954 this scholarship was awarded to Rufus Garland Revis of Pendleton, South Carolina.

The Edward Orton, Jr. Fellowship. A graduate fellowship annually awarded to an outstanding student to enable him to pursue research in the field of Ceramics. The fellowship carries a yearly stipend of $1,200 and is provided by the Edward Orton, Jr. Ceramic Foundation. General Orton was the founder of formal Ceramic Engineering Education. In 1954-1955 this award was given to Clifton Moody McClure, III of Anderson, South Carolina.

Owens-Corning Fiberglas Scholarship Fund. Two scholarships of $600 each to be awarded annually to an outstanding junior and an outstanding senior in either the Engineering or Textile Schools. Selection of recipients is to be made on the basis of academic standing and leadership ability by a committee composed of College and Fiberglas representatives subject to approval of Fiberglas Corporation. For the school year 1954-1955, the scholarships were awarded to Allston Thomas Mitchell, Textile Engineering Senior of Greenville, South Carolina, and to William Aull Leitner, Chemical Engineering Junior of Clemson, South Carolina.

V. B. Higgins Fund. The sum of $27,500 has been deposited with the Clemson College Foundation by Mr. V. B. Higgins, Class of 1910, to establish a fund to be used:

1. To provide one or more complete scholarships for a student of Engineering after his first year at Clemson College.
2. For the promotion of research in Engineering.
3. For the promotion of Engineering Education.

Undergraduate and graduate scholarships are made to Clemson students and professors on the basis of scholarship and need. For the year 1954-1955 a Junior scholarship in the amount of $400 was awarded to Walter Hazel Hendrix, Mechanical Engineering Junior of Heath Springs, South Carolina; a Sophomore scholarship in the amount of $300 was awarded to Franklin Delano Guerry, Mechanical Engineering Sophomore of North Charleston, South Carolina; and a Freshman scholarship in the amount of $100 was awarded to William Ray Wactor, Chemical Engineering freshman from Orangeburg, South Carolina. A graduate scholarship was

awarded to Joseph Laurie Young who is now engaged in graduate work in Architecture at Georgia Institute of Technology.

Sears, Roebuck Agricultural Foundation. The Sears, Roebuck Agricultural Foundation has made funds available for freshman agricultural scholarships at Clemson for the past several years. There are thirteen one-hundred-fifty-dollar Sears, Roebuck Scholarships available for 1954-1955 for freshmen who major in either Agriculture or Vocational Agricultural Education. Further information concerning these awards may be secured from Dr. J. W. Jones, Director of Agricultural Teaching, School of Agriculture, Clemson College, Clemson, South Carolina.

George E. and Leila Giles Singleton Scholarship. Mr. G. H. Singleton, Class of 1919, has given over $4,970 to Clemson College for a scholarship fund to aid deserving farm boys of Oconee County in studying agriculture at Clemson. The scholarship is given in the name of his parents, George E. and Leila Giles Singleton.

The income from this trust fund is to be awarded annually to a farm boy with farm experience preferably from Oconee County. If satisfactory applicants cannot be secured from Oconee County, the scholarship may be filled from applicants from Pickens County. The recipient of this scholarship may hold this award for two years. In 1954 this award, in the amount of $300, was made to James Theodore Powell of West Union, South Carolina.

Smith-Douglass Agricultural Foundation Scholarships. The Smith-Douglass Company, Inc. of Wilmington, North Carolina has provided funds for agricultural scholarships at Clemson. Two $750 scholarships are available for the 1955-1956 session to freshmen who major in either Agriculture or Vocational Agricultural Education. Applicants must be residents of either Clarendon, Darlington, Dillon, Florence, Georgetown, Horry, Lee, Marion, Marlboro, Sumter, or Williamsburg County. Scholarships are awarded on the basis of financial need, grades in high school, other evidence of leadership, and scores on tests required of all entering freshmen at Clemson College. Each of the scholarships will be paid in four annual installments. To continue receiving the installments after the freshman year, the recipient will be expected to earn a scholastic average sufficient to rank him in the upper half of his class, and to demonstrate other evidence of personal development. Further information concerning these scholarships may be secured from Director J. W. Jones, School of Agriculture, Clemson College, Clemson, South Carolina.

Warwick Chemical Foundation in Memory of Manfred Caranci. The sum of $3,000 to be held as part of the general capital endowment funds and the income to be used from time to time as the governing board shall from time to time designate, primarily for scholarships to encourage education and research in chemistry and to enable worthy students to pursue graduate studies in chemistry, and otherwise to promote chemical education. In 1954 this award was made to Charles Elliott White, Wagener, South Carolina.

Westinghouse Electric Corporation Scholarship. A scholarship of $500 to be awarded to a rising senior in Chemical, Electrical or Mechanical Engineering. The scholarship is awarded to a student who has done outstanding scholastic work and has demonstrated qualities of leadership. In addition to the scholarship, the student is offered employment with the Westinghouse Electric Corporation on a training course between the junior and senior years.

Zonolite Fellowship. A graduate fellowship awarded annually to an outstanding student to enable him to pursue fundamental research in the field of Ceramic Engineering. The fellowship carries a yearly stipend of $1,500, and is provided by the Zonolite Company. In 1954-1955 this award was given to Irvin F. Havens of Augusta, Georgia.

Assistantships. In addition to these funds there are certain funds which are available for assistantships to students who are enrolled in the Graduate School. For information relative to these funds inquiries should be addressed to the department in which the student plans to do his graduate work.

HONORS AND AWARDS

Agricultural Certificates of Merit. Beginning with the session of 1914-1915 certificates of merit have at times been awarded to farmers in South Carolina who have rendered distinguished service in the agricultural development of the State.

Air Force Association Medal. The Air Force Association of Washington, D. C., awards this medal annually to the first year advanced Air Force cadet who has shown outstanding aptitude for both academic and military pursuits. In 1954 this medal was awarded to James Kermit Henderson of Clemson, South Carolina.

Alpha Chi Sigma Award. Awarded to the sophomore majoring in Chemistry, Textile Chemistry, or Chemical Engineering who maintained the highest scholastic record during his first three se-

mesters of work. In 1954 this award was presented to John Baecher Butt of Greensboro, North Carolina.

Alpha Tau Alpha Scholarship Medal. Awarded to the senior in Agricultural Education having the highest scholastic record. In 1954 this award was presented to Thomas Max Mintz of Blacksburg, South Carolina.

Alpha Zeta Award. An annual award given to the sophomore in agriculture having the highest grade point ratio for the first three semesters. In 1954 this award was given to Elbridge Juette Wright, Jr. of Belton, South Carolina.

American Association of Textile Chemists and Colorists Award. This award for the best work done in Textile Chemistry and Dyeing by a member of the graduating class was given in 1954 to William Furman Moore, Jr. of Taylors, South Carolina.

The American Association of Textile Technologists Award. Awarded to the graduate having the highest scholarship and all-round qualifications for success in the textile industry. In 1954 this award was given to Max Ulmer Gainor of of Chester, South Carolina.

American Chemical Society Award. An award given annually to the outstanding senior in Chemistry who is a member of the student affiliate chapter of the American Chemical Society.

American Institute of Chemical Engineers Award. Each year, the American Institute of Chemical Engineers sponsors an award consisting of an engraved certificate, a gold emblem of student membership in the national organization, remission of undergraduate dues, and subscription to the "Chemical Engineering Progress" to the junior student, majoring in Chemical Engineering, who has attained the highest scholastic standing through the sophomore year. In 1954 this award was presented to Fritz Richard Franke of Spartanburg, South Carolina.

American Institute of Electrical Engineering Junior Scholastic Award. Awarded to the second semester junior or the first semester senior in Electrical Engineering having the highest scholastic record. In 1954 this award was presented to John Martin Bailey of Seneca, South Carolina and Marvin Reu Reese of Greer, South Carolina, a tie.

American Society of Civil Engineers Membership Award. Awarded each year by the South Carolina Section of the American Society of Civil Engineers to the outstanding graduating senior in

Civil Engineering. In 1954 this award was presented to Sam Barrow Murphree, Jr. of Troy, Alabama.

The American Society of Mechanical Engineers Membership Award. Awarded to the outstanding graduating senior in mechanical engineering. In 1954 this award was given to Nelson Crawford Poe of Greenville, South Carolina.

Architects' Certificates of Merit. The South Carolina Chapter of the American Institute of Architects each year awards a certificate of merit to the outstanding senior architect and senior architectural engineer. In 1954 certificates of merit were awarded to Tracey Howard Jackson, a senior in architecture, of Clemson, South Carolina and Vernon Dantzler Moorer, a senior in architectural engineering, of Washington, D. C.

Armed Forces Communications Association Medal. The Armed Forces Communications Association of Washington, D. C., sponsors annually an award to the outstanding sophomore, junior and senior student taking military training with communications or electronics as the major courses. In 1954 awards were given to Jones Arnold Gillard of Florence, South Carolina as the outstanding Army ROTC senior pursuing Electrical Engineering as his major course, and Philip Raymond Nickles of Hodges, South Carolina as the outstanding Air Force ROTC senior pursuing Electrical Engineering as his major course.

The Armor Medal. A medal awarded to the student selected for outstanding scholastic achievement in Armor Second Year Advanced ROTC. In 1954 this award was given to Joseph Lindsay, III of Clemson, South Carolina.

Armored Association Scroll. The Armor Association of Washington, D. C., awards this Scroll annually to the Senior Armor Cadet who has shown outstanding aptitude for both academic and military pursuits. In 1954 this Scroll was awarded to Benjamin Kilgore Chreitzberg, Jr. of Williamston, South Carolina.

Arnold R. Boyd English Honor Key. Arnold R. Boyd, Class of 1914, donates this Honor Key annually to the student in the graduating class who makes the best record in English during his college course. In 1954 this award was given to Lawrence Marion Gressette, Jr. of St. Matthews, South Carolina.

Association of the United States Army Infantry ROTC Medal. An award given annually to the senior infantry cadet in recognition of four years of outstanding efforts in college work, military

science and leadership. In 1954 this award was given to Lawrence Marion Gressette, Jr. of St. Matthews, South Carolina.

The Beta Sigma Chi Award. An award of $100 to be given to the winner of a competitive examination among students from the vicinity of Charleston. In 1954 this award was given to John William Felder of Charleston, South Carolina.

Class of 1902 Awards. In recognition of the distinguished teaching services of three professors who were on the College faculty at the time the Class of 1902 was at Clemson, and in memory of those of the class who have passed on, the members of the Class of 1902 have deposited with the Clemson College Foundation the three following funds of $2,000 each, the income from these funds to be awarded annually.

The Williston Wightman Klugh award to a worthy, earnest undergraduate student of good moral code and personality who intends to make teaching his life work. In 1954 this award was given to Wallis Shufeldt Goodman of Clemson, South Carolina, a February graduate.

The Rudolph Edward Lee award, to a worthy undergraduate student in Architecture, selected upon the recommendation of the faculty of the Department of Architecture after consideration of the student's grades, extra-curricular activities, and those qualities that go toward making a successful professional architect. In 1954 this award was given to John Walter Harrison of Sumter, South Carolina.

The Samuel Maner Martin award, to a worthy undergraduate student taking mathematics as a major subject was not awarded in 1954.

Thomas G. Clemson Award. Established by the Pendleton Agricultural Society to recognize the senior showing the most proficiency in agriculture. In 1954 this prize, a gold cup, was presented to Charles Jarred Hammett of Kingstree, South Carolina.

Consolidate Vultee Aircraft Corporation Award. The Consolidated Vultee Aircraft Corporation has made available a miniature model aircraft to be awarded to the Air Force ROTC Advanced Student who has demonstrated a keen interest in flying, outstanding leadership qualities, and has an academic standing in the upper third of his major course. In 1954 this award was presented to James Frank Humphries, Jr. of Columbia, South Carolina.

Howard Carlisle Copeland Memorial Fund. The family of Howard Carlisle Copeland, who gave his life during World War II, has set up a permanent memorial fund in his memory. Each year the interest from the fund shall be given to the boy who has made the greatest endeavor financially to stay in college. In 1954 an award of $35 was made to John Robert Trout of Rock Hill, South Carolina.

Virginia Dare Award. An award of $25 given annually by the Virginia Dare Extract Company, Incorporated, to the senior majoring in Dairying and having the highest grade in Dairy 402, Dairy Manufactures. In 1954 this award was given to Bernard McIntyre Sanders of Cordova, South Carolina.

Danforth Fellowships. The Danforth Foundation of St. Louis awards fellowships each year to two agricultural students. One of these is given to an outstanding member of the junior class majoring in either Dairying, Animal Husbandry or Poultry Husbandry. The award amounts to $195 and provides expenses incident to the attendance of the recipient at a two-weeks summer short course for training in salesmanship at the laboratories of the Ralston Purina Company in St. Louis and also for a two-weeks stay at the American Youth Foundation Leadership Training Camp at Shelby, Michigan. The fellowship for 1954 was awarded to Niles Craig Clark, Jr. of Waterloo, South Carolina, junior in Animal Husbandry. The second Danforth Fellowship amounting to $50 is awarded to an outstanding freshman expecting to major in the animal science field. It provides for a two-weeks stay at the Leadership Camp at Shelby, Michigan—the same camp to which the recipient of the Junior award goes. This award for 1954 was received by Benjamin Thomas McDaniel of Pickens, South Carolina.

Samuel B. Earle Award. An award established by Clemson Alumni in memory of Dean Samuel B. Earle who ended forty-eight years of service to Clemson College in July, 1950, given annually to an outstanding senior in the School of Engineering. In 1954 this award was presented to Jerry Edward Dempsey of Anderson, South Carolina.

Society of American Military Engineers Medal. The Society of American Military Engineers of Washington, D. C., sponsors annually awards to the outstanding cadets in the Corps of Engineers Advanced ROTC. In 1954 the following awards were made: John Thomas Gibbs, Jr. of North Augusta, South Carolina, the outstanding cadet in the Corps of Engineers Second Year Advanced ROTC

and David Morris of Shelby, North Carolina, the outstanding cadet in the Corps of Engineers First Year Advanced ROTC.

The General Electric Professors' Conference Association Scholarship. An award of $500 to be given to a rising senior in Mechanical Engineering in recognition of his outstanding record and achievements. In 1954 this award was given to William Lawrence Orr, Jr. of Hendersonville, North Carolina.

The Institute of Textile Technology Fellowship. An award of $1,125 given to an outstanding graduate in the School of Textiles to be used for further work at the Institute of Textile Technology. In 1954 this award was given to Marvin Curtis Robinson of Asheville, North Carolina.

James Lynah Merit Awards. Income from a fund established by Mr. James Lynah in memory of distinguished professors who were teaching at Clemson when the members of the Class of 1902 were undergraduates shall be used to grant prizes.

In 1954 recipients of $50 each were: The Charles Manning Furman prize in English to Robert Floyd Mixon of Clemson, South Carolina. The Mark Bernard Hardin prize in Chemistry to Charles Elliott White of Wagener, South Carolina. The William Shannon Morrison prize in History was not awarded in 1954. The Charles Carter Newman prize in Horticulture to Donald Busby Dunlap of Rock Hill, South Carolina. The Walter Meritt Riggs prize in Electrical Engineering to Marvin Reu Reese, Jr. of Greer, South Carolina. The Augustus G. Shanklin prize in Military Science and Tactics to Jerry Edward Dempsey of Anderson, South Carolina.

Clark Lindsay McCaslan Award. The sum of $1,000 has been deposited with the college to establish a fund in memory of Clark Lindsay McCaslan, Class of 1908, and a pioneer in Agricultural Engineering. The income from the fund shall be given annually to the student in the Department of Agricultural Engineering who, in the opinion of the faculty, shall be deemed to be the most deserving. In 1954 this award was given to Claude Lowry of Clemson, South Carolina and Pembroke, North Carolina.

Minaret Award. Awarded to the outstanding sophomore in Architecture. In 1954 this award was presented to Charles Hamilton Burnette of Greenville, South Carolina.

National Association of Cotton Manufacturers Medal. For several years, this medal has been awarded to the outstanding graduate in Textile Engineering, both in February and in June.

In 1954 these awards were given to Bennett Earle Wilson of Spartanburg, South Carolina, and Max Ulmer Gainor of Chester, South Carolina.

Norris Medal. The following is from the will of the Hon. D. K. Norris, a life trustee of Clemson, who died in 1905:

"I give $500 face value, Norris Cotton Mill stock . . . on condition the dividend thereon shall be applied annually to the purchase of a gold medal, to be known as the 'Norris Medal', to be awarded to the student of Clemson meriting the same at graduation, under such rules and conditions as may be prescribed by the said Board of Trustees, and which medal shall have engraved on it 'Honor habet onus' (Honor brings responsibility)."

In 1954 this medal was awarded to Joseph Lindsay, III, of Clemson, South Carolina.

American Ordnance Association Medal. The American Ordnance Association, Washington, D. C., sponsors annually an award to the outstanding second year advanced ordnance cadet. In 1954 the outstanding cadet in Ordnance Second Year Advanced ROTC was Jerry Edward Dempsey of Anderson, South Carolina.

Phi Eta Sigma Scholarship Medal. Awarded to the senior having the highest scholastic record. In 1954 this award was made to Joseph Lindsay, III of Clemson, South Carolina.

Phi Kappa Phi Award. Awarded to the junior having the highest scholastic record. In 1954 this award was presented to William Aull Leitner of Clemson, South Carolina.

Phi Psi Award. This award is made by the National Honor Council of the Phi Psi Textile Fraternity to the textile graduate who has attained the highest scholastic record in textile courses. In 1954 this award was given to George Rose Morgan, Jr. of Greenville, South Carolina.

Quartermaster Association Annual Awards. The Quartermaster Association, Washington, D. C., sponsors annual awards to the outstanding First Year Advanced Quartermaster Cadet and to the outstanding Second Year Advanced Quartermaster Cadet. In 1954 the outstanding cadet in Quartermaster First Year Advanced ROTC was Joe Franklin Mattison of Belton, South Carolina. The outstanding cadet in Quartermaster Second Year Advanced ROTC was Walter Carlisle Cottingham of Trio, South Carolina.

Republic Aviation Award. The Republic Aviation Corporation has made available a miniature model aircraft to be awarded to

the Air Force ROTC Graduate who has demonstrated the greatest personal achievement and professional development in the study of Aeronautical Sciences while enrolled in the Aircraft Maintenance Option. In 1954, this award was presented to Clifton Moody McClure, III of Anderson, South Carolina.

Sears, Roebuck Award. An award of $250 is given to the sophomore who makes the highest scholastic average as a Freshman Sears, Roebuck Scholar. In 1954 this award was given to James Teddie Ligon of Easley, South Carolina.

Sigma Pi Sigma Prize. Awarded to the outstanding senior in the Physics Department. In 1954 this award was presented to Richard Austin Branham of Atlanta, Georgia.

Sigma Tau Epsilon Membership Award. Awarded to the sophomore majoring in the School of Arts and Sciences and having the highest scholastic record. In 1954 this award was not presented.

R. W. Simpson Medal. A medal designated as the "R. W. Simpson Medal" is awarded annually to the best drilled cadet in the freshman, sophomore or junior class. In 1954 the medal was awarded to Daniel Jones Cochran of Charlotte, North Carolina.

Algernon Sydney Sullivan Medallion. A valuable and artistic memorial, established by the Southern Society of New York in honor of its first president, is awarded each year by the college to a member of the graduating class and to one other person who has some interest in, association with, or relation to the Institution, official or otherwise, of a nature as to make this form of recognition appropriate. The recipients of this award shall be chosen in recognition of their influence for good, their excellence in maintaining high ideals of living, their spiritual qualities and their generous and disinterested service to others.

In 1954 these medallions were awarded to Charles Jarred Hammett of Kingstree, South Carolina, a member of the graduating class, and to David Wistar Daniel, Dean Emeritus, School of Arts and Sciences, of Clemson, South Carolina.

Tau Beta Pi Scholastic Award. Awarded to the sophomore in engineering having the highest scholastic record. In 1954 this award was presented to James Frank Humphries, Jr. of Columbia, South Carolina.

Trustees' Medal. The Board of Trustees has provided for a gold medal to be awarded annually to the best speaker in the student

body. The medal was awarded in 1954 to James Lewis Cromer of Greenwood, South Carolina.

BUILDINGS AND GROUNDS

Buildings. Tillman Hall houses the offices of the President, the Registrar, the Commandant, the Treasurer, the Business Manager, the Professor of Military Science and Tactics, and the Dean of the School of Arts and Sciences. This building also has over twenty classrooms. At the north end of the building is Memorial Hall, the College Auditorium, with a seating capacity of about eighteen hundred.

The Library Building, located in approximately the center of the campus, houses the Main Library, the Agricultural Reference Department, and the Browsing Room. The Mailing Room for the Experiment Station and Extension Departments is on the basement floor.

The Library contains 141,281 bound volumes, consisting of books, periodicals and U. S. Government Publications. In addition to the bound volumes the Library contains 768,637 unbound Federal, State, Experiment Station and Extension Service publications, 8,841 unbound periodicals and 10,799 pamphlets and clippings in the vertical subject file.

The Browsing Room is located in the basement of the Library Building, is beautifully and comfortably furnished, and contains many popular and attractive books, current magazines, and daily newspapers. It also contains the reserve book collection.

A Carnegie Collection of 1,270 recordings of classical and semi-classical music, books related to music, and turntables for playing records with earphones for listening are also in this room.

The Library Staff consists of twelve professionally trained Librarians and several other non-professional assistants and clerical workers. A trained Librarian is always on duty to assist faculty and students.

The Library is open daily from 8 a. m. until 10 p. m., Monday through Friday, from 8 a. m. to 5:30 p. m. Saturdays, and from 2 p. m. to 10 p. m. Sundays, with the exception of holidays.

The instructional work of the institution is maintained largely in the departmental buildings. The Schools of Agriculture, Chemistry, Engineering and Textiles have individual buildings especially designed for their purposes, as do the Departments of Agricultural

Engineering and Ceramic Engineering. Through the generosity of the Olin Foundation of Minneapolis, Minnesota, there has recently been completed a magnificent new building known as Olin Hall, especially designed and equipped for the Department of Ceramic Engineering.

The School of Arts and Sciences is located in the Administration Building and the Physics Building with the exception of the Social Sciences Department which is located in the Old Chemistry Building, also occupied by the School of Education. Certain laboratory work is conducted at the greenhouses, livestock farms, poultry plant, veterinary hospital and other buildings on the college farm. The Department of Military Science has offices and classrooms in the Administration, Physics and Old Education Buildings, and in the McGinty House while the Department of Air Science is located in the Textile Building.

The college has just completed, at a cost of over four million dollars, a student dormitory building program. The new dormitories in the form of a quadrangle and containing approximately 1,000 rooms, represent the latest in architectural design and are of modern steel and concrete construction. As a result of this building program, the college is able to house all students two per room in modern facilities, all of which were constructed since 1935. In addition to the rooms for students the new building program includes a student union section. This section includes a spacious lobby, an information center, a visitor's lounge, meeting rooms for the various clubs and student activities, a small chapel, a student canteen, and a barber shop.

The Hospital, located about a quarter of a mile from the barracks, is a wooden building, especially designed for the purpose. The equipment includes a Victor *X*-ray machine, a new Burdick ultraviolet ray machine, and a Sorensen machine of the latest design for ear, eye, nose, and throat treatments.

The Y. M. C. A. building is a four-story structure equipped with club rooms, lounge rooms, game rooms, and has in addition, thirty rooms available for permanent roomers, guests, and transients. Some of these rooms are reserved for members of the Extension Department and other visitors and guests, and are equipped with connecting or private baths. Having an auditorium, gymnasium, and swimming pool, the Y. M. C. A. building is admirably fitted to serve as a center of social activities and voluntary religious work. Two auditoriums equipped with heating and cooling systems pro-

vide accommodations for numerous conferences, especially during the summer months when fewer students are in school.

The Physical Education Building consists of a central office and dormitory section, a field house, and a gymnasium.

The new Laundry building, operated exclusively for the students, is of modern design and completely equipped with the latest type machinery.

Fort Hill, the former home of John C. Calhoun, is located on the Clemson campus. In accordance with the provisions of Mr. Clemson's will, this residence has been made a shrine in honor of Mr. Calhoun. Several pieces of furniture and other interesting relics, formerly the property of Mr. Calhoun, are carefully preserved in this home, where they may be seen by visitors to the college.

Grounds. The college grounds comprise about 1,645 acres, including the campus, the farm, and the Experiment Station grounds. The two-hundred-acre campus is laid out in walks, drives and lawns, and is shaded by a beautiful grove of native forest trees.

LIVING CONDITIONS

At Clemson cadets live in dormitories under modified military discipline. A cadet must at all times be present or accounted for. The dormitories in which the Corps is housed are divided into company areas. Each company is under the supervision of cadet officers.

Civilian students live in dormitories under the general supervision of Dormitory Supervisors who are usually graduate students. These supervisors are responsible to the Commandant for the proper civilian student control. Civilian students are expected to remain quietly in their rooms during the evening study hours except when they are appropriately absent in some other element of the college.

Each student room is equipped with necessary furniture. The beds are single width. Bed linen, bed covers, pillows, and towels must be furnished by the students. All students are required to provide themselves with two laundry bags. These laundry bags should not be less than 20 by 30 inches.

The dining hall is under the supervision of the mess officer and all students living in the dormitories are required to eat in the dining hall.

The college has two hundred and eighty-seven houses for married students. These houses are equipped with space heaters and hot water heaters. The monthly rental ranges from $16.50 to $19.00 depending upon the type kitchen appliances used.

Women may be admitted to all curriculums of the College both undergraduate and graduate, but no dormitory facilities are available for women students.

RESERVE OFFICERS' TRAINING CORPS (ROTC)

Clemson is classified as a Military College by the Department of the Air Force and the Department of the Army. Both departments maintain senior division units of the ROTC at Clemson.

The mission of the Reserve Officers' Training Corps is to produce junior officers having qualities of leadership and attributes essential to their progress and continued development as commissioned officers in either the Air Force or the Army of the United States.

To implement this mission a four-year program is offered consisting of the basic course for freshmen and sophomores and the advanced course for juniors and seniors. In addition to the regular military curriculum, the college has approved one additional hour for leadership training.

Cadets who complete the prescribed ROTC courses and receive a bachelor's degree may be awarded commissions in either the Air Force Reserve or Army Reserve. Each student receives one credit hour for each semester of the basic course and three credit hours for each semester of advanced ROTC successfully completed, all of which are counted as approved credits in the curriculums toward a degree.

Members of the advanced course are required to attend one summer camp between the junior and senior years. All students attending camp are paid at the rate of $78 per month, reimbursed for travel at the rate of five cents per mile for the round trip, and are messed, housed, uniformed and receive medical attention at government expense while at camp. The Air Force encampment is normally of four-week duration, the Army encampment is normally of six-week duration.

The training at camp consists of demonstrations and a practical application of the theoretical knowledge learned in the classroom. This includes demonstrations of equipment and training techniques. The development of leadership potential of each individual is care-

fully stressed through the period. In addition to this training, the student has an opportunity to participate and compete in healthy outdoor sports with young men from other colleges. A religious program is conducted at each camp.

Outstanding Air Force ROTC Cadets who attain grades in the upper third of their major course and upper third of the Air Science subjects during their junior year and who possess outstanding qualities of leadership, character, and aptitude for military service may be designated, with the approval of the College President and the PAS, Distinguished Air Force ROTC Students. Those who maintain this outstanding record during their senior year may be designated Distinguished Air Force ROTC Graduates. A Distinguished Air Force ROTC Graduate may apply for a Regular Air Force Commission after eighteen months of Active Duty Service. Outstanding Army ROTC Cadets who attain grades in the upper half of the class in both academic and Military Science subjects during their junior year and who possess outstanding qualities of leadership, character and aptitude for military service may be designated, with the approval of the College President, as Distinguished Military Students by the PMS&T. Those who maintain this outstanding record during their senior year may be designated Distinguished Military Graduates. A Distinguished Military Graduate may apply for appointment as a Second Lieutenant in the Regular Army.

The statutory requirements for enrollment in the ROTC are that the student must be a citizen of the United States, physically qualified by standards as prescribed by the Department of the Army and the Air Force and accepted by the institution as a regularly enrolled student. To be enrolled initially in the Air Force ROTC, a student must not be less than fourteen years of age. The maximum age requirements for enrollment in Air Force ROTC are that a student must be able to complete all requirements for appointment as a Reserve Officer of the Air Force prior to his twenty-eighth birthday. The minimum requirements for enrollment in Army ROTC are that a student must not be less than fourteen years of age and must not have reached his twenty-third birthday at the time of the student's initial enrollment in the basic course. At the time of the student's initial enrollment in the advanced course of the Army ROTC, a student must not have reached his twenty-seventh birthday.

The minimum academic requirement for enrollment in advanced ROTC courses is that the student must establish, beyond the re-

quired attainment of Junior classification, that he will be able to complete the required college course in the normal time as indicated in the college catalog. For continuance in the Advanced ROTC course, as a senior, a student must have earned sufficient hours and established a grade-point ratio to give assurance of graduation in the normal time as indicated in the college catalog.

He must give positive evidence of having developed leadership potential to a degree that would indicate he will be an effective officer of the Armed Forces. As a member of the Army Reserve or the Air Force Reserve he will, after graduation be subject to call by his department for a tour of active duty.

Good moral character and the signing of a loyalty certificate are prerequisites for enrollment and continuance in the ROTC. Qualified veterans may enroll in the ROTC.

Currently, commutation in lieu of uniforms, is paid to basic ROTC students at the rate of $25 per year, not to exceed two years. Advanced ROTC students receive $100 commutation in lieu of uniforms for the junior and senior year combined and commutation in lieu of subsistence at the rate of ninety cents per day for a total not to exceed 595 days. Veterans are paid these allowances in addition to the benefits authorized by the Veterans Readjustment Assistance Act, if they are enrolled in the ROTC courses.

Air Force. The general program has two sections. The basic AFROTC curriculum consists of introductory material on aviation, the Air Force itself, and the world situation. Some subjects in this group are: Introduction to Aviation, Fundamentals of Global Geography, International Tensions and Security Structures (such as NATO and the UN), Elements of Aerial Warfare, and Career Opportunities.

In the advanced course, the juniors and seniors delve more deeply into the organizational machinery of the Air Force. His subjects include, The Commander and his Staff, Problem Solving Techniques, Human Communication, Instructing in the Air Force, Military Justice, and Applied Air Science.

During the senior year, the cadet studies Leadership and Management, Military Aviation and Evolution of Warfare, and Military Aspects of World and Political Geography. During his entire four years of AFROTC, the student receives a heavy concentration of leadership training and is given positions of responsibility therein.

Army. The Army ROTC instruction stresses an academic college level program in content, scope and intensity. Emphasis is

placed on the development of the students leadership potential. The program at Clemson is the branch material program and offers six branches of the Army in which a student may enroll.

The student is permitted to select the branch he desires for enrollment consistent with his major course and the quotes that may be established for each branch of the service.

The branches available at Clemson and the requirements for enrollment are indicated below:

Armor	—Any major course.
Corps of Engineers	—Any engineering course, Architecture, or any major course leading to a scientific degree.
Infantry	—Any major course.
Ordnance Corps	—Enrollment in an academic course of instruction leading to an engineering, technical, or other scientific degree. Major in accounting.
Quartermaster Corps	—Any major course.
Signal Corps	—Enrollment in an academic course leading to a degree in engineering or electronics. Majors in mathematics or physics. Possesses an amateur's radio operators license. Having a record of previous commercial employment providing technical communications experience. Having prior military service and become professional in certain other communication activities.

Except for unusual circumstances a student upon completion of the sophomore year of the basic course will be continued in the same branch in the advanced course as he studied during the sophomore year. Upon being commissioned a cadet may expect, subject to the needs of the service at that time, to ordinarily receive his commission in the branch he was enrolled in during his period in the advanced course.

Band. The Band is composed of over one hundred members and is under the musical direction of a competent full-time director. It consists of ROTC members of the Army and the Air Force and civilian students of the college. Instruments are furnished by the college and the Department of the Air Force and Army for the

organization. The Band plays for military ceremonies, football games and other appropriate occasions.

Rifle Team. The college rifle team consists of members of the Army and Air Force ROTC units and civilian members of the student body. In addition there are separate Army and Air Force teams. The teams compete in the Hearst Matches and the National Intercollegiate Matches. Both postal and shoulder matches are fired each year with other colleges and universities. The firing is conducted with modern small-bore target rifles in an indoor range. The team members earn the minor "C" and sweater.

STUDENT HEALTH SERVICE

The Surgeon, who has complete charge of the hospital, is one of the regular officers of the college, and his special duty is to look after the health of the students.

At a specified time every day, students who desire may consult the Surgeon, and those who are admitted to the hospital are cared for by experienced nurses in the college hospital. In case of necessity students are allowed to consult the Surgeon at any time, or to send for him in an emergency.

The Surgeon cannot undertake to notify parents every time a student reports to the hospital for medicine, or for rest on account of some slight complaint. However, they may rest assured that they will be notified at once of sickness of any consequence.

The medical fee paid by each student is intended to cover all ordinary cases of sickness and their treatment. It is not intended to cover fees of doctors or specialists called into consultation, for performing operations, for special nurses, or for any medical or surgical attentions performed away from the college; and the college does not assume any responsibility for accidents that happen away from the college. Such expenses must be borne by the parents. The right of the College Surgeon, with the approval of the President of the college, to incur in behalf of any student under his care any of these extra services is hereby expressly reserved.

RELIGIOUS INFLUENCES

Clemson cooperates with the various churches and the Y. M. C. A. in the religious training of its students. The Y. M. C. A., located on the campus, provides accommodations for all denominational groups not having church homes on the campus and is used a great deal by campus church groups, often because it is so convenient

and accessible. Numerous union services and cooperative meetings of young people's societies of the campus churches, of the Y. M. C. A. Councils, and Cabinet afford a united front for religious services.

Six denominations: Baptist, Episcopal, Lutheran, Methodist, Presbyterian, and Roman Catholic, have erected churches in the community. Arrangements are made for services for students of other denominations. Sunday schools and young people's church societies are maintained by the local churches. Attendance upon the services of these organizations is voluntary.

Courses in Religion, which are credited as free electives, are offered. This work is not financed by the college. For information regarding these courses see the description of courses.

HISTORICAL STATEMENT

In 1889, the General Assembly of South Carolina accepted the bequest of Thomas G. Clemson, which set aside the bulk of the Clemson estate for the founding of a scientific and technical college. The institution was also established under the Morrill Land-Grant Act passed by the National Congress in 1862. Clemson College, therefore, is the Agricultural and Mechanical College of South Carolina and is a member of the national system of Land-Grant Colleges and Universities.

The nature of the institution is outlined in Mr. Clemson's will and its acceptance by the legislature.

The will in part reads:

"Feeling a great sympathy for the farmers of this State, and the difficulties with which they have to contend in their efforts to establish the business of agriculture upon a proper basis, and believing that there can be no permanent improvement in agriculture without a knowledge of those sciences which pertain particularly thereto, I have determined to devote the bulk of my property to the establishment of an Agricultural College upon the Fort Hill Place. My purpose is to establish an Agricultural College which will afford useful information to the farmers and mechanics; therefore it should afford thorough instruction in agriculture and the natural sciences connected therewith; it should combine, if practicable, physical with intellectual education; and should be a high seminary of learning in which the graduate of the common schools can commence, pursue and finish a course of studies terminating

in thorough theoretic and practical instruction in those sciences and arts which bear directly upon agriculture. • • • • but to always bear in mind that the benefits herein sought to be bestowed are intended to benefit agriculture and mechanical industries. • • • • I trust I do not exaggerate the importance of such an institution for developing the material resources of the State, by affording its youth the advantages of scientific culture."

"The desire to establish such a school or college, as I have provided for in my said last will and testament, has existed with me for many years past, and many years ago I determined to devote the bulk of my property to the establishment of an Agricultural School or College. To accomplish this purpose is now the one great desire of my life."

This will gave all that part of the Fort Hill Estate inherited by Mrs. Clemson from her mother and the bulk of Mr. Clemson's other real and personal property. The latter amounted to a sum, which, considering the purchasing power at the time, probably has been only a few times exceeded in a public benefaction in South Carolina.

A Board of Trustees of seven members was provided for: R. W. Simpson, D. K. Norris, M. L. Donaldson, R. E. Bowen, B. R. Tillman, J. E. Wannamaker, and J. E. Bradley, who with those chosen by the General Assembly, should constitute a governing board in case the State accepted the bequest; but, who, in case the State declined the bequest, should alone constitute a governing board for a private institution.

These seven trustees, along with other friends of the movement, and the agricultural groups in the State developed and organized a public opinion favorable to the plan.

In November, 1889, the General Assembly of South Carolina accepted the terms of the will, and, following the decision of the United States Supreme Court to uphold the will, the State of South Carolina and the full Board of Trustees proceeded to convert the dream of Thomas G. Clemson into the reality of Clemson College.

The college was formally opened in July, 1893, with an enrollment of 446 students. The first graduating exercises were held in December, 1896, with a graduating class numbering thirty-seven—fifteen in the agricultural courses and twenty-two in the engineering courses.

LOCATION

The college is located on the Fort Hill homestead of John C. Calhoun, in the foothills of the Blue Ridge Mountains. It has an elevation of 800 feet above sea level and commands an excellent view of the mountains to the north and west, some of which attain an altitude of over five thousand feet.

The college is located at Clemson, S. C., on the main line of the Southern Railway. U. S. Highways numbers 76 and 123 pass through Clemson, and daily bus service at regular intervals is available.

THE OFFICE OF PUBLIC RELATIONS AND ALUMNI AFFAIRS

The Office of Public Relations and Alumni Affairs was formed in 1951 by coordination of the functions of the Alumni Office and the News Bureau. All matters concerning the alumni and all information and news releases to the public are handled through this office. The Director of Public Relations and Alumni Affairs is also secretary of the Clemson Alumni Corporation through election by its Board of Directors. He is assisted in his work by three associates; one in charge of athletic publicity, and the other two in charge of college information and alumni publications.

Accurate records of addresses and information concerning the alumni are being built up by this office. The Clemson Alumni News is published in regular magazine form in nine issues each year.

The purpose of the Alumni Corporation is to serve the college and its alumni in every possible way. The Corporation holds its regular annual meeting at the college on the Saturday of Commencement. At this meeting the directors of the Corporation are elected who in turn choose the officers. Annual dues are three dollars for those men whose classes have been graduated for less than five years and five dollars for all others.

The Clemson College Foundation was founded by interested members of the Alumni Corporation to raise an endowment to be used for the benefit of the college, its students, faculty and alumni. Trustees of the Foundation are elected by the Corporation.

THE CLEMSON AGRICULTURAL COLLEGE RECORD

PART III

Student Life and Activities

PART III—Student Life and Activities

CADET MILITARY ORGANIZATION

Clemson College is operated as a military school. The purpose of the military training in the college is to instill the soldierly qualities of loyalty, obedience, courteousness, punctuality, self-control, and courage.

The military system places every military student on an equal standing. All cadets wear the uniform, live under the same conditions, and are subject to the same privileges and restrictions. Veterans with more than twelve months service are not required to participate in the military program.

The military system assists the students in pursuit of a college education. Military training gives to Clemson graduates advantages that are important factors in their future progress and success.

After a student has completed two years of military training, he has the choice of becoming a civilian student or remaining in the Cadet Corps.

CLUBS AND SOCIETIES

Honor Fraternities. Honor scholarship organizations, including Tau Beta Pi, Sigma Tau Epsilon, Phi Psi, Alpha Zeta, Alpha Tau Alpha, Iota Lambda Sigma, Kappa Phi Kappa, Alpha Chi Sigma, Sigma Pi Sigma, and the Minaret Club, give recognition to superior work done by Engineering, Arts and Sciences, Textile, Agricultural, Agricultural Education, Industrial Education, Education, Chemistry, Physics, and Architecture students respectively.

The Phi Kappa Phi, honor society, and the Phi Eta Sigma fraternity both have chapters at Clemson. The former is an all-college honor organization composed of seniors and second semester juniors. The latter is a freshman organization with members selected from students who attain a high scholastic standing during the first semester of the freshman year.

The military activities of the cadet officers of the corps are recognized in membership in the Society of Scabbard and Blade, a national military honor faternity. The Pershing Rifles, a national honorary military organization, also has a chapter at Clemson. Air Force cadet officers are recognized for military excellency by membership in the Arnold Air Society, a national Air Force honor fraternity.

The Blue Key, a national fraternity based upon leadership, has a chapter at Clemson, as does Alpha Phi Omega, a national fraternity for former Boy Scouts. The Tiger Brotherhood is a local organization at Clemson which stresses the qualities of leadership.

Student Clubs. Students majoring in various courses of instruction have organized clubs. Among such clubs are the Agricultural Economics Society, Block and Bridle Club (Animal Husbandry), Dairy Club, History Club, Horticultural Club, Iota Epsilon (Industrial Education) and the Pre-Med Club. Gamma Alpha Mu recognizes superior journalistic services rendered by students.

The Y. M. C. A. and the Clemson Churches are recognized through organizations of the Baptist Student Union, Brandeis Club, Canterbury Club, Newman Club, Presbyterian Students Association, Wesley Foundation, Y. M. C. A. Cabinet, and the "Y" Council representing each of the four classes.

Engineering Societies. Outstanding students majoring in engineering courses are selected for membership in the Student Chapter of the American Institute of Electrical Engineers, American Society of Mechanical Engineers, American Society of Civil Engineers, American Society of Agricultural Engineers and the Society of American Military Engineers.

The National Textile Manufacturing Society. Students majoring in Textile Manufacturing and Textile Engineering courses are selected for membership. The purpose is to bring about a more intimate relationship between the textile industry and the undergraduates of the textile school.

Music Activities. The Clemson College Glee Club is under the musical leadership of the Director of Music. The organization performs the best in choral literature and makes appearances at various student functions on the campus. Students interested in the organization may become members by satisfactorily completing a simple audition. Previous experience and the ability to read music are not required.

In the spring of each year, the Glee Club makes a short tour of nearby institutions. Another highlight of the year is the participation by the Glee Club in a three hundred voice mixed choir of South Carolina College students in a performance with the Southern Symphony Orchestra. This concert is given annually in Township Auditorium, Columbia, South Carolina.

The Senior Platoon. The Senior Platoon is a Fancy Drill unit composed of cadet officers of the Senior class. This Platoon was activated in 1931 for the purpose of increasing proficiency and developing pride among the cadet officers. Frequent exhibitions of fancy drill are given by this Platoon at football games and other celebrations and ceremonies.

CONCERT SERIES

The college, through the Concert Committee composed of faculty and student members, brings to the campus each year a series of musical programs. This program is financed through the student activity fee and through the sale of tickets to individual subscribers. All students are admitted to the concerts without additional charge.

Listed below is the program of concerts offered in 1954-1955:

Navy Band
Opera Theater's "Barber of Seville"
The Boston Pops
Nadine Conner and Brian Sullivan
Ballet Russe de Monte Carlo
Arthur Rubenstein

THE YOUNG MEN'S CHRISTIAN ASSOCIATION

The Y. M. C. A. partakes of the nature of a small city Y. M. C. A. While it is recognized as a student association, the tremendous volume of community service undertaken in the building might easily qualify it as a community building. The Athletic Association has granted permission for the Y. M. C. A. to sponsor basketball and volleyball games in the Field House. Hundreds of basketball and volleyball games are participated in by students, faculty, campus children, and visitors from neighboring communities. Saturday morning games are sponsored for children of the community. A picture program is provided for boys and girls of the community as well as students and the swimming pool is available during the winter and summer months for campus children and visitors such as scout groups, 4-H groups, FFA and others. Social functions sponsored by the Y. M. C. A., or with the Y. M. C. A., cooperating, and Open House programs are almost daily occurrences in the club rooms, scout rooms, and cabinet rooms. It is here that many visiting groups are entertained with, and for, students and campus organizations. Evening Watch prayer groups, forum groups, freshman, sophomore, junior, and

senior councils all cooperate with, and under, the leadership of the Y. M. C. A. senior cabinet to make possible a real spiritual and mental development in the lives of all the students. Sixty-two faculty members and others visited with students in their evening watch or forum meetings in barracks last year and many student leaders took part in these meetings.

The Y. M. C. A. has supervision of voluntary religious activities of the students and endeavors to contribute to the religious, social, and physical life of the college community.

There are two Vesper services in the Y. M. C. A. auditorium each Sunday. Outstanding speakers and many visiting deputation groups are supplemented by local speakers, ministers, and campus leaders. Many educational news and travel reels are shown for the students over the weekend. In recent years a number of outstanding speakers have returned to the campus. Included in this group have been many graduates of Clemson who have achieved distinction in the field of education, religion, industry, science, and agriculture.

The college swimming pool at Clemson is located in the Y. M. C. A. Swimming classes, life saving, and instructor's courses are given. Members of the freshman and varsity swimming teams train here and many company swimming meets are scheduled. The pool is heated throughout the winter months and it is filtered and chlorinated with electric equipment.

Intramural athletics are encouraged and sponsored by the Physical Education Department and the Y. M. C. A. All of the companies with military organization and athletic officers have teams in such sports as basketball, volleyball, swimming, baseball, and soccer. These competitive games receive hearty support from many students and afford an opportunity for active participation. Practically all of the students at Clemson participate in some form of recreation or an intramural sport. Quite a number take part in many intramural sports. Participation is voluntary, but the majority of the students take advantage of this opportunity for wholesome recreation and physical direction. A director and trained student leaders are provided by the Y. M. C. A. and these cooperate with A & R officers and with interested veterans.

ATHLETICS

It is the policy of the college to sanction and encourage athletics so long as participation does not interfere with studies and other

duties. Football, baseball, basketball, and track are the most popular sports.

The college is a member of the Atlantic Coast Conference. In order to participate in inter-collegiate athletics, the student must meet the requirements of the Atlantic Coast Conference as well as the requirements of the college.

No member of an athletic team is eligible for a managerial position in any other branch of sport.

No team is allowed to leave the college grounds to participate in any match game unless accompanied by the authorized coach or other member of the faculty, who shall be responsible to the college for the conduct of the players while away.

No student is eligible to participate in an inter-collegiate contest who is away from the college without proper authority or without having complied with all the rules or orders issued by the President regarding such matters.

THE CLEMSON AGRICULTURAL COLLEGE RECORD

PART IV

Organization and Government

PART IV—Organization and Government

ADMINISTRATIVE ORGANIZATION

Board of Trustees. The government of the College is vested in a Board of thirteen members, six of whom are elected by the Legislature, and seven life and self-perpetuating under the Clemson will. The function of this Board is legislative and not executive. The Board determines the general policy of the College, makes the laws for its government, and directs the expenditure of its funds.

The President is the chief executive and administrative officer appointed by the Board of Trustees. He is the head of the College and is responsible for its satisfactory working and success.

The College is divided into schools of Agriculture, Arts and Sciences, Chemistry, Education, Engineering, and Textiles. A dean is at the head of each school and is responsible to the President for its conduct and success. The schools are comprised of departments. Each department is in charge of a professor who acts as its head. The President conducts all official business with each department through its dean.

The Faculty consists of all officers of instruction in the College. The voting members are the deans, professors, associate professors, and assistant professors.

The faculty meets once a month, or whenever called by the President, and is an advisory body to the President, on the instructional work of the College and such other business as he may bring before it.

The deans and directors of the various schools and departments meet weekly or when called by the President for consideration of matters affecting the welfare of the College. Departmental faculty meetings are held periodically.

Faculty Committees. In order to aid him in his executive duties and to carry on the instructional work of the College, the President appoints committees from the faculty. To these are assigned certain specified lines of work and the committees are clothed with full authority.

MILITARY ORGANIZATION

The President. The President of the college has general control of the government of this institution. He has authority, administered through the Commandant, to make rules from time to time, governing the granting of leaves of absence to students; to inspect anything in a student's room or personal baggage, to suspend or modify any paragraph of these regulations, or to publish special regulations when he considers it necessary, which will have the authority of the Board of Trustees until they have acted on them. He will prescribe the hours of study, drill and recreation. He has the authority to suspend a student or cause a student to withdraw from college when in his judgment such action is for the best interest of the college. The President has authority to dismiss a student, subject to final action by the Board of Trustees.

The Commandant and Staff. Upon the mutual consent of the President and the Professor of Military Science and Tactics or the Professor of Air Science, the PMS&T or PAS will be appointed as the Commandant of Cadets. The Commandant will have charge of the Corps of Cadets insofar as pertains to organization, discipline, and administration and will perform such other duties as may be prescribed by these regulations. He will prescribe the order in which furniture, bedding, books, clothing, equipment and other articles shall be arranged throughout the barracks, and will make a thorough inspection of the rooms, furniture, arms, equipment and uniforms of the cadets at least once a week. With their consent, the President may appoint Army and Air Force officers and enlisted men on ROTC duty with the college to such positions as are necessary on the Commandant's Staff. The Commandant and the members of his staff are officials of the college and perform such duties in addition to and in conjunction with their normal ROTC duties and functions. The members of the Commandant's staff assist him as he may direct.

Military Training. Clemson is a land grant college. Military training is offered to all students. All freshmen and sophomores who are physically fit for the ROTC are required to be members of the Corps of Cadets and to engage in two years of military training. This military training is the basic ROTC course administered by the Army and Air Force. In addition to the Air Force and Army curriculums, one hour is devoted to drill and ceremonies and one hour to inspections each week. All advanced ROTC course

juniors and seniors are required to be members of the Cadet Corps. Students who do not qualify for the ROTC but who are physically qualified according to the college surgeon to engage in the training offered at the college and are approved by the Commandant may become members of the Corps of Cadets. Military training is not required of veterans. Veteran students who qualify for and voluntarily enroll in the ROTC course may also be cadets. Students who have been separated from the advanced ROTC course for disciplinary or other than academic reasons may not be members of the Corps of Cadets.

Entering students who are over 21 years of age and do not wish to take military training are not required to do so. Transfer students from other colleges who have junior or senior standing and students who have completed two years of military training but are still classified as academic sophomores may not be members of the Corps of Cadets unless approved by the Commandant. Once a student has joined the Corps there will be no withdrawal except at the end of a semester. Once a cadet terminates his enrollment in the Corps he will not be re-enrolled.

Cadet Officers and Non-Commissioned Officers. Each year members of the Corps of Cadets are appointed to assist the Commandant and his staff in the exercise of administration command, discipline, leadership and training within the Cadet Corps. The Cadet Officers and Non-Commissioned Officers will be recommended by the previous years Cadet Officers, subject to the approval of the President and the Commandant. Appointments will be based on their academic record, aptitude for military service, military bearing, attention to duty and disciplinary record.

Study Hours. The hours between Call to Quarters and Taps are designated as study hours. These hours may be extended at the discretion of the individual cadet.

Week-End Leaves. Week-end leaves are granted to members of the Cadet Corps who have not exceeded 50% of their authorized semester quota of demerits, as noted under "Demerits" below, in accordance with the following standards:

1. Cadets of the upper three classes and second semester freshmen may absent themselves from the campus following inspection or their last class on Saturday, whichever is later, until 2200 Sunday by signing out and in on their organization week-end rosters, except for the following categories:

a. Temporary light duty cadets.
b. Cadets in room arrest.
c. Cadets marked quarters by the College Surgeon.
d. Cadets detailed to guard duty.
e. Cadets sick in the College Hospital.

2. Additionally, seniors who have no Saturday classes may sign out for two week-ends per month following their last class on Friday, subject to the same exceptions noted in subparagraphs a-e above. Juniors who have no Saturday classes will be permitted one such week-end leave per month on the same basis. A senior or junior who has Saturday classes and signs out under this provision will be considered as guilty of an honor violation, even though he may take a class cut without being penalized.
3. The President or the Commandant may suspend the week-end leave privileges at such times as may be deemed in the best interests of the college.
4. A cadet who signs out for week-end leave is not permitted to remain in barracks or utilize the Mess Hall for the leave period.

Demerits. Any cadet who accumulates demerits during any one semester in excess of the limits prescribed below will be punished as the President may direct. The demerit period is considered as extending from the beginning of the semester to two weeks prior to the semester's end. Demerits accumulated during the last two weeks of a semester will be carried over to the following semester.

	Barracks Cadets	*Day Cadets*
Freshmen	100	90
Sophomores	80	70
Juniors	70	60
Seniors	60	50

CIVILIAN STUDENTS

Civilian students at Clemson Agricultural College are governed by Regulations for Non-Military Students. A copy of these regulations will be furnished each civilian student. That portion of these regulations pertaining to demerits is quoted:

"Demerits—Students will be assessed demerits by dormitory supervisors for disorderly rooms, misconduct and violations of college regulations.

Maximum allowable demerits per semester.

Freshmen	50
Sophomore	40
Junior	35
Senior	30

Students who do not respond to assessment of demerits and admonition are subject to room arrest upon approval of the President of the College."

Week-End Leave. Students of the upper three classes and second semester freshmen may absent themselves from the campus following inspection or their last class on Saturday until 10.00 p. m. Sunday by signing out and in on their organizational week-end rosters, except for the following categories:

1. Students in room arrest.
2. Students marked quarters by the College Surgeon.
3. Students detailed to the Information Room.
4. Students sick in the College Hospital.

Additionally, seniors who have no Saturday classes may sign out for two week-ends a month following their last class on Friday, subject to the same exceptions noted in sub-paragraphs 1-4 above. Juniors who have no Saturday classes will be permitted one such week-end leave per month on the same basis. A senior or junior who has Saturday classes and signs out under this provision will be considered as guilty of an honor violation, even though he may take a class cut without being penalized.

The President or the Commandant may suspend the week-end leave privilege at such times as may be deemed in the best interests of the college.

A student who signs out for week-end leave is not permitted to remain in the dormitories or utilize the dining hall for the leave period.

Discharge From College. No cadet, unless he is of legal age and paying his own way through college, may be voluntarily discharged therefrom except upon the written request of his parents, guardian or for other reasons satisfactory to the President. Any cadet leaving school at the end of the first semester should first secure a discharge to avoid being carried as absent without leave.

THE COUNSELING SYSTEM

Fifty or more faculty members serve each year as special counselors for freshmen. Only fifteen or twenty freshmen are assigned to each counselor who is available to talk with his freshmen concerning their scholastic reports as well as to help them with any problems they may have.

The Counseling System is organized under the Deans who serve as chief counselors and advisers within each School of the College. The Registrar's Office acts as a clearinghouse of information concerning student records.

SCHOLASTIC REGULATIONS

The Credit System. The Semester Hour is the basis of all credits. One recitation hour or three laboratory or shop hours a week for a semester constitute a semester hour. Thus, in English 101, Composition and Literature, 3 cr. (3,0), as you will find this subject listed in the Courses of Study, the student takes three semester hours. When he completes this course satisfactorily, he is granted three semester credit hours on his record. The notation "3 cr.(3,0)", means that the course carries three credits, has three clock hours of theory or recitation per week, and no laboratory hours. Chemistry 101, General Chemistry, 4 cr. (3,3), carries four semester hours, has three hours of theory, and a three-hour laboratory period.

Semester Grades. The standing of a student in his work at the end of a semester is based upon daily class work, tests or other work, and the final examinations. Faculty members may excuse from the final examinations all students having the grade of A on the work of the course prior to the final examination, but for all other students written examinations are required in all subjects at the end of each semester, except in certain laboratory or practical courses in which final examinations are not deemed necessary by the department faculty.

Scholastic reports are mailed to parents four times each year, including a preliminary statement of progress at the middle of each semester, and a final report at the end of each semester.

The Grading System. The grading system is as follows:

A—*Excellent.* Indicates that the student is doing work of a very high character. The highest grade given.

B—*Good.* Indicates work that is definitely above average, though not of the highest quality.

C—*Fair.* Indicates work of average or medium character.

D—*Pass.* Indicates work below average and unsatisfactory. The lowest passing grade.

E—*Conditioned.* Indicates a failure to satisfy the requirements as to daily recitations, tests or other work, as well as to the final examination, which condition in the opinion of the instructor may be made up by re-examination at some fixed time.

F—*Failed.* Indicates that a student knows so little of the subject that it must be repeated in order that credit may be received.

I—*Incomplete Work.* Indicates that a relatively small part of the semester's work remains undone. Grade I is not given a student who has made a grade F on his daily work. All incomplete grades (I's) for a semester not removed within thirty days after the beginning of the next semester shall become F's unless an extension of time is approved by the instructor concerned and the Registrar.

WP—*Withdrew Passing.* This grade indicates that the student withdrew from the course while doing satisfactory work. The credit hours of a subject on which the grade of WP is received are counted as credits taken in computing the student's grade-point ratio.

WF—*Withdrew Failing.* Indicates that the student withdrew from the course while doing unsatisfactory work. The credit hours of a subject on which the grade of WF is received are counted as credits taken in computing the student's grade-point ratio.

Dropping Class Work. A subject dropped after the first four weeks of class work is recorded as "Withdrew Passing" or "Withdrew Failing" depending upon the student's grade in the course at the time the subject was dropped.

Upon the recommendation of the instructor and the dean concerned, a student's standing will be investigated and he may be required to drop a subject because of neglect, or lack of application or preparation. No student will be dropped under this rule without approval of the President.

Removal of Conditions. Only one opportunity shall be given a student to remove a condition (E) by a re-examination. A student who fails to pass such a re-examination shall be required to repeat the subject, hour for hour in class. Not more than twelve credit hours of conditions for a session shall be removed by re-examina-

tion. A student shall not receive a grade higher than D when a deficiency is removed by re-examination.

Removal of Failures. A student who has failed (made a grade F) in a subject cannot receive credit for that subject until it has been satisfactorily repeated hour for hour in class, except that in the case of correlated laboratory work, the number of hours to be taken shall be determined by the instructor. Where separate grades for class and laboratory work are given, that part of the subject shall be repeated in which the failure occurs.

Special Examinations. Any request for a special examination must be approved by (1) the instructor concerned, (2) the head of the department concerned, (3) the dean of the school, and (4) the registrar.

Grade Points—Old System. Prior to the 1952-1953 session, nine grade points were assigned for each credit hour on which the student received the grade of A; six grade points for each credit hour of grade B; and three for each credit hour of grade C. No grade points were assigned for grades D, E, F, I, WP, or WF.

Grade Points—New System. Beginning with the first semester of the 1952-1953 session, four grade points are assigned for each credit hour on which the student receives the grade of A, three grade points for each credit hour of grade B, two grade points for each credit hour of grade C, and one grade point for each credit hour of grade D. No grade points are assigned for grades E, F, I, WP, or WF.

Grade-Point Ratio. In calculating a student's grade-point ratio, the total number of grade points accumulated by the student is divided by the total number of credit hours taken by the student during the semester, session or other period for which the ratio is calculated.

Academic Standards. Proper discharge of all duties is required at Clemson College, and a student's first duty is his scholastic work. All students should be thoroughly acquainted with and cognizant of these basic requirements.

Minimum Requirements for Continuing Enrollment. To be eligible to enroll for the next session, a student in his first year of attendance in college must pass a minimum of 24 semester hours. Remedial work completed may be counted in this minimum total.

Approved courses completed in summer school just prior to the first year or following the first year may also be included, except that the student attending summer school both years must choose which summer's work to include. He cannot count the work of both summer schools toward meeting this requirement.

A student in his second or any later year of attendance in college, to be eligible to continue his enrollment, must pass either (1) a minimum of twenty-four semester credit hours of work in the two semesters of the regular session, or (2) a minimum of thirty semester credit hours of work in the two semesters of the regular session and the summer term.

In the cases of upperclassmen failing to pass thirty semester credit hours of work in two regular sessions and the summer term, exception may be made for those students whose cumulative grade-point ratio, computed up to date to the nearest whole number, added to the number of hours passed will total thirty. For example, if a student passes twenty-eight hours, and his grade-point ratio is two, the two added together will total thirty, and he will be eligible to enroll for the next session. The above requirements will be prorated for students entering in February.

A student who fails to earn a minimum of three semester credit hours during his first semester at Clemson and who wishes to continue his enrollment must apply to the Committee on Admissions for permission to continue. Remedial work completed may be counted in this minimum total.

The attention of students is directed to the fact that the freshman requirements apply to first year college students, and the more rigid requirements apply to college students in their second or later years, regardless of whether or not the student's attendance has been at Clemson or at some other institution. The student's classification does not enter into these regulations. The required minimum totals shall be exclusive of courses graded E and exclusive of courses graded I unless there are extenuating circumstances for the I.

The summer term referred to above is interpreted to mean the Clemson College Summer Term unless the student has special approval by the Committee on Admissions and the Committee on Transfer Credits to pursue a summer program at some other institution in an effort to redeem his academic standing at Clemson.

Work Taken at Another Institution. Clemson students may receive credit for work taken at another institution, however, ap-

proval of the work should be obtained by the student prior to scheduling the work. Information and forms relative to this approval may be obtained in the Registrar's Office. By obtaining advance approval the student is assured of receiving proper credit at Clemson providing he passes the work with a grade of C or higher. This approval is preferably obtained by the student in the spring prior to his leaving Clemson for the summer.

Classification Requirements for 1954-1955. For the 1954-1955 Session, the following classification rules will apply:

A. To be classified as a senior, a student must have completed sufficient scholastic work toward his degree to enable him to complete the requirements for graduation by completing not more than 42 additional credits. To be classified as a senior, a student must also have a grade-point ratio of 1.6 or above under the new grade-point system.

B. To be classified as a junior, a student must have completed at least 66 semester credit hours and must have a grade-point ratio of 1.6 or above under the new grade-point system.

C. To be classified as a sophomore, a student must have completed at least 30 semester credit hours and must have a grade-point ratio of 1.2 or above under the new grade-point system.

D. All new students are classified as freshmen unless they have attended another college prior to entrance and have completed sufficient scholastic work as to enable them to complete the requirements for graduation from Clemson in not more than three regular sessions.

Classification Requirements for 1955-1956. Announced at this time are the classification requirements for 1955-1956:

A. To be classified as a senior, a student must have completed sufficient scholastic work toward his degree to enable him to complete the requirements for graduation by completing not more than 42 additional credits. To be classified as a senior, a student must also have a grade-point ratio of 1.6 or above under the new grade-point system.

B. To be classified as a junior, a student must have completed at least 68 semester credit hours and must have a grade-point ratio of 1.6 or above under the new grade-point system.

C. To be classified as a sophomore, a student must have completed at least 30 semester credit hours and must have a grade-point ratio of 1.3 or above under the new grade-point system.

D. All new students are classified as freshmen unless they have attended another college prior to entrance and have completed sufficient scholastic work as to enable them to complete the requirements for graduation from Clemson in not more than three regular sessions.

Regular Advancement in Classification. All students are urged to meet the requirements for sophomore classification by the beginning of the second year, for junior classification by the beginning of the third year, and for senior classification by the beginning of the fourth year. Failure to meet these requirements can jeopardize a student's academic standing with the college as well as jeopardize his deferment under selective service even though he may be otherwise eligible for the deferment.

Maximum Credit Load. The number of credits which a student may schedule in a semester is governed by his grade-point ratio—the cumulative ratio or the ratio for the previous semester, whichever is higher. The entering freshman is restricted to the requirements of his course. Under this system, class advisers have the authority to restrict the student to any one of the following limits as indicated for each ratio:

Grade-point ratio required	*Maximum credit hours which may be scheduled as advised by Class Adviser*
0.00 to 0.49	14, 15, or 16
0.50 to 0.99	15, 16, or 17
1.00 to 1.49	16, 17, or 18
1.50 to 1.99	17, 18, or 19
2.00 to 2.49	18, 19, or 20
2.50 to 2.99	19, 20, or 21
3.00 to 3.49	20, 21, or 22
3.50 to 3.99	21, 22, or 23
4.00	22, 23, or 24

If any student schedules excessive credits, he will be automatically dropped from a sufficient number of subjects to reduce his total credits within the limits. If for any reason a student's excessive registration continues throughout the semester, his credit on one or more subjects passed will be cancelled at the end of the semester.

Quality Requirements for Graduation. A cumulative grade-point ratio of 1.6 or above is required for graduation in the calendar year

1955 and a ratio of 1.7 or above is required for graduation in 1956. In 1955 students may also qualify by fulfilling both of the following requirements: (1) A grade-point ratio of 1.8 or above under the new system on all work taken at Clemson beginning with the second semester of 1952-1953 and extending through the remainder of all credits taken (calculated as a special cumulative ratio for this period of attendance), and (2) the old requirement of "twice as many grade points as the number of credits required, with such grade points calculated under the old grade-point system." To qualify under this alternate plan, students must fulfill both of these requirements.

A grade-point ratio of 1.7 or above will be required for graduation in 1957 and 1958. The requirement for graduation in 1959 will be announced prior to the opening of the 1955-1956 session of the College.

Honor Students and Honor Graduates. An honor list is published each semester, and each spring a Scholarship Day Program is held honoring students who qualify for the honor list as well as those qualifying for special awards. To qualify for honors on the semester honor list, a student must have a grade-point ratio of 3.0 or above, and to qualify for high honors a student must have a grade-point ratio of 3.5 or above.

Graduates who meet the required qualifications are designated as having graduated with honor, with high honor, or with highest honor. A grade-point ratio of 3.00 to 3.49 is required for graduation with honor, 3.50 to 3.79 for high honor, and 3.80 or above for graduation with highest honor.

CLASS ATTENDANCE REGULATIONS

The class attendance regulations are as follows:

1. A student's first duty in college is his class work. Except for good and sufficient reasons, a student will attend every class on schedule. However, the college recognizes several reasons for class absences and will authorize absences in such instances. In addition, restricted provision is made for personal emergencies. *Rigid penalties are provided for the abuse of the regulations.*

2. Absence from class for any of the following reasons will be recorded as authorized, provided the absence *is approved in advance* by the Class Attendance Officer. The Class Attendance Officer will approve class absences only when the required action as

shown opposite the reason below has been taken. *Except in cases of extreme personal emergency, students who absent themselves from class prior to authorized permission, will have their absences recorded as unauthorized, even though otherwise authorized.*

Reason	*Required Action for Approval of Absence*
a. Sickness	Absence certified by the College Surgeon on the hospital report or by another doctor and endorsed by the College Surgeon.
b. Guard Duty	Absence certified by the Commandant.
c. Official representation in intercollegiate athletic events	Absence certified by the Head Coach.
d. Educational Trips	Absence certified by the Dean of the school concerned, or by the Coordinator of Military activities for Army or Air Force trips.
e. Participation in other activities considered to be official and authorized by the Deans and Directors	Absence certified by the faculty sponsor of the activity.
f. ROTC physical examinations	Approved by the Coordinator of Military Activities.
g. Personal emergencies of a serious nature such as death or serious illness in the family	Approved by the Commandant for Cadets or by the Class Attendance Officer for Non-Cadet students.

3. The Commandant or a member of his staff designated by him shall act as Class Attendance Officer. All absences, authorized and unauthorized, will be recorded by the Class Attendance Officer. Absence from class for any reason, except those approved in advance by the Class Attendance Officer or those excused because of conditions of extreme personal emergency, will be recorded as unauthorized. It will be the responsibility of the student to report to the Class Attendance Officer immediately for explanation of those cases when the student absents himself from class under conditions of extreme personal emergency not authorized in advance. Other-

wise, such absences will be presumed to be unauthorized and will be so recorded.

4. Absentee reports will be submitted daily, on the forms provided, to the Class Attendance Officer by each instructor through his Dean. These reports will be submitted so as to reach the Class Attendance Officer within twenty-four (24) hours after the class meets. All absences, authorized or unauthorized, will be reported. *It will be the responsibility of the individual student arriving late for a class to so inform the instructor in order that records will be correct.*

5. Students shall not request instructors to excuse them from class or to change class periods or examinations. Instructors have no authority to grant such requests.

6. All class work missed on account of authorized absences shall be made up to the satisfaction of the instructor concerned. Instructors will not be obligated to permit a student to make up any work missed during unauthorized absences. If the unauthorized absence is from a previously announced quiz or examination, the student will not be permitted to make up that work and will be given a grade of zero for that assignment.

7. To provide for personal emergencies, all students are allowed some unexcused absences in accord with the provisions of the following paragraphs. However, not more than one unauthorized absence may be taken in a laboratory course or the laboratory part of a course which has only one laboratory period per week, and not more than two unauthorized absences may be taken in a laboratory course or the laboratory part of a course which has more than one laboratory period per week.

8. To provide for personal emergencies, students enrolled at Clemson for their first semester of attendance (including students who have previously attended only one summer term) will not be penalized for unexcused absences in each course amounting to the number of times the course meets per week. Such students, however, are subject to the special restrictions of paragraphs 6 and 7. For any unauthorized absences in excess of one week, or in excess of the special limit on laboratory classes, the student will be dropped from the subject concerned by the Class Attendance Officer.

9. To provide for personal emergencies, all students, except first semester students as covered under paragraph 8, will be allowed

some unexcused absences based upon their grade point ratios for the previous semester. Subject to the special restrictions of paragraphs 6 and 7, the following limits of unexcused absences are allowed:

Last Semester's Grade-Point Ratio	*Limit of Unexcused Absences in Each Course*
0.0 through 0.9	One absence only
1.0 through 2.4	The number of times the class meets per week
2.5 or above	Twice the number of times the class meets per week

For any unauthorized absences in excess of the limits indicated above, including the special limit on laboratory classes, the student will be dropped from the subject concerned by the Class Attendance Officer.

10. In addition to the provisions of paragraph 9, but subject to the special restrictions of paragraphs 6 and 7, students who are officially classified as seniors and who have *cumulative* grade-point ratios of 3.00 or above, are granted optional class attendance.

11. In the event that any student misses sufficient work in a subject so that, in the judgment of the instructor concerned, he is unable to make up the work missed, he may be dropped from the course by decision of the Dean of his major course. In order for a student to be dropped from a course under the provisions of this paragraph, the recommendation for dropping (1) must be made by the instructor concerned, (2) approved by the head of the department in which the course is taught, (3) checked by the Class Attendance Officer for verification of absences, and (4) approved by the Dean of the student's major course. The Dean will then notify the Class Attendance Officer to drop the student from the course.

12. When a student is dropped from a course, he will be notified by the Class Attendance Officer. If the student wishes to appeal for reinstatement, he must do so through the Dean of his major course or his delegated representative within three days after notification, and must meet his classes in the course during this interim, pending receipt by the instructor of the final drop notice from the Registrar's Office. An instructor will not permit a student to continue meeting classes in a course after he has received the final drop notice from the Registrar's Office.

13. *Any student who, by being dropped from one or more subjects on account of excessive absences, reduces his credit hour load below twelve semester credits, shall be suspended* from college for at least the remainder of that semester. A student whose class attendance record is generally unsatisfactory may be required to withdraw from college at any time.

14. All students will keep their own records of class absences. *No routine notices of accumulated absences or warning letters will be sent out or posted* by the Class Attendance Officer. The College reserves the right to notify students' parents of unsatisfactory class attendance.

15. All students must turn in a completed class schedule on the prescribed form to the representatives of the Commandant in the Field House at the time of registration, or if a student registers late, said schedule will be turned in at the Commandant's Office at the completion of registration. All changes to this schedule must be reported promptly to the Class Attendance Officer.

16. Students who are absent from the campus because of sickness will report to the Class Attendance Officer at once upon their return to school in order that their attendance record may be verified and brought up to date.

THE CLEMSON AGRICULTURAL COLLEGE RECORD

PART V

Degrees and Curriculums

PART V—Degrees and Curriculums

BACHELORS' DEGREES

The degree of Bachelor of Science is awarded to those students who satisfactorily complete one of the four-year curriculums offered under the Schools of Agriculture, Arts and Sciences, Chemistry, Education and Textiles. The five-year course in Architecture leads to the Bachelor of Architecture degree. The degrees of Bachelor of Ceramic Engineering, Bachelor of Chemical Engineering, Bachelor of Civil Engineering, Bachelor of Electrical Engineering, and Bachelor of Mechanical Engineering are awarded to the graduates of these respective four-year courses.

The total semester credit hours required for graduation amount to 150 in each of the regular four-year curriculums. These credits include the prescribed subjects in each curriculum and an appropriate number of approved electives or technical electives as outlined in the regular four-year curriculums.

For graduation in February, June and August 1955, a student must complete his course with a grade-point ratio of 1.6 or above. For graduation in the calendar years of 1956, 1957 and 1958, a minimum grade-point ratio of 1.7 will be required. Candidates for the degrees listed above are required to apply for their degrees at least two months prior to the date the degrees are to be awarded. These applications should be filled out in the Registrar's Office on the regular blanks provided.

All work for a degree must be completed by 5 p. m., on the Thursday preceding graduating exercises. Residence of at least one regular session is required for graduation. Every candidate for a degree must pay to the Treasurer of the College the cost of his diploma before the time the diploma order is placed.

A senior who fails to graduate because of one F on a subject or one or more grades of E or I shall have an opportunity of removing the unsatisfactory grades by examination after commencement provided that he can furnish evidence of having done satisfactory study. A senior who qualifies for graduation under this regulation will be awarded his degree on the next regular date for the award of degrees.

If all work toward a degree is not completed within five years after entrance, the student may be required to take additional courses.

GRADUATE DEGREES

The degrees of Master of Ceramic Engineering, Master of Civil Engineering, Master of Electrical Engineering, Master of Mechanical Engineering and Master of Science are awarded to those students who satisfactorily complete prescribed graduate programs of work consisting of a minimum of 30 semester credit hours in the student's fields of concentration. Of the 30 semester credit hours required 6 must be for research and at least 12 must come from the courses which are designed exclusively for graduate students.

For further information concerning advanced degrees see *The Graduate Bulletin,* which may be obtained from the Office of the Registrar.

PROFESSIONAL DEGREES

The College offers the following professional engineering degrees: Civil Engineer, Electrical Engineer and Mechanical Engineer.

The requirements for these degrees are: (a) a Bachelor's degree from Clemson College in one of these three branches in engineering, (b) five years of subsequent professional experience, one year of which must have been in responsible charge of engineering or engineering instruction, (c) the preparation of a thesis demonstrating distinct technical ability. (Detailed information regarding professional degrees may be obtained from the Registrar.)

CURRICULUMS

Twenty-nine undergraduate curriculums are offered under the Schools of Agriculture, Arts and Sciences, Chemistry, Education, Engineering, and Textiles. The curriculums under each school are listed below:

SCHOOL OF AGRICULTURE
- Agricultural Economics
- *Agricultural Engineering
- Agronomy
- Animal Husbandry
- Botany
- Dairy
- Entomology
- Horticulture
- Poultry
- Pre-Forestry
- Pre-Veterinary

* Jointly administered by the School of Agriculture and the School of Engineering.

SCHOOL OF ARTS AND SCIENCES
- Arts and Sciences
- Industrial Management
- Industrial Physics
- Pre-Medicine

SCHOOL OF CHEMISTRY AND GEOLOGY
- Agricultural Chemistry
- Chemistry

SCHOOL OF EDUCATION
- Education
- Industrial Education
- Vocational Agricultural Education

SCHOOL OF ENGINEERING
- *Agricultural Engineering
- Architecture
- Ceramic Engineering
- Chemical Engineering
- Civil Engineering
- Electrical Engineering
- Mechanical Engineering

SCHOOL OF TEXTILES
- Textile Chemistry
- Textile Engineering
- Textile Manufacturing

While the College is glad to assist all who ask for help in securing employment, it does not guarantee positions to those who complete any of the courses of study.

In the curriculums which follow are given the official title and number of the course, the descriptive title, the number of semester hours credit, and in parentheses the number of hours per week in class and laboratory, respectively.

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* Jointly administered by the School of Agriculture and the School of Engineering.

SCHOOL OF AGRICULTURE

The School of Agriculture is composed of four main divisions: Resident Teaching, Research (Agricultural Experiment Station), Extension (Agricultural Extension Service), and Livestock Sanitation. Organized under the division of Resident Teaching are curriculums in Agricultural Economics, Agricultural Engineering, Agronomy, Animal Husbandry, Botany, Dairying, Entomology, Horticulture, Poultry, Pre-Forestry and Pre-Veterinary Medicine. In general, the work of agricultural graduates may be classified in six rather broad fields: Farming, both general and specialized; agricultural extension service, including county agent work and extension specialists; research, especially work with the agricultural experiment stations; government regulatory work, such as plant inspection with the U. S. Bureau of Entomology and Plant Quarantine; teaching in college after appropriate graduate work is completed; and a host of occupations with commercial concerns, such as seed companies, meat packers, fertilizer companies, florists, canneries, hatcheries, commercial feed manufacturers, agricultural implement concerns, etc. To illustrate the types of work in which graduates engage, a few of the many occupations of agricultural graduates are listed under each curriculum.

The curriculum in Agricultural Engineering is jointly administered by the School of Engineering and the School of Agriculture and may be found in this catalog under the School of Agriculture.

AGRICULTURE

BASIC CURRICULUM

Required of all agricultural students except those in Agricultural Engineering, Pre-Forestry, and Pre-Veterinary

FRESHMAN YEAR

First Semester			*Second Semester*		
AH 101 Types and Breeds	2	(2,0)	Agron 101 Farm Crops	3	(3,0)
AH 103 Types and Breeds Lab.	1	(0,3)	Chem 102 General Chemistry	4	(3,3)
Bot 101 General Botany	3	(3,0)	Engl 102 Comp. and Lit.	3	(3,0)
Bot 103 General Botany Lab.	1	(0,3)	Math 102 Trigonometry	3	(3,0)
Chem 101 General Chemistry	4	(3,3)	Zool 101 General Zoology	3	(3,0)
Engl 101 Comp. and Lit.	3	(3,0)	Zool 103 General Zoology Lab.	1	(0,3)
Math 101 College Algebra	3	(3,0)	AS or MS – Basic	1	(2,1)
AS or MS – Basic	1	(2,1)			
	18			18	

SOPHOMORE YEAR

First Semester			*Second Semester*		
Ag Ec 201 Agric. Economics	3	(3,0)	Ag Ch 220 Agric. Org. Chemistry°	4	(3,3)
Ag En 201 Farm Machinery	3	(2,3)	Agron 202 Soils	3	(2,3)
Engl 203 Survey of Engl. Lit.	3	(3,0)	Dairy 201 Dairying	3	(2,3)
For 205, 207 Farm Forestry	3	(2,3)	Engl 204 Survey of Engl. Lit.	3	(3,0)
or Geol 201 Agric. Geology	3	(3,0)	Phys 202 General Physics	3	(3,0)
Hort 201 Gen. Horticulture	3	(2,3)	Phys 204 General Physics Lab.	1	(0,3)
Phys 201 General Physics	3	(3,0)	AS or MS — Basic	1	(2,1)
Phys 203 General Physics Lab.	1	(0,3)			
AS or MS — Basic	1	(2,1)			
	20			18	

° Agricultural Economics majors may substitute Math 104 for Ag Ch 220.

AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY

Training in Agricultural Economics and Rural Sociology prepares students wholly or in part for farming; managing farms; appraising land, marketing activities; supervising agricultural loan departments in private banks; directing farmer cooperatives such as the production credit and farm loan associations affiliated with the Farm Credit Administration; educational work as teachers or extension workers; public relations research and sales work for the manufacturers of agricultural implements, fertilizers, etc.; organizational and publicity work for farm organizations and cooperative associations; positions in state, county and local government service; research work in farm management, farm credit, taxation, marketing, farm population and rural life trends; farm planning work for the Soil Conservation Service; and for operating numerous enterprises where a knowledge of economic principles is an essential supplement to knowledge of the technical requirements of the business.

AGRICULTURAL ECONOMICS MAJOR

For additional requirements see *Basic Agricultural Curriculum*

JUNIOR YEAR

First Semester			*Second Semester*		
Ag Ec 305 Farm Accounting	3	(2,3)	Ag Ec 302 Farm Management	4	(3,3)
Ag Ec 309 Marketing	3	(2,3)	Ag Ec 352 Public Finance	3	(3,0)
Engl 301 Public Speaking	3	(3,0)	Engl 401 Adv. Comp.	3	(3,0)
Hist 301 U. S. since 1865	3	(3,0)	PH 301 Farm Poultry	3	(3,0)
RS 301 Rural Sociology	3	(3,0)	PH 303 Farm Poultry Lab.	1	(0,3)
Approved Electives	4		Approved Electives	4	
	19			18	
Suggested Electives:			Suggested Electives:		
Ag Ec 357 Con. Nat. Resources	3	(3,0)	AS or MS — Advanced	3	(4,1)
Ag Ec 361 Mktg. Livestock	3	(3,0)	Econ 302 Money and Banking	3	(3,0)
AS or MS — Advanced	3	(4,1)	Ent 301 Elem. & Econ. Ent.	3	(2,3)
YM 305 Cotton Marketing	1	(0,3)			

SENIOR YEAR

First Semester			*Second Semester*		
Ag Ec 401 Statistics	4	(3,3)	Ag Ec 406 Seminar	1	(1,0)
Ag Ec 405 Seminar	1	(1,0)	Ag Ec 452 Agric. Policy	3	(3,0)
Ag Ec 451 Agricultural Coop.	2	(2,0)	Ag Ec 456 Prices	3	(3,0)
or Ag Ec 460 Agric. Finance	2	(2,0)	Gov 301 Am. G. & Pol. Par.	3	(3,0)
Agron 302 Genetics	3	(2,3)	Approved Electives	9	
Psych 301 General Psychology	3	(3,0)			
Approved Electives	7				
	20			19	
Suggested Electives:			Suggested Electives:		
AS or MS — Advanced	3	(4,1)	Ag Ec 462 Applied Statistics	3	(2,3)
Gov 403 International Relations	3	(3,0)	AS or MS — Advanced	3	(4,1)
RS 459 The Rural Community	3	(3,0)	RS 461 Rural Leadership	3	(3,0)
			Soc 402 The Family	3	(3,0)

AGRONOMY

Agronomy graduates have opportunities in general farming, soil conservation service, agricultural extension and experiment station work, and may also be found as plant breeders, soil analysts, and crop specialists. Other positions include work with commercial concerns such as fertilizer companies, seedsmen, and manufacturers of certain food products.

AGRONOMY MAJOR

For additional requirements see *Basic Agricultural Curriculum*

JUNIOR YEAR

First Semester			*Second Semester*		
Ag En 301 Soil Conservation	3	(2,3)	Agron 302 Genetics	3	(2,3)
Agron 301 Fertilizers	3	(3,0)	Agron 306 Forage Crops	4	(3,3)
Bact 301 Gen. Bacteriology	3	(3,0)	Bot 352 Plant Physiology	3	(3,0)
Bact 303 Gen. Bacteriology Lab.	1	(0,3)	Bot 354 Plant Physiology Lab.	1	(0,3)
Engl 301 Public Speaking	3	(3,0)	PH 301 Farm Poultry	3	(3,0)
Approved Electives	6		PH 303 Farm Poultry Lab.	1	(0,3)
			Approved Elective	3	
	19			18	
Suggested Electives:			Suggested Electives:		
AS or MS — Advanced	3	(4,1)	Ag Ec 302 Farm Management	4	(3,3)
Chem 215 Qual. Analysis	4	(2,6)	AS or MS — Advanced	3	(4,1)
Chem 216 Quan. Analysis	4	(2,6)	For 205 Farm Forestry	2	(2,0)
Ent 301 Elem. & Econ. Ent.	3	(2,3)	For 207 Farm Forestry Lab.	1	(0,3)
RS 301 Rural Sociology	3	(3,0)			

SENIOR YEAR

Agron 401 Adv. Crop Lab.	1	(0,3)	Agron 452 Soil Management	2	(2,0)
Agron 405 Plant Breeding	3	(2,3)	Agron 454 Adv. Soil Lab.	1	(0,3)
Agron 409 Cotton & Tobacco	3	(3,0)	Agron 456 Seminar	1	(1,0)
Agron 451 Min. Nutr. Crops	2	(2,0)	Agron 458 Res. and Thesis	1	(0,3)
Agron 455 Seminar	1	(1,0)	AH 301 Feeds and Feeding	3	(3,0)
Agron 457 Res. and Thesis	1	(0,3)	Bact 410 Soil Microbiology	2	(2,0)
Bot 401 Plant Pathology	2	(2,0)	Bact 412 Soil Microbiology Lab.	1	(0,3)
Bot 403 Plant Pathology Lab.	1	(0,3)	Gov 301 Am. G. & Pol. Par.	3	(3,0)
Psych 301 Gen. Psychology	3	(3,0)	Approved Electives	5	
Approved Elective	3				
	20			19	
Suggested Electives:			Suggested Electives:		
Ag Ec 309 Marketing	3	(2,3)	Ag Ec 460 Agric. Finance	2	(2,0)
Ag Ec 401 Statistics	4	(3,3)	AS or MS — Advanced	3	(4,1)
AS or MS — Advanced	3	(4,1)	Bot 356 Taxonomy	1	(1,0)
			Bot 358 Taxonomy Lab.	2	(0,6)
			Bot 402 Economic Botany	2	(2,0)
			Bot 404 Economic Botany Lab.	1	(0,3)

ANIMAL HUSBANDRY

Occupations for Animal Husbandry graduates include livestock farming, cattle and swine breeding, extension livestock specialists, feed specialists, county agents, research work in animal industry, positions with meat packing companies, feed dealers, freezer locker operators, livestock dealers, and livestock commission brokers.

ANIMAL HUSBANDRY MAJOR

For additional requirements see *Basic Agricultural Curriculum*

JUNIOR YEAR

First Semester			*Second Semester*		
Agron 301 Fertilizers	3	(3,0)	Ag Ec 302 Farm Management	4	(3,3)
Agron 302 Genetics	3	(2,3)	Agron 306 Forage Crops	4	(3,3)
AH 301 Feeds and Feeding	3	(3,0)	AH 306 Judging	1	(0,3)
AH 303 Feeding Lab.	1	(0,3)	AH 310 Pork Production	2	(2,0)
Engl 301 Public Speaking	3	(3,0)	AH 312 Breeds of Livestock	2	(2,0)
Approved Electives	6		AH 314 Pork Production Lab.	1	(0,3)
			Gov 301 Am. G. & Pol. Par.	3	(3,0)
			Approved Elective	3	
	19			20	
Suggested Electives:			Suggested Electives:		
AS or MS — Advanced	3	(4,1)	Ag Ec 460 Agric. Finance	2	(2,0)
Ent 301 Elem. & Econ. Ent.	3	(2,3)	Ag En 301 Soil Conservation	3	(2,3)
RS 301 Rural Sociology	3	(3,0)	AS or MS — Advanced	3	(4,1)

SENIOR YEAR

AH 401 Beef Production	2	(2,0)	AH 402 Horse & Sheep Prod.	2	(2,0)
AH 403 Beef Production Lab.	1	(0,3)	AH 406 Seminar	2	(2,0)
AH 451 Advanced Feeds	2	(2,0)	AH 452 Animal Breeding	2	(2,0)
AH 455 Farm Meats	2	(0,6)	AH 454 Animal Breeding Lab.	1	(0,3)
Bact 301 Gen. Bacteriology	3	(3,0)	AH 456 Advanced Meats	1	(1,0)
Bact 303 Gen. Bacteriology Lab.	1	(0,3)	PH 301 Farm Poultry	3	(3,0)
Psych 301 Gen. Psychology	3	(3,0)	PH 303 Farm Poultry Lab.	1	(0,3)
Approved Electives	6		Approved Electives	5	
	20			17	
Suggested Electives:			Suggested Electives:		
Ag Ec 309 Marketing	3	(2,3)	Ag Ec 361 Mktg. Livestock	3	(3,0)
AS or MS — Advanced	3	(4,1)	AS or MS — Advanced	3	(4,1)
AH 405 Advanced Judging	1	(0,3)	Hort 464 Food Preservation	3	(2,3)
Dairy 309 Animal Nutrition	3	(3,0)	Zool 404 Diseases of Animals	2	(2,0)
Zool 402 Animal Anat. & Phys.	3	(2,3)			

BOTANY

Opportunities in Botany include research work with the state and federal agencies as well as with private agencies such as manufacturers of foods and fibers, agricultural chemicals, fertilizers, weed control chemicals, and seedsmen. Occupations in the agricultural extension work, teaching of biological sciences, curators of herbaria, industrial sales and demonstration representatives for companies manufacturing fungicides and herbicides are also available. Plant pathologists also have opportunities in nursery, orchard and food inspection as well as pathologist-plant breeders with seed companies and other research agencies.

BOTANY MAJOR

For additional requirements see *Basic Agricultural Curriculum*

JUNIOR YEAR

First Semester			*Second Semester*		
Bact 301 Gen. Bacteriology	3	(3,0)	Agron 302 Genetics	3	(2,3)
Bact 303 Gen. Bacteriology Lab.	1	(0,3)	Bot 352 Plant Physiology	3	(3,0)
Bot 351 Plant Morphology	2	(2,0)	Bot 354 Plant Physiology Lab.	1	(0,3)
Bot 353 Plant Morphology Lab.	2	(0,6)	Bot 356 Taxonomy	1	(1,0)
Bot 355 Histology	2	(0,6)	Bot 358 Taxonomy Lab.	2	(0,6)
Engl 301 Public Speaking	3	(3,0)	Ger 102 Elementary German	3	(3,0)
Ger 101 Elementary German	3	(3,0)	Gov 301 Am. G. & Pol. Par.	3	(3,0)
Approved Elective	3		Approved Elective	3	
	19			19	
Suggested Electives:			Suggested Electives:		
AS or MS — Advanced	3	(4,1)	AS or MS — Advanced	3	(4,1)
Econ 312 Commercial Law	3	(3,0)	Ent 302 General Entomology	3	(2,3)
Hort 301 Prin. Veg. Prod.	3	(2,3)	For 205 Farm Forestry	2	(2,0)
			For 207 Farm Forestry Lab.	1	(0,3)

SENIOR YEAR

Bot 401 Plant Pathology	2	(2,0)	Bot 402 Economic Botany	2	(2,0)
Bot 403 Plant Pathology Lab.	1	(0,3)	Bot 404 Economic Botany Lab.	1	(0,3)
Bot 405 Seminar & Thesis	2	(1,3)	Bot 406 Seminar & Thesis	2	(1,3)
Bot 451 Morph. of Fungi	2	(2,0)	Bot 452 Ecology	2	(2,0)
Bot 453 Morph. Fungi Lab.	1	(0,3)	Bot 454 Ecology Lab.	2	(0,6)
Ent 301 Elem. & Econ. Ent.	3	(2,3)	PH 301 Farm Poultry	3	(3,0)
Psych 301 Gen. Psychology	3	(3,0)	PH 303 Farm Poultry Lab.	1	(0,3)
Approved Electives	6		Approved Electives	5	
	20			18	
Suggested Electives:			Suggested Electives:		
Ag Ec 401 Statistics	4	(3,3)	Agron 452 Soil Management	2	(2,0)
Agron 405 Plant Breeding	3	(2,3)	Agron 454 Adv. Soil Lab.	1	(0,3)
Agron 451 Min. Nutr. Crops	2	(2,0)	AS or MS — Advanced	3	(4,1)
AS or MS — Advanced	3	(4,1)	Bact 410 Soil Microbiology	2	(2,0)
			Bact 412 Soil Microbiology Lab.	1	(0,3)
			Hort 456 Truck Crops	3	(2,3)

DAIRYING

Opportunities in Dairying include dairy farming, dairy plant management, dairy herdsmen for large breeding companies, ice cream manufacturing, laboratory and technical work in dairy plants, milk inspection work, dairy extension specialist, research work with state, federal and commercial organizations, as well as many positions with milk products laboratories and production plants.

DAIRY MAJOR

For additional requirements see *Basic Agricultural Curriculum*

JUNIOR YEAR

First Semester			*Second Semester*		
Agron 302 Genetics	3	(2,3)	AH 301 Feeds and Feeding	3	(3,0)
Bact 301 Gen. Bacteriology	3	(3,0)	Dairy 306 Market Milk*	3	(3,0)
Bact 303 Gen. Bacteriology Lab.	1	(0,3)	Engl 301 Public Speaking	3	(3,0)
Dairy 302 Dairy Technology	3	(2,3)	PH 301 Farm Poultry	3	(3,0)
Dairy 305 Dairy Cattle Judging	1	(0,3)	PH 303 Farm Poultry Lab.	1	(0,3)
Dairy 309 Animal Nutrition	3	(3,0)	Approved Electives	6	
Approved Electives	5				
	19			19	
Suggested Electives:			Suggested Electives:		
Ag Ec 401 Statistics	4	(3,3)	AS or MS — Advanced	3	(4,1)
AS or MS — Advanced	3	(4,1)	AH 310 Pork Production	2	(2,0)
Ent 301 Elem. & Econ. Ent.	3	(2,3)	AH 314 Pork Production Lab.	1	(0,3)
Zool 302 Embryology	3	(2,3)	Dairy 304 Judg. Dairy Prod.	1	(0,3)
Zool 402 Animal Anat. & Phys.	3	(2,3)	Dairy 308 Adv. Dy. Cattle Judg.	1	(0,3)
			Dairy 352 Advertising & Mktg.*	3	(3,0)
			Dairy 354 Endocrinology	3	(3,0)

SENIOR YEAR

Agron 301 Fertilizers	3	(3,0)	Dairy 402 Dairy Manufactures	4	(2,6)
Bact 402 Dairy Bacteriology	2	(2,0)	Dairy 405 Breeding	3	(2,3)
Bact 404 Dairy Bacteriology Lab.	1	(0,3)	Dairy 410 Seminar	2	(2,0)
Dairy 401 Dairy Manufactures	3	(2,3)	Gov 301 Am. G. & Pol. Par.	3	(3,0)
Dairy 409 Seminar	2	(2,0)	Psych 301 Gen. Psychology	3	(3,0)
Dairy 452 Feeding & Mgt.	3	(2,3)	Approved Elective	3	
Approved Electives	6				
	20			18	
Suggested Electives:			Suggested Electives:		
Agron 306 Forage Crops	4	(3,3)	Ag Ec 302 Farm Management	4	(3,3)
AS or MS — Advanced	3	(4,1)	Ag Ec 460 Agric. Finance	2	(2,0)
Econ 312 Commercial Law	3	(3,0)	AS or MS — Advanced	3	(4,1)
Econ 401 Accounting	3	(3,0)	Dairy 352 Advertising & Mktg.*	3	(3,0)
			Zool 404 Diseases of Animals	2	(2,0)

* Dairy 306 and 352 are given in alternate years.

ENTOMOLOGY

Many Entomology graduates normally enter federal service with the U. S. Bureau of Entomology and Plant Quarantine as research men or as inspectors. Others enter responsible positions in teaching, research and extension staffs of the several State Colleges and Universities. Insecticide manufacturing concerns also attract many Entomology graduates. Beekeeping is also one phase of entomological work.

ENTOMOLOGY MAJOR

For additional requirements see *Basic Agricultural Curriculum*

JUNIOR YEAR

First Semester			*Second Semester*		
Bact 301 Gen. Bacteriology	3	(3,0)	Agron 302 Genetics	3	(2,3)
Bact 303 Gen. Bacteriology Lab.	1	(0,3)	Bot 352 Plant Physiology	3	(3,0)
Engl 301 Public Speaking	3	(3,0)	Bot 354 Plant Physiology Lab.	1	(0,3)
Ent 301 Elem. & Econ. Ent.	3	(2,3)	Ent 302 General Entomology	3	(2,3)
Ger 101 Elementary German	3	(3,0)	Zool 306 Game Management	2	(2,0)
Zool 301 Advanced Zoology	3	(2,3)	Approved Electives	7	
Approved Elective	3				
	19			19	
Suggested Electives:			Suggested Electives:		
AS or MS — Advanced	3	(4,1)	AS or MS — Advanced	3	(4,1)
Hort 305 Plant Propagation	3	(2,3)	For 205 Farm Forestry	2	(2,0)
RS 301 Rural Sociology	3	(3,0)	For 207 Farm Forestry Lab.	1	(0,3)
			Ger 102 Elementary German	3	(3,0)
			Zool 302 Embryology	3	(2,3)

SENIOR YEAR

Bot 401 Plant Pathology	2	(2,0)	Ent 402 Econ. Entomology	3	(2,3)
Bot 403 Plant Pathology Lab.	1	(0,3)	Ent 406 Beekeeping	3	(2,3)
Ent 401 Econ. Entomology	3	(2,3)	Ent 452 Taxonomic Ent.	2	(1,3)
Ent 405 Insect Morphology	3	(2,3)	Ent 456 Parasitology	3	(2,3)
Ent 451 Res. Tech. & Meth.	2	(1,3)	Ent 460 Seminar	2	(2,0)
Psych 301 Gen. Psychology	3	(3,0)	Gov 301 Am. G. & Pol. Par.	3	(3,0)
Approved Electives	6		Approved Elective	2	
	20			18	
Suggested Electives:			Suggested Electives:		
Ag Ec 401 Statistics	4	(3,3)	AS or MS — Advanced	3	(4,1)
AS or MS — Advanced	3	(4,1)	Bot 356 Taxonomy	1	(1,0)
Bot 451 Morph. of Fungi	2	(2,0)	Bot 358 Taxonomy Lab.	2	(0,6)
Bot 453 Morph. Fungi Lab.	1	(0,3)	Econ 312 Commercial Law	3	(3,0)
Soc 301 Intro. Sociology	3	(3,0)	Zool 402 Animal Anat. & Phys.	3	(2,3)
Zool 403 Protozoology	3	(2,3)			
Zool 405 Animal Histology	3	(2,3)			

HORTICULTURE

Opportunities in Horticulture include vegetable and fruit farm management, nursery management, landscape gardening, fresh fruit and vegetable and food products inspection, plant breeding, agricultural extension service, experiment station research, and food canning, freezing and dehydration. Other occupations include work with florists, seedsmen, fruit products companies, fertilizer companies, fungicide and insecticide manufacturers and dealers, and spraying and dusting equipment manufacturers and dealers.

HORTICULTURE MAJOR

For additional requirements see *Basic Agricultural Curriculum*

JUNIOR YEAR

First Semester			*Second Semester*		
Agron 301 Fertilizers	3	(3,0)	Agron 302 Genetics	3	(2,3)
Bact 301 Gen. Bacteriology	3	(3,0)	Bot 352 Plant Physiology	3	(3,0)
Bact 303 Gen. Bacteriology Lab.	1	(0,3)	Bot 354 Plant Physiology Lab.	1	(0,3)
Ent 301 Elem. & Econ. Ent.	3	(2,3)	Engl 301 Public Speaking	3	(3,0)
Hort 301 Prin. Veg. Prod.	3	(2,3)	Gov 301 Am. G. & Pol. Par.	3	(3,0)
Hort 305 Plant Propagation	3	(2,3)	Hort 306 Landscape Design	2	(2,0)
Approved Elective	3		Hort 308 Landscape Design Lab.	1	(0,3)
			Approved Elective	3	
	19			19	
Suggested Electives:			Suggested Electives:		
AS or MS — Advanced	3	(4,1)	Ag Ec 302 Farm Management	4	(3,3)
RS 301 Rural Sociology	3	(3,0)	AS or MS — Advanced	3	(4,1)
			Bot 356 Taxonomy	1	(1,0)
			Bot 358 Taxonomy Lab.	2	(0,6)

SENIOR YEAR

Ag Ec 302 Farm Management	4	(3,3)	Hort 410 Seminar	1	(1,0)
or Ag Ec 309 Marketing	3	(2,3)	Hort 452 Commercial Pomology	3	(2,3)
Bot 401 Plant Pathology	2	(2,0)	or Hort 402 Garden Design	2	(2,0)
Bot 403 Plant Pathology Lab.	1	(0,3)	Hort 404 Garden Design Lab.	1	(0,3)
Hort 409 Seminar	1	(1,0)	Hort 456 Truck Crops	3	(2,3)
Hort 451 Syst. Pomology	3	(2,3)	or Hort 460 Landscape Design	3	(2,3)
Hort 455 Breeding Hort. Crops	3	(2,3)	Hort 464 Food Preservation	3	(2,3)
or Hort 405 Nut Culture [*]	3	(2,3)	PH 301 Farm Poultry	3	(3,0)
Psych 301 Gen. Psychology	3	(3,0)	PH 303 Farm Poultry Lab.	1	(0,3)
Approved Elective	3 – 4		Approved Elective	4	
	20			18	
Suggested Electives:			Suggested Electives:		
AS or MS — Advanced	3	(4,1)	Ag En 301 Soil Conservation	3	(2,3)
Hort 401 Landscape Design	2	(2,0)	AS or MS — Advanced	3	(4,1)
Hort 403 Landscape Design Lab.	1	(0,3)	Ent 406 Beekeeping	3	(2,3)
Hort 415 Floriculture	3	(2,3)	Hort 466 Research Methods	3	(2,3)

[*] Hort 405 and 455 are given in alternate years.

POULTRY

Graduates in Poultry Husbandry have opportunities as poultry farm operators, hatchery managers, sales and servicemen with feed manufacturers and poultry equipment concerns, poultry research workers and extension agents.

POULTRY MAJOR

For additional requirements see *Basic Agricultural Curriculum*

JUNIOR YEAR

First Semester			*Second Semester*		
Agron 302 Genetics	3	(2,3)	Ag Ec 302 Farm Management	4	(3,3)
AH 301 Feeds and Feeding	3	(3,0)	Bact 301 Gen. Bacteriology	3	(3,0)
AH 303 Feeding Lab.	1	(0,3)	Bact 303 Gen. Bacteriology Lab.	1	(0,3)
RS 301 Rural Sociology	3	(3,0)	Engl 301 Public Speaking	3	(3,0)
Zool 402 Animal Anat. & Phys.	3	(2,3)	PH 301 Farm Poultry	3	(3,0)
Approved Electives	6		PH 303 Farm Poultry Lab.	1	(0,3)
			Approved Elective	3	
	19			18	
Suggested Electives:			Suggested Electives:		
AS or MS — Advanced	3	(4,1)	Agron 306 Forage Crops	4	(3,3)
Ent 301 Elem. & Econ. Ent.	3	(2,3)	AS or MS — Advanced	3	(4,1)
Zool 301 Advanced Zoology	3	(2,3)	Zool 302 Embryology	3	(2,3)
			Zool 306 Game Management	2	(2,0)

SENIOR YEAR

PH 451 Poultry Breeding	3	(2,3)	Gov 301 Am. G. & Pol. Par.	3	(3,0)
PH 455 Grading & Process.	3	(2,3)	Hort 464 Food Preservation	3	(2,3)
PH 459 Diseases & Parasites	3	(2,3)	PH 452 Feed. & Flock Mgt.	3	(2,3)
Psych 301 Gen. Psychology	3	(3,0)	PH 456 Incubat. & Brood.	3	(2,3)
Approved Electives	7		PH 460 Seminar	2	(2,0)
			Approved Electives	6	
	19			20	
Suggested Electives:			Suggested Electives:		
Ag Ec 309 Marketing	3	(2,3)	AS or MS — Advanced	3	(4,1)
Ag Ec 401 Statistics	4	(3,3)	Ent 406 Beekeeping	3	(4,0)
AS or MS — Advanced	3	(4,1)	Zool 405 Animal Histology	3	(2,3)
Dairy 309 Nutrition	3	(3,0)			

AGRICULTURAL ENGINEERING *

Opportunities in Agricultural Engineering include mechanized farming; research with state, federal, and private agencies; sales, service, advertising and design of farm equipment and materials; agricultural extension service with state and federal agencies; employment in the fields of soil conservation, land drainage and reclamation, and irrigation; rural electrification work with power companies, manufacturers of electrical equipment and the Rural Electrification Administration of the United States Department of Agriculture; and private business such as farming, operating machinery dealerships and related lines of business.

* Jointly administered by the School of Agriculture and the School of Engineering.

AGRICULTURAL ENGINEERING

FRESHMAN YEAR

First Semester			*Second Semester*		
Chem 101 General Chemistry	4	(3,3)	Chem 102 General Chemistry	4	(3,3)
DD 105 Engr. Drawing	2	(0,6)	CE 101 Elementary Surveying	2	(1,3)
Engl 101 Comp. and Lit.	3	(3,0)	DD 106 Engr. Drawing	2	(0,6)
In En 101 Mfg. Processes	2	(0,6)	Engl 102 Comp. and Lit.	3	(3,0)
Math 103 Freshman Math	5	(5,0)	Math 104 Freshman Math	5	(5,0)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	17			17	

SOPHOMORE YEAR

Ag En 203 Ag. Engr. Problems	2	(1,3)	Ag En 202 Farm Equipment	3	(2,3)
Ag En 207 Farm Mechanics	2	(1,3)	Agron 101 Farm Crops	3	(3,0)
AH 101 Types and Breeds	2	(2,0)	Engl 204 Survey of Engl. Lit.	3	(3,0)
Engl 203 Survey of Engl. Lit.	3	(3,0)	Math 204 Integral Calculus	5	(5,0)
Math 203 Diff. Calculus	5	(5,0)	Phys 212 Gen. Phys. for Engr.	4	(4,0)
Phys 211 Gen. Phys. for Engr.	4	(4,0)	Phys 214 Gen. Phys. Lab.	1	(0,3)
Phys 213 Gen. Phys. Lab.	1	(0,3)	AS or MS — Basic	1	(2,1)
AS or MS — Basic	1	(2,1)			
	20			20	

JUNIOR YEAR

Ag En 351 Farm Tractors	3	(2,3)	Ag En 304 Rur. Electrification	3	(2,3)
Agron 202 Soils	3	(2,3)	Bot 101 General Botany	3	(3,0)
EE 305 Elec. Cir. & Machines	4	(3,3)	Bot 103 General Botany Lab.	1	(0,3)
ME 302 Elem. Thermodynamics	3	(3,0)	Gov 301 Am. G. & Pol. Par.	3	(3,0)
ME 307 Mech. Engr. Lab.	1	(0,3)	In En 201 Metal Processes	2	(1,3)
Mech 302 Statics	3	(3,0)	In En 302 Welding	2	(1,3)
Approved Elective	3		Mech 304 Mech. of Matr.	3	(3,0)
			Approved Elective	3	
	20			20	
Suggested Electives:			Suggested Electives:		
AS or MS — Advanced	3	(4,1)	Ag Ec 302 Farm Management	4	(3,3)
Arch 215 Building Materials	2	(2,0)	Agron 306 Forage Crops	4	(3,3)
CE 203 Topog. Survey & Map	1	(0,3)	AS or MS — Advanced	3	(4,1)
CE 319 Gen. Photogrammetry	3	(2,3)	Arch 216 Building Design	2	(2,0)
DD 305 Kinematics of Mach.	2	(1,3)	DD 306 Machine Design	2	(1,3)
Mech 303 Kinetics	3	(3,0)	ME 306 Heat Power	3	(3,0)

SENIOR YEAR

Ag En 401 Soil & Wat. Con. En.	3	(2,3)	Ag En 402 Drain. & Irrig.	3	(2,3)
Ag En 409 Seminar	1	(1,0)	Ag En 406 Adv. Farm Mach.	3	(2,3)
Ag En 451 Farm Structures	3	(2,3)	Ag En 410 Seminar	1	(1,0)
Hist 301 U. S. since 1865	3	(3,0)	Ag En 452 Adv. Farm Struct.	3	(2,3)
Mech 401 Fluid Mechanics	3	(3,0)	Engl 301 Public Speaking	3	(3,0)
Mech 403 Fluid Mech. Lab.	1	(0,3)	Hort 464 Food Preservation	3	(2,3)
Approved Elective	3		Approved Elective	3	
	17			19	
Suggested Electives:			Suggested Electives:		
Ag Ec 401 Statistics	4	(3,3)	AS or MS — Advanced	3	(4,1)
AS or MS — Advanced	3	(4,1)	Hort 452 Commercial Pomology	3	(2,3)
In En 402 Metallurgy	3	(3,0)	ME 414 Heat Power Lab.	2	(0,6)
Mech 464 Flow in Open Channels	2 or 3	(2 or 3,0)	Mech 460 Hydrology	3	(3,0)

PRE-FORESTRY

Students completing the two-year Pre-Forestry program at Clemson are qualified to transfer to any of the major forestry institutions in the country. Opportunities exist for work on national forests, state forests, and large private timber lands in technical administrative capacity. Men with training in forest products are also in demand in pulp and paper mills and laboratories and in the mills and developmental laboratories of the larger lumber, plywood and furniture companies in this region and throughout the country.

PRE-FORESTRY

FRESHMAN YEAR

First Semester			*Second Semester*		
Bot 101 General Botany	3	(3,0)	Chem 102 General Chemistry	4	(3,3)
Bot 103 General Botany Lab.	1	(0,3)	CE 101 Elementary Surveying	2	(1,3)
Chem 101 General Chemistry	4	(3,3)	DD 106 Engr. Drawing	2	(0,6)
DD 105 Engr. Drawing	2	(0,6)	Engl 102 Comp. and Lit.	3	(3,0)
Engl 101 Comp. and Lit.	3	(3,0)	Math 102 Trigonometry	3	(3,0)
Math 101 College Algebra	3	(3,0)	Zool 101 General Zoology	3	(3,0)
AS or MS — Basic	1	(2,1)	Zool 103 Gen. Zool. Lab.	1	(0,3)
			AS or MS — Basic	1	(2,1)
	17			19	

SOPHOMORE YEAR

CE 201 Surveying	2	(2,0)	CE 202 Surveying	2	(2,0)
CE 203 Topog. Survey. & Map.	1	(0,3)	Econ 201 Prin. of Economics	3	(3,0)
Engl 203 Survey of Engl. Lit.	3	(3,0)	Engl 204 Survey of Engl. Lit.	3	(3,0)
For 201 Introduction to Forestry	2	(2,0)	For 202 Dendrology	3	(3,0)
For 203 Intro. to For. Lab.	1	(0,3)	For 204 Dendrology Lab.	1	(0,3)
Geol 201 Agric. Geology	3	(3,0)	Phys 202 General Physics	3	(3,0)
Phys 201 General Physics	3	(3,0)	Phys 204 Gen. Phys. Lab.	1	(0,3)
Phys 203 Gen. Phys. Lab.	1	(0,3)	AS or MS — Basic	1	(2,1)
AS or MS — Basic	1	(2,1)			
	17			17	

PRE-VETERINARY MEDICINE

The curriculum in Pre-Veterinary Medicine is designed to meet the general requirements of certain Schools of Veterinary Medicine. Since the requirements for entrance to these schools are not uniform, the student should consider the specific requirements of the school he expects to attend in choosing elective courses. Under the Southern Regional plan qualified students from South Carolina may enter the School of Veterinary Medicine at the University of Georgia. The Pre-Veterinary curriculum meets the entrance requirements of the School of Veterinary Medicine at the University of Georgia.

PRE-VETERINARY

FRESHMAN YEAR

First Semester			*Second Semester*		
AH 101 Types and Breeds	2	(2,0)	Chem 104 General Chemistry	4	(3,3)
AH 103 Types and Breeds Lab.	1	(0,3)	Engl 102 Comp. and Lit.	3	(3,0)
Bot 101 General Botany	3	(3,0)	Hist 101 American History	3	(3,0)
Bot 103 General Botany Lab.	1	(0,3)	Math 102 Trigonometry	3	(3,0)
Chem 101 General Chemistry	4	(3,3)	Zool 101 General Zoology	3	(3,0)
Engl 101 Comp. and Lit.	3	(3,0)	Zool 103 Gen. Zool. Lab.	1	(0,3)
Math 101 College Algebra	3	(3,0)	AS or MS — Basic	1	(2,1)
AS or MS — Basic	1	(2,1)			
	18			18	

SOPHOMORE YEAR

Ag Ch 220 Agric. Org. Chemistry	4	(3,3)	Ag Ec 201 Agric. Economics	3	(3,0)
Engl 203 Survey of Engl. Lit.	3	(3,0)	Agron 101 Farm Crops	3	(3,0)
Phys 201 General Physics	3	(3,0)	Bot 401 Plant Pathology	2	(2,0)
Phys 203 General Physics Lab.	1	(0,3)	Bot 403 Plant Pathology Lab.	1	(0,3)
PH 301 Farm Poultry	3	(3,0)	Chem 215 Qual. Analysis	4	(2,6)
PH 303 Farm Poultry Lab.	1	(0,3)	Dairy 201 Dairying	3	(2,3)
Zool 301 Advanced Zoology	3	(2,3)	Engl 204 Survey of Engl. Lit.	3	(3,0)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	19			20	

SCHOOL OF ARTS AND SCIENCES

In addition to acting as a service school to all other schools of the College in furnishing the training in the humanities and the social and physical sciences which is essential to the general education of students, the School of Arts and Sciences offers four curriculums:

1. The curriculum in Arts and Sciences, leading to the degree of Bachelor of Science in Arts and Sciences.
2. The curriculum in Pre-Medicine, leading to the degree of Bachelor of Science in Pre-Medicine.
3. The curriculum in Industrial Management leading to the degree of Bachelor of Science in Industrial Management. (To be offered beginning in September, 1955.)
4. The curriculum in Industrial Physics, leading to the degree of Bachelor of Science in Industrial Physics.

Students majoring in the School of Arts and Sciences should secure from the Dean of the School of Arts and Sciences the *Handbook for Students Majoring in the School of Arts and Sciences*, the purpose of which is to provide information to students about possible fields of study, guidance in choosing an appropriate field of concentration, a list of approved electives, and additional information about the requirements for graduation in this school.

ARTS AND SCIENCES

The curriculum in Arts and Sciences is planned to meet the needs of those students who desire a broad, general education

as a preparation for intelligent citizenship and for vocational efficiency. The first two years are spent in introductory work in various fields, in order to give the student breadth of view and to enable him to take a more intelligent part in his own education. During the last two years the student concentrates in selected fields.

ARTS AND SCIENCES

FRESHMAN YEAR

First Semester			*Second Semester*		
Chem 101 General Chemistry	4	(3,3)	Chem 102 General Chemistry	4	(3,3)
Engl 101 Comp. and Lit.	3	(3,0)	Engl 102 Comp. and Lit.	3	(3,0)
Hist 101 American History	3	(3,0)	Hist 102 American History	3	(3,0)
Math 103 Freshman Math.	5	(5,0)	Math 104 Freshman Math.	5	(5,0)
Modern Language	3	(3,0)	Modern Language	3	(3,0)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	19			19	

SOPHOMORE YEAR

Bot 101 General Botany *	3	(3,0)	Engl 204 Survey of Engl. Lit.	3	(3,0)
Bot 103 General Botany Lab.*	1	(0,3)	Modern Language	3	(3,0)
Engl 203 Survey of Engl. Lit.	3	(3,0)	Phys 202 General Physics	3	(3,0)
Modern Language	3	(3,0)	Phys 204 General Physics Lab.	1	(0,3)
Phys 201 General Physics	3	(3,0)	Zool 101 General Zoology *	3	(3,0)
Phys 203 General Physics Lab.	1	(0,3)	Zool 103 Gen. Zool. Lab.*	1	(0,3)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
Approved Elective	3		Approved Elective	3	
	18			18	

JUNIOR YEAR

Engl 301 Public Speaking	3	(3,0)	Approved Electives	19	
Approved Electives	16				
	19			19	

SENIOR YEAR

Approved Electives	19		Approved Electives	19	
	19			19	

SUPPLEMENTARY REQUIREMENTS

(1) Before the registration date beginning his Junior year, the student shall select two of the fields of study in the curriculum in Arts and Sciences as fields of concentration. These may be selected from Economics or a combination of Economics with either Government or Sociology, English, History or a combination of History with either Government or Sociology, Mathematics, Physics, Modern Languages, Biological Sciences, and Chemistry.

(2) A minimum of twenty-four hours shall be taken in the primary field of concentration and fifteen hours in the secondary

* Students who elect Chemistry, Mathematics, or Physics for one of their fields of concentration shall take Mathematics 203 and 204 and may elect Physics 211, 213 and 212, 214 instead of Physics 201, 203 and 202, 204 during their sophomore year, postponing until their junior year Botany and Zoology, which are required for graduation.

field. This work shall be on the Junior-Senior level except that Mathematics 203 and 204 may be used as part fulfillment of this requirement by a student whose field of concentration is Mathematics.

(3) Besides the courses in the primary and secondary fields of concentration, a minimum of 12 additional approved elective hours shall be taken in courses of Junior-Senior level.

(4) The remainder of the elective work may be taken from the list of approved electives.

(5) Students majoring in Arts and Sciences who desire to teach in the public schools may fulfill the requirements for the secondary field of concentration by taking the eighteen hours of Education required by the State Board of Education.

(6) For graduation in Arts and Sciences at least the second year of one foreign language must be completed in college.

(7) The total number of hours required for graduation is 150. Students enrolled in the advanced ROTC program may use 12 semester hours of advanced military in this total.

For lists of subjects in fields of concentration, for list of approved electives, and for further information the student should consult the *Handbook for Students Majoring in the School of Arts and Sciences.*

INDUSTRIAL MANAGEMENT

The curriculum in Industrial Management will become effective in September 1955. Since detailed information on the curriculum is not ready for publication as the catalog goes to press, students interested in this curriculum are requested to ask for more information which will be available later.

The curriculum in Industrial Management is offered for those students who plan to follow a career associated with industry or business. The curriculum constitutes a program of basic professional education designed to prepare students for eventual managerial and administrative positions in manufacturing and commerce or careers in the general field of business. In keeping with the increasing demands by industry for students equipped with a well rounded education, during the first two years training in the humanities, social and physical sciences is emphasized. During the Junior and Senior years, the student concentrates on various basic engineering, business, economic, and technical courses designed to furnish a balanced curriculum for those entering the fields of business or industry.

INDUSTRIAL PHYSICS

The curriculum in Industrial Physics is intended to give a thorough knowledge of the fundamental principles of physics to students who plan to enter industrial laboratories. This course combines sound theoretical training and extensive laboratory practices in the various branches of physics with considerable work in one related field such as Chemistry or Electrical Engineering. The student is required to take at least two advanced mathematics courses and other technical courses may be taken as electives if desired. On completing this curriculum the student should be prepared to enter research in an industrial or government laboratory.

In this curriculum the student is required to take a number of technical subjects in addition to his physics courses. Other technical courses may be taken as electives if approved by the student class adviser. For further information about the curriculum consult the *Handbook for Students Majoring in the School of Arts and Sciences.*

INDUSTRIAL PHYSICS

FRESHMAN YEAR

First Semester			*Second Semester*		
Chem 101 General Chemistry	4	(3,3)	Chem 102 General Chemistry	4	(3,3)
DD 105 Engr. Drawing	2	(0,6)	Engl 102 Comp. and Lit.	3	(3,0)
Engl 101 Comp. and Lit.	3	(3,0)	Hist 102 American History	3	(3,0)
Math 103 Freshman Math.	5	(5,0)	Math 104 Freshman Math.	5	(5,0)
Phys 101 Intro. to Methods in Physics	2	(2,0)	Phys 102 Intro. to Methods in Physics	2	(2,0)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	17			18	

SOPHOMORE YEAR

Engl 203 Survey of Engl. Lit.	3	(3,0)	Engl 204 Survey of Engl. Lit.	3	(3,0)
Math 203 Diff. Calculus	5	(5,0)	Math 204 Integral Calculus	5	(5,0)
Phys 205 Lab. Techniques	1	(0,3)	Phys 212 Gen. Phys. for Engr.	4	(4,0)
Phys 211 Gen. Phys. for Engr.	4	(4,0)	Phys 214 Gen. Phys. Lab.	1	(0,3)
Phys 213 Gen. Phys. Lab.	1	(0,3)	AS or MS — Basic	1	(2,1)
AS or MS — Basic	1	(2,1)	Approved Electives	4	
Approved Electives	4				
	19			18	

JUNIOR YEAR

EE 307 Basic Elect. Engr.	3	(3,0)	EE 308 Basic Elect. Engr.	3	(3,0)
EE 309 Elec. Engr. Lab.	1	(0,3)	EE 310 Elect. Engr. Lab.	1	(0,3)
Math 306 Ord. Diff. Equations	3	(3,0)	Engl 301 Public Speaking	3	(3,0)
Phys 312 Heat & Kinetic Th.	3	(3,0)	Math (as approved)	3	
Phys 314 Experimental Heat	1	(0,3)	Phys 321 Mechanics	4	(4,0)
Phys 341 Elec. & Magnetism	3	(3,0)	Phys 323 Mechanics Lab.	1	(0,3)
Phys 343 Electricity Lab.	1	(0,3)	Approved Electives	4	
Approved Electives	4				
	19			19	

SENIOR YEAR

EE 320 Electronics	4	(3,3)	EE (as approved)	3	
Hist 303 Hist. of Civ.	3	(3,0)	Hist 304 Hist. of Civ.	3	(3,0)
Phys 441 Electromagnetism	3	(3,0)	Phys 432 Light	4	(4,0)
Phys 451 Modern Physics	3	(3,0)	Phys 434 Light Lab.	1	(0,3)
Phys 453 Exp. in Mod. Phys.	1	(0,3)	Approved Electives	9	
Approved Electives	6				
	20			20	

Note: A student may take four of the courses: Chemistry 215, 216, 323, 324, 331, 332 instead of the electrical engineering courses.

PRE-MEDICINE

The curriculum in Pre-Medicine is designed to meet the general entrance requirements of standard medical colleges. Since, however, requirements for entrance to various medical schools are not uniform, the student before choosing his electives should consult the specific requirements of the medical college of his preference.

Those preparing for the study of medicine are advised to complete four years of undergraduate work before entering a medical school. Clemson College, however, will award the degree of Bachelor of Science in Pre-Medicine to a student who, after completing all requirements of the first three years of the Pre-Medical course, is graduated from a medical college approved by the American Medical Association. Requirements of the first three years would be three-fourths of the number of hours required for graduation, including required courses for the first three years.

The total number of hours required for graduation is 150. Students enrolled in the advanced ROTC program may use 12 semester hours of advanced military courses in this total.

Students preparing for the study of dentistry find this curriculum appropriate for the purpose. If a student plans to complete his pre-dental work in two years, slight rearrangement in the sequence of chemistry courses is necessary and is permitted.

PRE-MEDICINE

FRESHMAN YEAR

First Semester			*Second Semester*		
Chem 101 General Chemistry	4	(3,3)	Chem 104 General Chemistry	4	(3,3)
Engl 101 Comp. and Lit.	3	(3,0)	Engl 102 Comp. and Lit.	3	(3,0)
Fr 101 Elementary French	3	(3,0)	Fr 102 Elementary French	3	(3,0)
or Ger 101 Elementary Ger.	3	(3,0)	or Ger 102 Elementary Ger.	3	(3,0)
Hist 101 American History	3	(3,0)	Hist 102 American History	3	(3,0)
Math 103 Freshman Math.	5	(5,0)	Math 104 Freshman Math.	5	(5,0)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	19			19	

SOPHOMORE YEAR

Chem 215 Qual. Analysis	4	(2,6)	Bot 101 General Botany	3	(3,0)
DD 101 Freehand Drawing	1	(0,3)	Bot 103 General Botany Lab.	1	(0,3)
Engl 203 Survey of Engl. Lit.	3	(3,0)	Chem 216 Quan. Analysis	4	(2,6)
Fr 201 Intermediate French	3	(3,0)	Engl 204 Survey of Engl. Lit.	3	(3,0)
or Ger 201 Intermediate Ger.	3	(3,0)	Fr 202 Intermediate French	3	(3,0)
Phys 201 General Physics	3	(3,0)	or Ger 202 Intermediate Ger.	3	(3,0)
Phys 203 General Physics Lab.	1	(0,3)	Phys 202 General Physics	3	(3,0)
Zool 101 General Zoology	3	(3,0)	Phys 204 General Physics Lab.	1	(0,3)
Zool 103 Gen. Zool. Lab.	1	(0,3)	AS or MS — Basic	1	(2,1)
AS or MS — Basic	1	(2,1)			
	20			19	

JUNIOR YEAR

First Semester			*Second Semester*		
Chem 323 Elem. Org. Chem.	4	(3,3)	Chem 324 Elem. Org. Chem.	4	(3,3)
Econ 201 Prin. of Economics	3	(3,0)	Econ 202 Prin. of Economics	3	(3,0)
Engl 301 Public Speaking	3	(3,0)	Approved Electives	11	
Approved Electives	8				
	18			18	

SENIOR YEAR

Bact 301 Gen. Bacteriology	3	(3,0)	Hist 304 Hist. of Civ.	3	(3,0)
Bact 303 Gen. Bact. Lab.	1	(0,3)	Psych 302 Social Psychology	3	(3,0)
Hist 303 Hist. of Civ.	3	(3,0)	Soc 301 Intro. Sociology	3	(3,0)
Psych 301 Gen. Psychology	3	(3,0)	Zool 302 Embryology	3	(2,3)
Zool 301 Advanced Zoology	3	(2,3)	Approved Electives	6	
Approved Electives	6				
	19			18	

SCHOOL OF CHEMISTRY AND GEOLOGY

AGRICULTURAL CHEMISTRY

The curriculum in Agricultural Chemistry is designed to give the student a thorough understanding of the basic principles of chemistry and their application in the agricultural and biological sciences. The curriculum includes courses which are fundamental to both agriculture and chemistry. Opportunities exist for graduates in Agricultural Chemistry in agricultural experiment stations, governmental agencies, and in industries producing fertilizers, pesticides, foods and feeds.

AGRICULTURAL CHEMISTRY

FRESHMAN YEAR

First Semester			*Second Semester*		
Bot 101 General Botany	3	(3,0)	Chem 104 General Chemistry	4	(3,3)
Bot 103 General Botany Lab.	1	(0,3)	DD 102 Technical Drawing	1	(0,3)
Chem 101 General Chemistry	4	(3,3)	Engl 102 Comp. and Lit.	3	(3,0)
DD 101 Freehand Drawing	1	(0,3)	Math 104 Freshman Math.	5	(5,0)
Engl 101 Comp. and Lit.	3	(3,0)	Zool 101 General Zoology	3	(3,0)
Math 103 Freshman Math.	5	(5,0)	Zool 103 Gen. Zool. Lab.	1	(0,3)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	18			18	

SOPHOMORE YEAR

Chem 215 Qual. Analysis	4	(2,6)	Agron 202 Soils	3	(2,3)
Engl 203 Survey of Engl. Lit.	3	(3,0)	Chem 216 Quan. Analysis	4	(2,6)
Geol 201 Agric. Geology	3	(3,0)	Engl 204 Survey of Engl. Lit.	3	(3,0)
Phys 201 General Physics	3	(3,0)	Phys 202 General Physics	3	(3,0)
Phys 203 General Physics Lab.	1	(0,3)	Phys 204 General Physics Lab.	1	(0,3)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
Approved Electives	4		Approved Electives	4	
	19			19	

JUNIOR YEAR

First Semester			*Second Semester*		
Bact 301 General Bacteriology	3	(3,0)	Bot 352 Plant Physiology	3	(3,0)
Bact 303 Gen. Bacteriology Lab.	1	(0,3)	Bot 354 Plant Physiology Lab.	1	(0,3)
Chem 323 Organic Chemistry	4	(3,3)	Chem 324 Organic Chemistry	4	(3,3)
Engl 301 Public Speaking	3	(3,0)	Chem 339 Intro. to Phys. Chem.	3	(3,0)
Approved Electives *	8		Zool 402 Animal Physiology	3	(2,3)
			Approved Electives *	6	
	19			20	

SENIOR YEAR

Ag Ch 411 Agric. Chemistry	4	(2,6)	Ag Ch 412 Agric. Chemistry	4	(2,6)
Ag Ch 421 Gen. Biochemistry	3	(3,0)	Ag Ch 422 Gen. Biochemistry	3	(3,0)
Approved Electives *	12		Chem 442 Chem. Literature	2	(1,3)
			Approved Electives *	9	
	19			18	

* Electives:
For the B.S. in Agricultural Chemistry, a student must elect 6 hours in German or French and 18 hours in History, English, Government, Economics, Sociology, Psychology, etc.

CHEMISTRY

The Chemistry curriculum is designed to give the student a thorough knowledge of the fundamental principles of chemistry. The course is so arranged that each student takes approximately the same number of hours of work in each of the four fundamental branches of chemistry—Inorganic, Analytical, Organic and Physical. Additional work may be scheduled in any of these fields in which the student is particularly interested. The number of allowable elective credits is great enough to enable the student to take work in related fields such as engineering, textile chemistry, physics, bacteriology, etc. Graduates of the Chemistry curriculum are prepared for employment in any of the chemical industries in laboratory, plant control or sales work, as well as in Experiment Stations. Many of our graduates go to other institutions for graduate work and the number of our Chemistry graduates who have obtained graduate degrees is impressive. These men are well distributed through industry and research institutions. The Chemistry Department is fully accredited by the American Chemical Society.

CHEMISTRY

FRESHMAN YEAR

First Semester			*Second Semester*		
Chem 101 General Chemistry	4	(3,3)	Chem 104 General Chemistry	4	(3,3)
DD 101 Freehand Drawing	1	(0,3)	DD 102 Technical Drawing	1	(0,3)
Engl 101 Comp. and Lit.	3	(3,0)	Engl 102 Comp. and Lit.	3	(3,0)
Ger 101 Elementary German	3	(3,0)	Ger 102 Elementary German	3	(3,0)
Math 103 Freshman Math.	5	(5,0)	Math 104 Freshman Math.	5	(5,0)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	17			17	

SOPHOMORE YEAR

First Semester			*Second Semester*		
Chem 215 Qual. Analysis	4	(2,6)	Chem 216 Quan. Analysis	4	(2,6)
Engl 203 Survey of Engl. Lit.	3	(3,0)	Engl 204 Survey of Engl. Lit.	3	(3,0)
Math 203 Diff. Calculus	5	(5,0)	Math 204 Integral Calculus	5	(5,0)
Phys 201 General Physics	3	(3,0)	Phys 202 General Physics	3	(3,0)
Phys 203 General Physics Lab.	1	(0,3)	Phys 204 General Physics Lab.	1	(0,3)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
Approved Electives *	3		Approved Electives *	3	
	20			20	

JUNIOR YEAR

Chem 323 Elem. Org. Chem.	4	(3,3)	Chem 324 Elem. Org. Chemistry	4	(3,3)
Chem 331 Physical Chemistry	5	(3,6)	Chem 332 Physical Chemistry	5	(3,6)
Engl 301 Public Speaking	3	(3,0)	Chem 442 Chem. Literature	2	(1,3)
Approved Electives *	7		Approved Electives *	8	
	19			19	

SENIOR YEAR

Chem 401 Inorg. Chemistry	2	(2,0)	Chem 402 Inorg. Chemistry	3	(2,3)
Chem 411 Instr. Analysis	3	(1,6)	Chem 472 Org. Synthesis	3	(1,6)
Chem 421 Qual. Org. Analysis	3	(1,6)	Approved Electives *	13	
Geol 306 Mineralogy	3	(2,3)			
Approved Electives *	8				
	19			19	

Suggested Electives:			Suggested Electives:		
AS or MS — Advanced	3	(4,1)	AS or MS — Advanced	3	(4,1)
Ag Ch 421 Gen. Biochemistry	3	(3,0)	Chem 444 Research Problems	3	(0,9)
Bact 301 General Bacteriology	3	(3,0)	Chem 454 Inorganic Synthesis	2	(0,6)
Bact 303 Gen. Bact. Lab.	1	(0,3)	Ger 202 Intermediate German	3	(3,0)
Chem 441 Glass Manipulation	2	(0,6)	Math 306 Ord. Diff. Equations	3	(3,0)
Chem 443 Research Problems	3	(0,9)	Phys 452 Atom. & Nucl. Physics	3	(3,0)
Ger 201 Intermediate German	3	(3,0)			
Math 305 Inter. Calculus	3	(3,0)			
Phys 341 Elec. and Magn.	3	(3,0)			
Phys 343 Electricity Lab.	1	(0,3)			
Phys 451 Modern Physics	3	(3,0)			

* Electives:

For the degree of B.S. in Chemistry, a student must elect at least 18 hours in History, Government, Economics, Sociology, Psychology, etc.

SCHOOL OF EDUCATION

The School of Education offers four-year curriculums leading to the degree of Bachelor of Science in Education, Industrial Education and Vocational Agricultural Education, for those who plan to teach in the public schools. Courses are also made available for students of the other schools of the college. By making a proper program of studies it is possible for students to meet the professional requirements in subject matter and in education and to qualify for the teacher's certificate in this State. Students who are planning to teach are advised to plan not only their courses in education, but also their subject matter courses so as to fulfill the State requirements in the state where they plan to teach. Students who are interested are invited to consult the Dean and other members of the Education faculty for information.

Directed student teaching in several subjects in cooperation with the State Department of Education and school systems constitutes part of the training. Students may be required to live in a public school community for at least six weeks and to provide the necessary travel while engaged in this directed teaching.

The School of Education maintains a Teacher Placement Service with which students and qualified graduates may register and from which employers may receive assistance. Both students and employers of teachers are invited to use this service.

EDUCATION

The purpose of the curriculum in Education is to prepare teachers of general high school subjects. Emphasis is placed upon the training of teachers in mathematics and science. The offerings of the other departments of the college make possible a wide selection of subject-matter courses in biology, chemistry, mathematics, English, history, civics, and physics. The majority of graduates enter the teaching profession, although some engage in administrative work, recreation leadership, or athletic coaching in schools, textile communities, public parks and elsewhere.

Approval of electives by adviser is based on sequences appropriate to educational plan of the student.

EDUCATION

FRESHMAN YEAR

First Semester			*Second Semester*		
Chem 101 General Chemistry	4	(3,3)	Chem 102 General Chemistry	4	(3,3)
DD 101 Freehand Drawing	1	(0,3)	Engl 102 Comp. and Lit.	3	(3,0)
Educ 101 Orientation	1	(1,0)	Gov 101 Am. Nat'l Gov't	3	(3,0)
Engl 101 Comp. and Lit.	3	(3,0)	Hist 102 American History	3	(3,0)
Hist 101 American History	3	(3,0)	Math 104 Freshman Math.	5	(5,0)
Math 103 Freshman Math.	5	(5,0)	AS or MS — Basic	1	(2,1)
AS or MS — Basic	1	(2,1)			
	18			19	

SOPHOMORE YEAR

Bot 101 General Botany	3	(3,0)	Econ 202 Prin. of Economics	3	(3,0)
Bot 103 General Botany Lab.	1	(0,3)	Engl 204 Survey of Engl. Lit.	3	(3,0)
Econ 201 Prin. of Economics	3	(3,0)	Phys 202 General Physics	3	(3,0)
Engl 203 Survey of Engl. Lit.	3	(3,0)	Phys 204 General Physics Lab.	1	(0,3)
Phys 201 General Physics	3	(3,0)	Zool 101 General Zoology	3	(3,0)
Phys 203 General Physics Lab.	1	(0,3)	Zool 103 General Zoology Lab.	1	(0,3)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
Approved Electives	4		Approved Electives	4	
	19			19	

JUNIOR YEAR

First Semester			*Second Semester*		
Bact 301 Gen. Bacteriology	3	(3,0)	Econ 312 Commercial Law	3	(3,0)
Bact 303 Gen. Bact. Lab.	1	(0,3)	Educ 302 Educ. Psychology	3	(3,0)
Educ 305 Prin. of Ed.	3	(3,0)	RS 459 The Rural Community *	3	(3,0)
Engl 301 Public Speaking	3	(3,0)	Zool 306 Game Management	2	(2,0)
Soc 301 Intro. Sociology	3	(3,0)	Approved Electives	8	
Approved Electives	6				
	19			19	

SENIOR YEAR

Econ 301 Labor Problems *	3	(3,0)	Arch 409 Art Appreciation	3	(3,0)
Educ 424 Tech. of Teach.	3	(3,0)	Educ 332 Organ. Courses	3	(3,0)
Educ 458 Health Educ.	3	(3,0)	Educ 412 Directed Teaching	6	(1,15)
Gov 302 State and Local Gov.	3	(3,0)	Music 402 Music Appreciation	3	(3,0)
Soc 402 The Family	3	(3,0)	Approved Electives	3	
Approved Electives	4				
	19			18	

* Note: A student who desires to add 3 credits of work in the field (mathematics, sciences, English, or social studies) in which he plans to teach may omit Econ 301 *or* RS 459 if the desired work is approved *by the faculty adviser.*

INDUSTRIAL EDUCATION

The curriculum in Industrial Education is designed to prepare students to teach industrial subjects, industrial arts, drawing, manual training, and metal work in the high schools and to supervise the teaching of evening trade classes. Graduates become affiliated with high school industrial education departments as teachers, supervisors, and diversified-occupations specialists. Students who plan to teach in industrial communities may choose such electives in textiles, engineering, chemistry or agriculture as they have the background, prerequisites and interests. Some graduates secure employment in industry in special training programs. Itinerant teacher training for foremen and others who teach vocational classes in textile and other industrial plants is offered in various parts of the State.

INDUSTRIAL EDUCATION

FRESHMAN YEAR

First Semester			*Second Semester*		
Chem 101 General Chemistry	4	(3,3)	Chem 102 General Chemistry	4	(3,3)
DD 105 Engr. Drawing	2	(0,6)	DD 106 Engr. Drawing	2	(0,6)
Educ 101 Orientation	1	(1,0)	Engl 102 Comp. and Lit.	3	(3,0)
Engl 101 Comp. and Lit.	3	(3,0)	Math 104 Freshman Math.	5	(5,0)
In En 101 Mfg. Processes	2	(0,6)	TM 101 Intro. to Textiles	3	(2,3)
Math 103 Freshman Math.	5	(5,0)	AS or MS — Basic	1	(2,1)
AS or MS — Basic	1	(2,1)			
	18			18	

SOPHOMORE YEAR

First Semester			*Second Semester*		
Cr Ar 101 Pottery Materials	3	(2,3)	Ag En 203 Ag. Engr. Problems	2	(1,3)
Engl 203 Survey of Engl. Lit.	3	(3,0)	Bot 101 General Botany	3	(3,0)
In En 201 Metal Processes	2	(1,3)	Bot 103 General Botany Lab.	1	(0,3)
Phys 201 General Physics	3	(3,0)	Econ 201 Prin. of Economics	3	(3,0)
Phys 203 General Physics Lab.	1	(0,3)	Engl 204 Survey of Engl. Lit.	3	(3,0)
Zool 101 General Zoology	3	(3,0)	In En 202 Wood Processes	2	(0,6)
Zool 103 General Zoology Lab.	1	(0,3)	Phys 202 General Physics	3	(3,0)
AS or MS — Basic	1	(2,1)	Phys 204 General Physics Lab.	1	(0,3)
Approved Elective	2		AS or MS — Basic	1	(2,1)
	19			19	

JUNIOR YEAR

Arch 215 Bldg. Materials	2	(2,0)	Arch 216 Building Design	2	(2,0)
Educ 305 Prin. of Educ.	3	(3,0)	Educ 302 Educ. Psychology	3	(3,0)
Educ 307 Ind. Educ. Lab.	2	(0,6)	Educ 308 Ind. Educ. Lab.	2	(0,6)
EE 303 Basic Electricity	4	(3,3)	Engl 301 Public Speaking	3	(3,0)
Hist 303 History of Civ.	3	(3,0)	Hist 304 History of Civ.	3	(3,0)
In Ar 303 Industrial Arts	2	(1,3)	In Ar 304 School Shop Mgt.	2	(1,3)
Approved Elective	3		In En 302 Welding	2	(1,3)
			Approved Elective	3	
	19			20	

SENIOR YEAR

Arch 409 Art Appreciation	3	(3,0)	Arch 408 Industrial Design	1	(0,3)
Educ 402 Directed Teaching	6	(1,15)	Bact 301 Gen. Bacteriology	3	(3,0)
Educ 424 Tech. of Teaching	3	(3,0)	Bact 303 Gen. Bact. Lab.	1	(0,3)
Educ 458 Health Education	3	(3,0)	Educ 332 Org. of Courses	3	(3,0)
Music 402 Music Appreciation	3	(3,0)	Educ 421 Coor. Methods	2	(2,0)
Approved Elective	3		Soc 301 Intro. Sociology	3	(3,0)
			Approved Elective	3	
	21			16	

VOCATIONAL AGRICULTURAL EDUCATION

The majority of the graduates in Vocational Agricultural Education are employed to teach Vocational Agriculture in the public schools as sponsored by State Department and United States Office of Education. The curriculum, however, is well balanced with training in related fields and many graduates enter general farming and other agricultural educational or business occupations. Employment opportunities for graduates in Vocational Agricultural Education are excellent and for a number of years the demand for these graduates has exceeded the supply.

After a few years of teaching experience many graduates have advanced in the teaching profession or have entered related agricultural work such as farm credit, agricultural extension work, soil conservation and other government agencies.

VOCATIONAL AGRICULTURAL EDUCATION

FRESHMAN YEAR

First Semester			*Second Semester*		
Agron 101 Farm Crops	3	(3,0)	AH 101 Types and Breeds	2	(2,0)
Chem 101 General Chemistry	4	(3,3)	AH 103 Types and Breeds Lab.	1	(0,3)
Educ 101 Orientation	1	(1,0)	Bot 101 General Botany	3	(3,0)
Engl 101 Comp. and Lit.	3	(3,0)	Bot 103 General Botany Lab.	1	(0,3)
Math 101 College Algebra	3	(3,0)	Chem 102 General Chemistry	4	(3,3)
Zool 101 General Zoology	3	(3,0)	Engl 102 Comp. and Lit.	3	(3,0)
Zool 103 General Zoology Lab.	1	(0,3)	Math 102 Trigonometry	3	(3,0)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	19			18	

SOPHOMORE YEAR

Ag Ch 220 Agric. Org. Chemistry	4	(3,3)	Ag Ec 201 Agric. Economics	3	(3,0)
Dairy 201 Dairying	3	(2,3)	Ag En 201 Farm Machinery	3	(2,3)
Engl 203 Survey of Engl. Lit.	3	(3,0)	Agron 202 Soils	3	(2,3)
Gov 101 Am. Nat'l Gov't	3	(3,0)	Engl 204 Survey of Engl. Lit.	3	(3,0)
Phys 201 General Physics	3	(3,0)	Hort 201 Gen. Horticulture	3	(2,3)
Phys 203 General Physics Lab.	1	(0,3)	Phys 202 General Physics	3	(3,0)
AS or MS — Basic	1	(2,1)	Phys 204 General Physics Lab.	1	(0,3)
			AS or MS — Basic	1	(2,1)
	18			20	

JUNIOR YEAR

Ag En 301 Soil Conservation	3	(2,3)	Ag En 205 Farm Shop	3	(2,3)
Agron 301 Fertilizers	3	(3,0)	AH 301 Feeds and Feeding	3	(3,0)
Educ 301 Intro. to Educ.	3	(2,3)	Bact 301 General Bacteriology	3	(3,0)
PH 301 Farm Poultry	3	(3,0)	Bact 303 Gen. Bact. Lab.	1	(0,3)
PH 303 Farm Poultry Lab.	1	(0,3)	Educ 302 Educ. Psychology	3	(3,0)
RS 301 Rural Sociology	3	(3,0)	Engl 301 Public Speaking	3	(3,0)
Approved Elective	3		Approved Social Studies	3	
	19			19	
Suggested Electives:			Suggested Electives:		
AS or MS — Advanced	3	(4,1)	Ag Ec 460 Agric. Finance	3	(3,0)
AH 310 Pork Production	2	(2,0)	AS or MS — Advanced	3	(4,1)
AH 314 Pork Prod. Lab.	1	(0,3)	For 205 Farm Forestry	2	(2,0)
Ent 301 Elem. & Econ. Ent.	3	(2,3)	For 207 Farm Forestry Lab.	1	(0,3)
Hort 305 Plant Propagation	3	(2,3)	Hort 306 Landscape Design	3	(2,3)
			Hort 308 Landscape Des. Lab.	3	(2,3)

SENIOR YEAR

Ag Ec 302 Farm Management	4	(3,3)	Educ 401 Meth. in Ag. Ed.	3	(3,0)
Arch 409 Art Appreciation	3	(3,0)	Educ 406 Dir. Teaching	6	(0,18)
Bot 401 Plant Pathology	2	(2,0)	Educ 422 Prob. in Adult Educ.	3	(3,0)
Bot 403 Plant Pathology Lab.	1	(0,3)	Educ 458 Health Educ. for Tchrs.	3	(3,0)
Hort 464 Food Preservation	3	(2,3)	Approved Elective	3	
Music 402 Music Appreciation	3	(3,0)			
Approved Elective	3				
	19			18	
Suggested Electives:			Suggested Electives:		
Ag Ec 309 Marketing	3	(2,3)	Ag Ec 451 Econ. of Cooperation	3	(3,0)
AS or MS — Advanced	3	(4,1)	AS or MS — Advanced	3	(4,1)
Hort 456 Truck Crops	3	(2,3)	Hist 301 U. S. since 1865	3	(3,0)
RS 459 The Rural Community	3	(3,0)	Soc 301 Intro. Sociology	3	(3,0)
Zool 402 Animal Anat. & Phys.	3	(2,3)	Zool 404 Diseases of Animals	2	(2,0)

SCHOOL OF ENGINEERING

Six curriculums are offered under the School of Engineering including Architecture, Ceramic Engineering, Chemical Engineering, Civil Engineering, Electrical Engineering, and Mechanical Engineering. The curriculums in Agricultural, Civil, Electrical, and Mechanical Engineering are accredited by the Engineers Council for Professional Development. The Department of Architecture is on the list of accredited schools of architecture issued by the National Architectural Accrediting Board. The curriculum in Agricultural Engineering is jointly administered by the School of Engineering and the School of Agriculture and may be found in this catalog under the School of Agriculture.

While the School of Engineering does not offer specific options or majors under each of these curriculums, the training includes many phases of each respective field. Thus, a Civil Engineering student is graduated in Civil Engineering rather than hydraulic engineering, highway engineering, sanitary engineering or other such options, but the curriculum in Civil Engineering includes definite training along these lines. In the same way, the other engineering curriculums include thorough training in various phases of the field of specialization without over-emphasizing one phase to the neglect of others.

All engineering consists of the application of the laws of physics, chemistry, and mathematics to the solution of specific problems. Furthermore, any engineer must be able to express his ideas both in words and in drawings. For these two reasons the first two years of all the branches of engineering here listed are substantially the same and deal largely with the fundamentals mentioned above.

An engineer in any branch should understand the methods of fabrication of machine parts and the possibilities and limitations of various methods. For this reason shop courses are included in all engineering curriculums. These courses are not manual training in nature and do not deal with the acquisition of specific skills.

In all curriculums, over-specialization is carefully avoided by the inclusion of subjects which involve the most direct application of the basic sciences and which serve to develop habits of orderly analysis and logical thinking.

AGRICULTURAL ENGINEERING

The Agricultural Engineering curriculum is jointly administered by the School of Agriculture and the School of Engineering. The

curriculum may be found in this catalog under the School of Agriculture.

ARCHITECTURE

The full professional courses in Architecture as given below lead to the Bachelor of Architecture degree at the end of the fifth* year. The two optional courses are the same in the Freshman, Sophomore and Junior years. At the end of the Junior year, a student may choose one of the two courses offered. Those students interested in Architectural design continue in the course of Option No. 1, and those interested in architectural structures pursue the course of Option No. 2.

The courses are broad in scope, fitting the graduate not only for the practice of architecture, but for a number of allied professions. All work is individual and every effort is made to develop the students' individuality, imagination and creative ability. Skillful draftsmanship and artistic presentation are insisted upon.

The South Carolina State Board of Architectural Examiners accepts the diploma of this department as equivalent to two years' work in a practicing architect's office, otherwise required. The department is a member of the Association of Collegiate Schools of Architecture. The five-year curriculum leading to the degree of Bachelor of Architecture is accredited by the National Architectural Accrediting Board.

As Architecture is one of the fine arts much time is given to freehand drawing, color work, history of architecture, painting and sculpture. Architectural design and building construction are the two major subjects and greatest attention is paid to them throughout the entire course. The two courses parallel each other and insofar as feasible are integrated one with the other. In these the student is given a written program of requirements of a building or group of buildings and under the criticism of the instructor creates a design embodying his own ideas.

Fundamental courses are given in mathematics, graphic statics, strength of materials, reinforced concrete, steel, building materials and details, and in working drawings which consist of complete plans and specifications for a building prepared as in the office of the practicing architect.

The architectural library adjoining the drafting rooms is a working library with many volumes concerning architecture and

* Previously offered four-year courses in Architecture and Architectural Engineering will be continued until June, 1959 for the benefit of students now enrolled in these courses. A four-year course will not be offered to any student enrolling in Architecture after 1954.

allied subjects, photographic plans and illustrations, lantern slides, drawings, models and files of the leading architectural magazines, both American and foreign. Books of this type purchased by the main College library are deposited in the architectural library. In the structural drafting room is a complete built-in exhibit of building materials and appliances especially arranged for instructional purposes.

Each spring students are expected to take an educational trip to a large city to study examples of architecture and construction.

Six weeks of practical architectural work approved by the architectural faculty are required for graduation.

ARCHITECTURE

FRESHMAN YEAR

First Semester			*Second Semester*		
Arch 101 Graphics	3	(0,9)	Arch 102 Graphics	3	(0,9)
Arch 105 Visual Arts Lab.	2	(0,6)	Arch 106 Visual Arts Lab.	2	(0,6)
Arch 115 Building Materials	2	(2,0)	Arch 116 Dwelling House Constr.	2	(2,0)
Arch 121 Intro. to Arch.	2	(2,0)	Arch 122 Intro. to Arch.	2	(2,0)
Engl 101 Comp. and Lit.	3	(3,0)	Engl 102 Comp. and Lit.	3	(3,0)
Math 103 Freshman Math.	5	(5,0)	Math 104 Freshman Math.	5	(5,0)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	18			18	

SOPHOMORE YEAR

Arch 201 Arch. Design	3	(0,9)	Arch 202 Arch. Design	3	(0,9)
Arch 207 Visual Arts Lab.	1	(0,3)	Arch 208 Visual Arts Lab.	1	(0,3)
Arch 217 Elem. Constr.	1	(1,0)	Arch 218 Elem. Working Draw.	2	(0,6)
Engl 203 Survey of Engl. Lit.	3	(3,0)	Engl 204 Survey of Engl. Lit.	3	(3,0)
Math 203 Diff. Calculus	5	(5,0)	Math 204 Integral Calculus	5	(5,0)
Phys 211 Gen. Phys. for Engr.	4	(4,0)	Phys 202 General Physics	3	(3,0)
Phys 213 Gen. Phys. Lab.	1	(0,3)	Phys 204 Gen. Phys. Lab.	1	(0,3)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	19			19	

JUNIOR YEAR

Arch 301 Arch. Design	4	(0,12)	Arch 302 Arch. Design	4	(0,12)
Arch 307 Visual Arts Lab.	1	(0,3)	Arch 310 History of Arch.	3	(3,0)
Arch 309 History of Arch.	3	(3,0)	Arch 318 Working Drawings	2	(0,6)
CE 101 Elementary Surveying	2	(1,3)	Chem 101 General Chemistry°	4	(3,3)
Engl 301 Public Speaking	3	(3,0)	or Elective	3	
Mech 302 Statics	3	(3,0)	CE 309 Trusses	1	(0,3)
Approved Elective	3		Mech 304 Mech. of Matr.	3	(3,0)
			Approved Elective	3	
	19			19 or 20	

OPTION NO. 1

SENIOR YEAR

Arch 401 Arch. Design	6	(0,18)	Arch 402 Arch. Design	6	(0,18)
Arch 411 History of Arch.	2	(2,0)	Arch 406 Visual Arts Lab.	1	(0,3)
Arch 415 Structural Methods	2	(2,0)	Arch 418 Working Drawings	2	(0,6)
CE 310 Structures	3	(2,3)	CE 409 Reinf. Concrete	4	(3,3)
Approved Electives	6 or 5°°		Approved Electives	6	
	19 or 18°°			19	

° Chem 101 required for students not having one unit of high school chemistry.
°° For students required to take Chem 101.

FIFTH YEAR

First Semester			*Second Semester*		
Arch 451 Arch. Design	6	(0,18)	Arch 452 Thesis	6	(0,18)
Arch 461 Environmental Planning	3	(3,0)	Arch 462 Environmental Planning	3	(3,0)
Arch 465 Advanced Constr.	2	(1,3)	Arch 468 Working Drawings	2	(0,6)
Arch 471 Mech. Plant	2	(1,3)	Arch 472 Mech. Plant	2	(1,3)
Arch 475 Arch. Office Practice	2	(2,0)	Arch 476 Arch. Office Practice	2	(2,0)
Approved Elective	3		Approved Elective	3	
	18			18	

OPTION NO. 2

SENIOR YEAR

Arch 411 History of Arch.	2	(2,0)	Arch 406 Visual Arts Lab.	1	(0,3)
Arch 415 Struct. Methods	2	(2,0)	Arch 428 Working Drawings	3	(0,9)
CE 310 Structures	3	(2,3)	CE 402 Struct. Analysis	2	(2,0)
CE 414 Soil Mechanics	3	(2,3)	CE 409 Reinf. Concrete	4	(3,3)
Geol 406 Engr. Geology	3	(2,3)	Mech 401 Fluid Mechanics	3	(3,0)
Approved Electives	6 or 5*		Approved Electives	6	
	19 or 18*			19	

FIFTH YEAR

Arch 461 Environmental Planning	3	(3,0)	Arch 462 Environmental Planning	3	(3,0)
Arch 465 Advanced Constr.	2	(1,3)	Arch 472 Mechanical Plant	2	(1,3)
Arch 471 Mechanical Plant	2	(1,3)	Arch 476 Arch. Office Practice	2	(2,0)
Arch 475 Arch. Office Practice	2	(2,0)	Arch 478 Structural Thesis	6	(0,18)
CE 420 Concrete Mixes	1	(0,3)	CE 412 Reinf. Conc. Design	2	(1,3)
CE 452 Struct. Analysis	2	(2,0)	Approved Elective	3	
Approved Electives	6				
	18			18	

At least 15 credits of electives must be chosen from list below:

Chem 101 General Chemistry*	4	(3,3)	Ger 301 Advanced German	3	(3,0)
Engl 405 Shakespeare	3	(3,0)	Ger 302 Advanced German	3	(3,0)
Engl 406 Shakespeare	3	(3,0)	Hist 303 Hist. of Civ.	3	(3,0)
Engl 409 Chaucer	3	(3,0)	Hist 304 Hist. of Civ.	3	(3,0)
Engl 415 Intro. to Drama	3	(3,0)	Music 402 Music Appreciation	3	(3,0)
Engl 419 Sel. Masterpieces	3	(3,0)	Music 410 Bach to 20th Cen.	3	(3,0)
Engl 420 Sel. Masterpieces	3	(3,0)	Psych 301 General Psychology	3	(3,0)
Engl 423 American Lit.	3	(3,0)	Psych 401 Applied Psychology	3	(3,0)
Engl 424 American Lit.	3	(3,0)	Psych 402 Abnormal Psychology	3	(3,0)
Engl 425 Romantic Revival	3	(3,0)	Rel 201 Old Test. Prophets	3	(3,0)
Engl 426 Romantic Revival	3	(3,0)	Rel 205 Intro. to New Test.	3	(3,0)
Engl 427 Victorian Lit.	3	(3,0)	Rel 305 New Test. Outline	3	(3,0)
Engl 428 Victorian Lit.	3	(3,0)	Rel 307 Intro. to Chris. Ethics	3	(3,0)
Engl 429 The English Novel	3	(3,0)	Rel 401 Intro. to Chris. Phil.	3	(3,0)
Engl 430 The English Novel	3	(3,0)	Soc 301 Intro. Sociology	3	(3,0)
Engl 431 Restoration & 18th Cen.	3	(3,0)	Soc 401 Social Problems	3	(3,0)
Fr 101 Elementary French	3	(3,0)	Soc 402 The Family	3	(3,0)
Fr 102 Elementary French	3	(3,0)	Soc 403 Criminology	3	(3,0)
Fr 201 Intermediate French	3	(3,0)	Soc 405 Indus. Sociology	3	(3,0)
Fr 202 Intermediate French	3	(3,0)	Soc 406 Region. Sociology	3	(3,0)
Fr 301 Advanced French	3	(3,0)	Span 101 Elementary Spanish	3	(3,0)
Fr 302 Advanced French	3	(3,0)	Span 102 Elementary Spanish	3	(3,0)
Ger 101 Elementary German	3	(3,0)	Span 201 Intermediate Spanish	3	(3,0)
Ger 102 Elementary German	3	(3,0)	Span 202 Intermediate Spanish	3	(3,0)
Ger 201 Intermediate German	3	(3,0)	Span 301 Advanced Spanish	3	(3,0)
Ger 202 Intermediate German	3	(3,0)	Span 302 Advanced Spanish	3	(3,0)
General Electives:			General Electives:		
Ag Ec 352 Public Finance	3	(3,0)	Econ 301 Labor Problems	3	(3,0)
Ag Ec 401 Statistics	4	(3,3)	Econ 302 Money and Banking	3	(3,0)
Ag En 203 Ag. Engr. Problems	2	(1,3)	Econ 401 Accounting	3	(3,0)
AS or MS Advanced	3	(4,1)	Educ 302 Educational Psych.	3	(3,0)
Arch 408 Industrial Design	1	(0,3)	EE 305 Elect. Circ. & Mach.	4	(3,3)
Arch 409 Art Appreciation	3	(3,0)	Foreign Language Electives	3	(3,0)
Arch 412 History of Art	3	(3,0)	Hort 306 Landscape Design	2	(2,0)
Cr En 303 Ceramic Products	2	(2,0)	Hort 308 Landscape Des. Lab.	1	(0,3)
Chem 101 General Chemistry	4	(3,3)	Hort 401 Landscape Design	2	(2,0)
Chem 102 General Chemistry	4	(3,3)	Hort 403 Landscape Des. Lab.	1	(0,3)
CE 306 Prin. of Sanitation	2	(0,6)	Mathematics Elective	3	(3,0)
CE 417 City Planning	2	(2,0)	ME 302 Elem. Thermodynamics	3	(3,0)
CE 422 Engineering Ethics	3	(3,0)	Mech 303 Kinetics	3	(3,0)
CE 434 Constr. Cost and Est.	3	(2,3)	Mech 305 Mech. of Matr. Lab.	1	(0,3)
Econ 201 Prin. of Economics	3	(3,0)	Mech 403 Fluid Mech. Lab.	1	(0,3)
Econ 202 Prin. of Economics	3	(3,0)	Phys 305 Photography	3	(2,3)
			Phys 308 Sound & Acoustics	3	(3,0)

* For students required to take Chem 101.

CERAMIC ENGINEERING

The ceramic industries have as their raw materials the nonmetallic minerals other than fuel. These minerals constitute over 90 percent of the earth's crust while the industries dependent on them comprise almost one-third the entire field of industrial activity. Ceramic industries produce products in eight major classifications: structural clay products; glass; whitewares; refractories; abrasives; cements; limes and plaster; enameled metals; and raw material processing.

South Carolina possesses a wide variety of ceramic minerals which rank with forests as the richest natural resources in the state and which makes it possible for South Carolina to contribute raw materials to every major classification of the ceramic industry. South Carolina has a diversified ceramic industry with plants manufacturing Portland Cement, glass containers, glass fibers, sewer pipes, brick, refractories, special raw materials, and whitewares. The growth of these industries and the development of new ones is to a large measure dependent on the availability of trained engineers capable of incorporating and operating the modern techniques and equipment of the ceramic industries.

The curriculum of Ceramic Engineering leads to the degree of Bachelor of Ceramic Engineering, and graduate courses are offered leading to advanced degrees. The course is based on a study of the fundamental courses in chemistry, physics, mathematics, and geology and advanced courses are designed to apply these fundamental sciences to Ceramic Engineering. The ceramic engineering student receives basic training in general engineering and the fundamentals of civil, electrical, and mechanical engineering. In the Ceramic Engineering courses emphasis is placed on the principles of manufacture common to all ceramic industries. The Ceramic Engineering student may choose certain elective courses from the humanistic and social subjects.

The Olin Foundation recently provided a grant for the construction and equipping of a ceramic engineering building. The grant has provided Clemson College with the outstanding facilities for ceramic engineering education and research. An excellent ceramic laboratory has been equipped to demonstrate all processes of ceramic manufacturing including beneficiation of ores and clays, grinding and crushing materials, mixing and blending raw materials, forming the materials into various shapes, and drying and firing the

prepared objects. Equipment for the control of industrial processes is studied and tests are made to determine the quality of various ceramic products. Well-equipped laboratories are available for research on raw materials and problems of ceramic industries in South Carolina.

Ceramic Engineering graduates find employment as plant executives, research engineers, plant designers and constructors, equipment manufacturers, consulting engineers, ceramic chemists and technologists in the ceramic industries and in allied fields.

CERAMIC ENGINEERING

FRESHMAN YEAR

First Semester			*Second Semester*		
Chem 101 General Chemistry	4	(3,3)	Chem 104 General Chemistry	4	(3,3)
DD 105 Engr. Drawing	2	(0,6)	CE 101 Elem. Surveying	2	(1,3)
Engl 101 Comp. and Lit.	3	(3,0)	or In En 101 Mfg. Processes	2	(0,6)
In En 101 Mfg. Processes	2	(0,6)	DD 106 Engr. Drawing	2	(0,6)
or CE 101 Elem. Surveying	2	(1,3)	Engl 102 Comp. and Lit.	3	(3,0)
Math 103 Freshman Math.	5	(5,0)	Math 104 Freshman Math.	5	(5,0)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	17			17	

SOPHOMORE YEAR

Cr En 201 Intro. to Cr. Engr.	2	(2,0)	Cr En 202 Ceramic Materials	3	(3,0)
Chem 215 Qual. Analysis	4	(2,6)	Chem 216 Quan. Analysis	4	(2,6)
Engl 203 Survey of Engl. Lit.	3	(3,0)	Engl 204 Survey of Engl. Lit.	3	(3,0)
Math 203 Diff. Calculus	5	(5,0)	Math 204 Integral Calculus	5	(5,0)
Phys 211 Gen. Phys. for Engr.	4	(4,0)	Phys 212 Gen. Phys. for Engr.	4	(4,0)
Phys 213 Gen. Phys. Lab.	1	(0,3)	Phys 214 Gen. Phys. Lab.	1	(0,3)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	20			21	

JUNIOR YEAR

Cr En 301 Drying and Firing	4	(3,3)	Cr En 305 Silicates	5	(3,6)
Chem 335 Physical Chemistry	3	(3,0)	Chem 336 Physical Chemistry	2	(2,0)
Geol 406 Engr. Geology	3	(2,3)	Geol 306 Mineralogy	3	(2,3)
ME 305 Engr. Thermodynamics	3	(3,0)	ME 306 Engr. Thermodynamics	3	(3,0)
ME 309 Mechanical Lab.	1	(0,3)	ME 310 Mechanical Lab.	1	(0,3)
Mech 302 Statics	3	(3,0)	Approved Elective	3	
Approved Elective	3				
	20			17	

SENIOR YEAR

Cr En 403 Whitewares & Glazes	3	(3,0)	Cr En 402 Refractories	3	(3,0)
Cr En 405 Plant Design	2	(0,6)	Cr En 406 Ceramic Project	2	(0,6)
EE 305 Elec. Circ. and Mach.	4	(3,3)	Cr En 408 Plant Design	2	(0,6)
Geol 307 Optical Mineralogy	3	(2,3)	Engl 301 Public Speaking	3	(3,0)
Mech 303 Kinetics	3	(3,0)	Mech 304 Mech. of Matr.	3	(3,0)
Approved Elective	3		Mech 305 Mech. of Matr. Lab.	1	(0,3)
			Technical Elective	3	(3,0)
			Approved Elective	3	
	18			20	

Technical Electives:

Cr En 404 Enamels	3	(3,0)
Cr En 410 Glass	3	(3,0)
Cr En 412 Raw Material Prep.	3	(3,0)
Cr En 416 Cement, Lime & Plaster	3	(3,0)
Cr En 418 Process Control	3	(1,6)
ME 420 Administration	3	(3,0)

CHEMICAL ENGINEERING

The curriculum in Chemical Engineering is designed to give a sound training in Chemical Engineering for those who wish to enter the process industries. In addition to the direct work in Unit Operations and Unit Processes, a solid background of chemistry, mathematics, physics, and general engineering is provided. The ever-changing and increasingly complex chemical industry demands well-trained, adaptive personnel. The rule-of-thumb methods of the turn of the century are no longer adequate for the chemical engineer's principal tasks, design and operation of process plants and converting the discoveries of the research laboratory into industrial reality.

Chemical Engineering graduates are principally employed in direct manufacturing, research and development work, technical service, and in the sales divisions of chemical and allied industrial organizations.

CHEMICAL ENGINEERING

FRESHMAN YEAR

First Semester			*Second Semester*		
Chem 101 General Chemistry	4	(3,3)	Chem 104 General Chemistry	4	(3,3)
DD 105 Engr. Drawing	2	(0,6)	CE 101 Elem. Surveying	2	(1,3)
Engl 101 Comp. and Lit.	3	(3,0)	or In En 101 Mfg. Processes	2	(0,6)
In En 101 Mfg. Processes	2	(0,6)	DD 106 Engr. Drawing	2	(0,6)
or CE 101 Elem. Surveying	2	(1,3)	Engl 102 Comp. and Lit.	3	(3,0)
Math 103 Freshman Math.	5	(5,0)	Math 104 Freshman Math.	5	(5,0)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	17			17	

SOPHOMORE YEAR

Ch En 202 Intro. Chem. Engr.	2	(1,3)	Chem 216 Quan. Analysis	4	(2,6)
Chem 215 Qual. Analysis	4	(2,6)	Engl 204 Survey of Engl. Lit.	3	(3,0)
Engl 203 Survey of Engl. Lit.	3	(3,0)	Math 204 Integral Calculus	5	(5,0)
Math 203 Diff. Calculus	5	(5,0)	Mech 302 Statics	3	(3,0)
Phys 211 Gen. Phys. for Engr.	4	(4,0)	Phys 212 Gen. Phys. for Engr.	4	(4,0)
Phys 213 Gen. Phys. Lab.	1	(0,3)	Phys 214 Gen. Phys. Lab.	1	(0,3)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	20			21	

JUNIOR YEAR

Ch En 301 Prin. Chem. Engr.	3	(3,0)	Ch En 302 Prin. Chem. Engr.	3	(3,0)
Chem 323 Elem. Org. Chemistry	4	(3,3)	Ch En 306 Unit Operations	1	(0,3)
Chem 337 Physical Chemistry	4	(3,3)	Ch En 330 Chem. Engr. Thermo.	2	(2,0)
Math 306 Diff. Equations	3	(3,0)	Chem 324 Elem. Organic Chem.	4	(3,3)
Mech 304 Mech. of Matr.	3	(3,0)	Chem 338 Physical Chemistry	4	(3,3)
Approved Elective	3		Approved Electives	6	
	20			20	

SENIOR YEAR

Ch En 401 Prin. Chem. Engr.	3	(3,0)	Ch En 409 Plant Design	2	(0,6)
Ch En 407 Unit Operations	2	(0,6)	Ch En 412 Thesis	2	(0,6)
Ch En 411 Chem. Engr. Lib. Matr.	1	(1,0)	EE 308 Basic Elect. Engr.	3	(3,0)
Ch En 430 Chem. Engr. Thermo.	3	(3,0)	EE 310 Elect. Engr. Lab.	1	(0,3)
EE 307 Basic Elec. Engr.	3	(3,0)	In En 402 Metallurgy	3	(2,3)
Approved Electives	6		Approved Electives	6	
	18			17	

Suggested Electives:

Bact 301 Gen. Bacteriology	3	(3,0)
Ch En 415 Intro. to Nuc. Engr.	3	(3,0)
Chem 401 Inorg. Chemistry	2	(2,0)
Econ 201 Prin. of Economics	3	(3,0)
Econ 301 Labor Problems	3	(3,0)
EE 434 Indus. Electronics	3	(2,3)
Elective English	3	(3,0)
Gov 301 Am. G. & Pol. Par.	3	(3,0)
Gov 401 Comparative Government	3	(3,0)
Hist 301 U. S. Since 1865	3	(3,0)
Hist 303 Hist. of Civ.	3	(3,0)
In En 303 Job Eval. & Wage Incen.	3	(3,0)
Math 303 Statistics	3	(3,0)
Math 304 Statistics	3	(3,0)

Suggested Electives:

Math 307 Part. Diff. Equations	3	(3,0)
ME 420 Administration	3	(3,0)
Mech 303 Kinetics	3	(3,0)
Mech 401 Fluid Mechanics	3	(3,0)
Modern Language	3	(3,0)
Phys 301 Intro. to Mod. Phys.	3	(3,0)
Phys 452 Atom. & Nuc. Phys.	3	(3,0)
Psych 301 General Psychology	3	(3,0)
Psych 302 Social Psychology	3	(3,0)
Psych 401 Applied Psychology	3	(3,0)
Soc 301 Intro. Sociology	3	(3,0)
Soc 401 Social Problems	3	(3,0)
Soc 405 Industrial Sociology	3	(3,0)

CIVIL ENGINEERING

Civil engineering is the broadest in scope of the engineering professions, being the parent stem from which most of the other branches of engineering have developed. All branches of civil engineering rest on a comparatively compact body of principles, in which the students are thoroughly trained in the classroom, the drafting room, the laboratory, and the field. Particular effort is made to develop those qualities essential to success in any field of endeavor and to fit the graduate to become a useful citizen—a good business man as well as a successful engineer.

The course in Civil Engineering leads to the degree of Bachelor of Civil Engineering. It is planned to equip the student with a working knowledge of those subjects which are fundamental in the field of civil engineering.

The curriculum for the first three years is the same for all civil engineering students. In his senior year each student may make limited selection of technical electives in order to major in a General, Construction, or Sanitary option. However, each option requires specific and related courses so chosen as to round out the student's education in fundamentals and to qualify him to enter any branch of civil engineering which he chooses or in which he may find employment. The civil engineering graduate is prepared to work in practically all of the civil engineering fields, including surveying and mapping, design and construction of bridges, buildings, railways, highways, hydraulic, municipal and sanitary works.

A summer surveying camp is held on the campus during the regular summer school session and all civil engineering students are required to attend at the end of their sophomore year. All surveying courses with the exception of CE 101, Elementary Surveying, are given during this camp.

In addition to the required technical studies, broadening training in the field of humanities is given.

CIVIL ENGINEERING

FRESHMAN YEAR

First Semester			*Second Semester*		
Chem 101 General Chemistry	4	(3,3)	Chem 102 General Chemistry	4	(3,3)
DD 105 Engineering Drawing	2	(0,6)	CE 101 Elem. Surveying	2	(1,3)
Engl 101 Comp. and Lit.	3	(3,0)	or In En 101 Mfg. Processes	2	(0,6)
In En 101 Mfg. Processes	2	(0,6)	DD 106 Engineering Drawing	2	(0,6)
or CE 101 Elem. Surveying	2	(1,3)	Engl 102 Comp. and Lit.	3	(3,0)
Math 103 Freshman Math.	5	(5,0)	Math 104 Freshman Math.	5	(5,0)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	17			17	

SOPHOMORE YEAR

CE 205 C. E. Problems	1	(0,3)	CE 317 Materials of Constr.	2	(2,0)
Econ 201 Prin. of Economics	3	(3,0)	Engl 204 Survey of Engl. Lit.	3	(3,0)
Engl 203 Survey of Engl. Lit.	3	(3,0)	Math 204 Integral Calculus	5	(5,0)
Math 203 Diff. Calculus	5	(5,0)	Mech 302 Statics	3	(3,0)
Phys 211 Gen. Phys. for Engr.	4	(4,0)	Phys 212 Gen. Phys. for Engr.	4	(4,0)
Phys 213 Gen. Phys. Lab.	1	(0,3)	Phys 214 Gen. Phys. Lab.	1	(0,3)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	18			19	

SUMMER SURVEY CAMP

CE 301 Surveying	3	(2,3)	CE 305 Route Surveying	3	(2,3)

JUNIOR YEAR

CE 307 Roads and Pavements	3	(2,3)	CE 306 Prin. of Sanitation	2	(2,0)
or Math 306 Diff. Equations	3	(3,0)	CE 310 Structures	3	(2,3)
CE 309 Trusses	1	(0,3)	Geol 406 Engr. Geology	3	(2,3)
EE 305 Elect. Cir. and Mach.	4	(3,3)	ME 302 Mech. Engr.	3	(3,0)
Engl 301 Public Speaking	3	(3,0)	Mech 303 Kinetics	3	(3,0)
Mech 304 Mech. of Matr.	3	(3,0)	Approved Electives	6	
Mech 305 Mech. of Matr. Lab.	1	(0,3)			
Approved Elective	3				
	18			20	

SENIOR YEAR

CE 401 Struct. Design	3	(2,3)	CE 410 Mun. & San. Engr.	3	(2,3)
CE 409 Reinf. Concrete	4	(3,3)	CE 414 Soil Mech.	3	(2,3)
Mech 401 Fluid Mech.	3	(3,0)	CE 422 Engr. Ethics	3	(3,0)
Mech 403 Fluid Mech. Lab.	1	(0,3)	Approved Electives	9	
Approved Electives	6				
	17			18	

STRUCTURAL OPTION

Those students desiring to qualify under the structural option will elect the following courses:

Econ 401 Accounting	3	(3,0)	CE 402 Structural Analysis	2	(2,0)
			CE 420 Concrete Mixes	1	(0,3)
			CE 434 Constr. Costs & Est.	3	(2,3)
	3			6	

SANITARY OPTION

Those students desiring to qualify under the sanitary option will elect the following courses:

CE 413 Sanitation Controls	3	(2,3)	CE 417 City Planning	2	(2,0)
			Bact 406, 408 Sanitary Bact.	4	(3,3)
	3			6	

GENERAL OPTION

The general option is provided for those students who do not plan to specialize in either the structural or sanitary fields. With the approval of their faculty adviser they may select the required number of electives to qualify them for graduation from a wide range in order that they may choose subjects in which they are particularly interested. A large selection of subjects in the humanistic-social field is provided.

Suggested Electives:

Ch En 422 Ind. Waste Treat	2	(2,0)
CE 319 Gen. Photogrammetry	3	(2,3)
CE 402 Struct. Analysis	2	(2,0)
CE 412 Reinf. Conc. Design	2	(1,3)
CE 417 City Planning	2	(2,0)
CE 420 Concrete Mixes	1	(0,3)
CE 434 Constr. Costs & Est.	3	(2,3)
CE 452 Adv. Struct. Analysis	2	(2,0)
DD 460 Mech. Vibrations	3	(3,0)
DD 461 Photoelasticity	2	(1,3)
Econ 202 Prin. of Economics	3	(3,0)
Econ 301 Labor Problems	3	(3,0)
Econ 401 Accounting	3	(3,0)
Econ 412 Internat'l Trade	3	(3,0)
Engl 405 Shakespeare	3	(3,0)
Engl 409 Chaucer	3	(3,0)
Engl 415 Intro. to Drama	3	(3,0)
Engl 419 Sel. Masterpieces	3	(3,0)
Engl 423 American Lit.	3	(3,0)
Geog 301 Economic Geography	3	(3,0)
Geog 302 Political Geography	3	(3,0)

Suggested Electives:

Gov 301 Am. G. & Pol. Par.	3	(3,0)
Gov 403 Internat'l Relations	3	(3,0)
Hist 301 U. S. Since 1865	3	(3,0)
Hist 303 Hist. of Civ.	3	(3,0)
Hist 307 A Dip. Hist of U. S.	3	(3,0)
Hist 404 Hist. of the South	3	(3,0)
In En 303 Job Eval. & Wage Incen.	3	(3,0)
In En 402 Metallurgy	3	(2,3)
Math 303 Statistics	3	(3,0)
Math 305 Inter. Calculus	3	(3,0)
Math 306 Ord. Diff. Equations	3	(3,0)
Math 307 Part. Diff. Equations	3	(3,0)
Math 455 Adv. Math. for Engr.	3	(3,0)
Mech 460 Hydrology	2	(2,0)
Mech 462 Water Power Engr.	3	(3,0)
Phys 304 Astronomy	3	(2,3)
Phys 451 Modern Physics	3	(3,0)
Phys 453 Exp. in Mod. Phys.	1	(0,3)
Psych 301 Gen. Psychology	3	(3,0)
Rel 401 Intro. to Philosophy	3	(3,0)
Soc 401 Intro. to Sociology	3	(3,0)

ELECTRICAL ENGINEERING

Engineering deals fundamentally with the control of the energies of nature. Electrical Engineering is that branch of engineering which embraces the conversion of primary energy into electrical form, the transmission and the application of this energy to innumerable devices designed for human service. Some of the more notable applications are domestic appliances, illumination, transportation, communication, and industry motorization.

The curriculum for students in Electrical Engineering contains a selected series of fundamental studies which enable the student to enter any division of the field of Electrical Engineering. In addition the curriculum includes a selected group of broadening and cultural studies.

The first two years are devoted largely to basic sciences and other subjects prerequisite to the general field of engineering. The work of the last two years is more specialized and embraces required and elective courses which are pertinent to the two major fields, Power Engineering and Communication Engineering.

The theoretical courses in science and engineering are paralleled and reinforced by strong laboratory courses through which the student may make his own determinations of the characteristics of engineering materials and machines and other electrical devices. The laboratories are well equipped for this work.

The entire course is directed toward the development of initiative and self-reliance, so that the student may enter his chosen field with reasonable hope of usefulness and success.

All students who will have completed EE 211 by July 1955, will complete their work in Electrical Engineering under the old curriculum as published in the 1953-1954 catalog. Students not having completed EE 211 by July 1955, will complete their work under the new curriculum as published in this catalog. In special cases where completion of the program may have been delayed for one reason or another, the student is expected to arrange a satisfactory course of study with the assistance of his class adviser or the department head. EE 212 will not be offered after the first semester of 1955-1956. EE 214 (in the new curriculum) will be required of those who will have completed EE 211 but not EE 212 by the end of the first semester of 1955. EE 211 will not be offered after the second semester 1954-1955.

ELECTRICAL ENGINEERING

Freshman Year

First Semester			*Second Semester*		
Chem 101 General Chemistry	4	(3,3)	Chem 102 General Chemistry	4	(3,3)
DD 105 Engr. Drawing	2	(0,6)	CE 101 Elem. Surveying	2	(1,3)
Engl 101 Comp. and Lit.	3	(3,0)	or In En 101 Mfg. Processes	2	(0,6)
In En 101 Mfg. Processes	2	(0,6)	DD 106 Engr. Drawing	2	(0,6)
or CE 101 Elem. Surveying	2	(1,3)	Engl 102 Comp. and Lit.	3	(3,0)
Math 103 Freshman Math.	5	(5,0)	Math 104 Freshman Math.	5	(5,0)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	17			17	

Sophomore Year

Econ 201 Prin. of Economics	3	(3,0)	EE 214 Elec. Cir. & Fields	3	(3,0)
Engl 203 Survey of Engl. Lit.	3	(3,0)	Engl 204 Survey of Engl. Lit.	3	(3,0)
In En 201 Metal Processes	2	(1,3)	Math 204 Integral Calculus	5	(5,0)
Math 203 Diff. Calculus	5	(5,0)	Mech 302 Statics	3	(3,0)
Phys 211 Gen. Phys. for Engr.	4	(4,0)	Phys 216 Gen. Phys. for El. Engr.	4	(4,0)
Phys 213 Gen. Phys. Lab.	1	(0,3)	Phys 214 Gen. Phys. Lab.	1	(0,3)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	19			20	

Junior Year

EE 311 D. C. Machinery	4	(3,3)	EE 316 A. C. Circuits	4	(3,3)
EE 313 Elec. Measurements	3	(2,3)	EE 320 Electronics	4	(3,3)
EE 315 A. C. Circuits	3	(3,0)	ME 305 Engr. Thermodynamics	3	(3,0)
Engl 301 Public Speaking	3	(3,0)	ME 309 Mechanical Lab.	1	(0,3)
Math 306 Ord. Diff. Equations	3	(3,0)	Mech 303 Kinetics	3	(3,0)
Approved Elective	3		Approved Elective	3	
	19			18	

Senior Year

EE 411 A. C. Machinery	5	(3,6)	EE 412 A. C. Machinery	4	(3,3)
EE 415 Advanced Circuits	3	(3,0)	Hist 301 U. S. since 1865	3	(3,0)
ME 306 Engr. Thermodynamics	3	(3,0)	ME 420 Administration	3	(3,0)
ME 310 Mechanical Lab.	1	(0,3)	Mech 304 Mech. of Matr.	3	(3,0)
Technical Electives	5		Technical Electives	4	
Approved Elective	3		Approved Elective	3	
	20			20	

Technical Electives: Junior and senior level courses in mathematics, physics, chemistry, and engineering, other than those of a strictly practical nature, are generally acceptable, subject to approval by the class adviser. A coordinated program is preferable to a random choice of courses.

General Electives: In general, non-technical courses of sophomore level and above are acceptable, subject to approval by the class adviser. An effort should be made to take enough interest in a given area to obtain some depth of understanding.

MECHANICAL ENGINEERING

Mechanical Engineering deals largely with the production of power from prime sources of energy and the design of the wide variety of mechanisms involved in the production and use of this power and, therefore, necessitates a study of thermodynamics, mechanics, strength of materials, metallurgy, and fluid mechanics.

The economic aspects of all engineering are emphasized as much as possible and the program is conducted so as to encourage orderly habits of attack and analysis with the main emphasis on why rather than how.

Mechanical Engineering graduates work with the production and application of power from fuel and water, in research, and in design, development, construction, and application of machines used in manufacturing, as well as in the management of power industries and manufacturing plants. In addition to the power companies and large electric and manufacturing concerns where many graduates are employed, opportunities are numerous in the automotive, aeronautical, railroad, air-conditioning and refrigeration industries.

MECHANICAL ENGINEERING

FRESHMAN YEAR

First Semester			*Second Semester*		
Chem 101 General Chemistry	4	(3,3)	Chem 102 General Chemistry	4	(3,3)
DD 105 Engr. Drawing	2	(0,6)	CE 101 Elem. Surveying	2	(1,3)
Engl 101 Comp. and Lit.	3	(3,0)	or In En 101 Mfg. Processes	2	(0,6)
In En 101 Mfg. Processes	2	(0,6)	DD 106 Engr. Drawing	2	(0,6)
or CE 101 Elem. Surveying	2	(1,3)	Engl 102 Comp. and Lit.	3	(3,0)
Math 103 Freshman Math.	5	(5,0)	Math 104 Freshman Math.	5	(5,0)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	17			17	

SOPHOMORE YEAR

Engl 203 Survey of Engl. Lit.	3	(3,0)	Engl 204 Survey of Engl. Lit.	3	(3,0)
In En 201 Metal Processes	2	(1,3)	In En 201 Metal Processes	2	(1,3)
or General Elective			or General Elective		
Math 203 Diff. Calculus	5	(5,0)	Math 204 Integral Calculus	5	(5,0)
ME 211 Mech. Engr.	2	(2,0)	Mech 302 Statics	3	(3,0)
ME 213 Engr. Problems	1	(0,3)	Phys 212 Gen. Phys. for Engr.	4	(4,0)
Phys 211 Gen. Phys. for Engr.	4	(4,0)	Phys 214 Gen. Phys. Lab.	1	(0,3)
Phys 213 Gen. Phys. Lab.	1	(0,3)	AS or MS — Basic	1	(2,1)
AS or MS — Basic	1	(2,1)			
	19			19	

JUNIOR YEAR

DD 305 Kinematics of Mach.	2	(1,3)	DD 306 Machine Design	2	(1,3)
Econ 201 Prin. of Economics	3	(3,0)	EE 308 Basic Elect. Engr.	3	(3,0)
EE 307 Basic Elect. Engr.	3	(3,0)	EE 310 Elect. Engr. Lab.	1	(0,3)
EE 309 Elect. Engr. Lab.	1	(0,3)	Engl 301 Public Speaking	3	(3,0)
ME 311 Engr. Thermodynamics	3	(3,0)	ME 312 Engr. Thermodynamics	3	(3,0)
ME 313 Heat Power Lab.	1	(0,3)	ME 314 Heat Power Lab.	1	(0,3)
Mech 303 Kinetics	3	(3,0)	Mech 304 Mech. of Matr.	3	(3,0)
Approved Elective	3		Approved Elective	3	
	19			19	

SENIOR YEAR

First Semester			*Second Semester*		
Hist 301 U. S. since 1865	3	(3,0)	In En 402 Metallurgy	3	(2,3)
ME 411 Heat Power	3	(3,0)	ME 412 Heat Power	3	(3,0)
ME 413 Heat Power Lab.	2	(0,6)	ME 414 Heat Power Lab.	2	(0,6)
Mech 401 Fluid Mechanics	3	(3,0)	ME 420 Administration	3	(3,0)
Mech 403 Fluid Mech. Lab.	1	(0,3)	Technical Electives	6	
Technical Electives	5		Approved Elective	3	
Approved Elective	3				
	20			20	

Technical Electives:

Junior and senior level courses in mathematics, physics, chemistry and engineering, other than those of a strictly practical nature are generally acceptable. The following courses are specifically recommended:

Cr En 303 Ceramic Products	2	(2,0)	ME 426 Steam Turbines	3	(3,0)
Ch En 415 Intro. to Nucl. Engr.	3	(3,0)	ME 428 Steam Turbine Design	1	(0,3)
Ch En 430 Chem. Engr. Thermo.	3	(3,0)	ME 429 Heating and Vent.	2	(2,0)
CE 309 Trusses	1	(0,3)	ME 430 Air Conditioning	2	(2,0)
EE 320 Electronics	4	(3,3)	ME 431 Heat. & Vent. Des.	1	(0,3)
EE 434 Electronic Controls	3	(2,3)	ME 432 Air Conditioning Des.	1	(0,3)
In En 303 Job Eval. & Wage Incen.	3	(3,0)	ME 433 Elem. Aerodynamics	2	(2,0)
In En 304 Motion & Time Study	3	(2,3)	ME 434 Refrigeration	2	(2,0)
Math 305 Inter. Calculus	3	(3,0)	ME 437 Centrifugal Machinery	3	(3,0)
Math 306 Ord. Diff. Equations	3	(3,0)	ME 438 Fuels and Combustion	2	(2,0)
Math 453 Advanced Calculus	3	(3,0)	ME 464 Heat Transmission	3	(3,0)
Math 454 Advanced Calculus	3	(3,0)	Mech 460 Hydrology	3	(3,0)
ME 417 Mech. Design	2	(1,3)	Mech 462 Water Power Engr.	3	(3,0)
ME 418 Mech. Design	2	(1,3)	Phys 451 Modern Physics	3	(3,0)
ME 421 Gas Engines	3	(3,0)	Phys 452 Atom. and Nuc. Phys.	3	(3,0)
ME 423 Gas Engine Design	1	(0,3)	Phys 453 Exp. in Mod. Phys.	1	(0,3)

General Electives:

Generally, non-technical courses of sophomore level and above are acceptable, subject to approval of class adviser.

SCHOOL OF TEXTILES

The great majority of the textile corporations which produce textiles on the cotton system are now located in the Southeastern States, centering in South Carolina and neighboring states. This makes Clemson College an appropriate institution for college training in this field.

There is a trend in the demand for some graduates with training in the basic engineering sciences; therefore, the Textile Engineering course has been modified to meet this demand.

The Clemson Textile School now offers three courses leading to the degree of Bachelor of Science: Textile Chemistry, Textile Engineering, and Textile Manufacturing. Knitting is offered as an option under Textile Manufacturing.

The Sirrine Foundation. The funds in this foundation have been contributed by the textile companies in the State and now total nearly one million dollars, which figure is expected to be exceeded soon. The interest from this large fund is used exclusively for the School of Textiles at Clemson, primarily to improve the teaching staff. Under the present plans, the textile faculty is benefitting in

three ways: (1) For all faculty members retiring with the rank of associate or full professor, the retirement payments by the State are enhanced to 85 percent of the member's full salary (to 100 percent for heads of departments). (2) The foundation contributes half of the salary for an extra professor in each of three departments. The additional faculty members have research projects but take classes for short periods to enable the regular teachers to visit mills, attend conferences, etc. (3) The foundation greatly increases the travel funds to aid the visitation and study of the mills in the State. Plans for the use of additional funds are to be announced later.

TEXTILE CHEMISTRY

The work of textile chemists includes the various phases of textile coloring, bleaching, printing, dyeing, and finishing of textile yarns and fabrics, as well as the manufacture and sale of dyestuffs. Graduates have positions such as bleachery chemist, dye foreman, designer, laboratory chemist, textile chemist, research assistant, and sales representative.

TEXTILE CHEMISTRY

FRESHMAN YEAR

First Semester			*Second Semester*		
Chem 101 General Chemistry	4	(3,3)	Chem 104 General Chemistry	4	(3,3)
DD 105 Engr. Drawing	2	(0,6)	DD 106 Engr. Drawing	2	(0,6)
Engl 101 Comp. and Lit.	3	(3,0)	Engl 102 Comp. and Lit.	3	(3,0)
Gov 101 Am. Nat'l Gov't	3	(3,0)	Math 104 Freshman Math.	5	(5,0)
Math 103 Freshman Math.	5	(5,0)	TM 101 Intro. to Textiles	3	(2,3)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	18			18	

SOPHOMORE YEAR

Chem 215 Qual. Analysis	4	(2,6)	Chem 216 Quan. Analysis	4	(2,6)
Engl 203 Survey of Engl. Lit.	3	(3,0)	Econ 201 Prin. of Economics	3	(3,0)
Math 203 Diff. Calculus	5	(5,0)	Engl 204 Survey of Engl. Lit.	3	(3,0)
Phys 201 General Physics	3	(3,0)	Math 204 Integral Calculus	5	(5,0)
Phys 203 General Physics Lab.	1	(0,3)	Phys 202 General Physics	3	(3,0)
WD 201 Fabric Design	3	(2,3)	Phys 204 General Physics Lab.	1	(0,3)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	20			20	

JUNIOR YEAR

Chem 335 Physical Chemistry	3	(3,0)	Chem 336 Physical Chemistry	2	(2,0)
Engl 301 Public Speaking	3	(3,0)	Econ 312 Commercial Law	3	(3,0)
TC 305 Textile Chemistry	4	(4,0)	TC 306 Textile Chemistry	4	(4,0)
TC 307 Textile Chemistry Lab.	1	(0,3)	TC 308 Textile Chemistry Lab.	1	(0,3)
TM 403 Textile Management	3	(3,0)	TC 447 Chem. Proc. Tex.	3	(3,0)
YM 305 Cotton Grading	1	(0,3)	TC 449 Chem. Proc. Tex. Lab.	1	(0,3)
Approved Elective *	3		TM 462 Textile Microscopy	2	(1,3)
			Approved Elective *	3	
	18			19	

SENIOR YEAR

First Semester			*Second Semester*		
Econ 301 Labor Problems	3	(3,0)	TC 410 Color Matching	1	(0,3)
TC 442 Thesis	2	(0,6)	TC 430 Textile Finishing	3	(1,6)
TC 452 Chem. Proc. Tex.	4	(4,0)	TC 456 Syn. Fibers & Finishing	3	(3,0)
TC 454 Chem. Proc. Tex. Lab.	1	(0,3)	TM 454 Motion and Time Study	3	(2,3)
TC 455 Cellulose Chemistry	3	(3,0)	Approved Electives *	9	
TM 464 Phys. Tex. Testing	2	(1,3)			
Approved Elective *	3				
	18			19	

* Approved Electives:
Any courses beyond those required in Economics, English, Mathematics, Physics, Psychology, Sociology, and Textiles; any courses on the Junior-Senior level in Government, History and Religion except Gov 301; French or Spanish if four semesters completed; German if two semesters completed; Arch 409, Music 402.

Other Suggested Electives:			Other Suggested Electives:		
Ag Ec 401 Statistics	4	(3,3)	Ag Ec 352 Public Finance	3	(3,0)
AS or MS — Advanced	3	(4,1)	AS or MS — Advanced	3	(4,1)
Ch En 301 Prin. Chem. Engr.	3	(3,0)	Ch En 302 Prin. Chem. Engr.	3	(3,0)
Ch En 305 Unit Operations	1	(0,3)	Ch En 306 Unit Operations	1	(0,3)
Ch En 405 Unit Operations	1	(0,3)	Chem 472 Organic Synthesis	3	(1,6)
Chem 401 Inorganic Chemistry	2	(2,0)	Geog 302 Political Geography	3	(3,0)
EE 305 Elec. Circuits & Mach.	4	(3,3)	Geol 306 Mineralogy	3	(2,3)
Ent 301 Elem. & Econ. Ent.	3	(2,3)			
Ent 401 Econ. Entomology	3	(2,3)			
Geog 301 Economic Geography	3	(3,0)			

TEXTILE ENGINEERING

Students following the Textile Engineering curriculum receive instruction in basic textile courses for a total of thirty-six college credits; the remainder are in Physics, Mathematics, English, Economics, and Mechanical and Electrical Engineering. Graduates in this curriculum are prepared to enter the research and development fields which are being emphasized by the textile industry, as well as the field of production. They are also prepared to go forward with post-graduate studies.

TEXTILE ENGINEERING

FRESHMAN YEAR

First Semester			*Second Semester*		
Chem 101 General Chemistry	4	(3,3)	Chem 102 General Chemistry	4	(3,3)
DD 105 Engr. Drawing	2	(0,6)	CE 101 Elem. Surveying	2	(1,3)
Engl 101 Comp. and Lit.	3	(3,0)	or In En 101 Mfg. Processes	2	(0,6)
In En 101 Mfg. Processes	2	(0,6)	DD 106 Engr. Drawing	2	(0,6)
or CE 101 Elem. Surveying	2	(1,3)	Engl 102 Comp. and Lit.	3	(3,0)
Math 103 Freshman Math.	5	(5,0)	Math 104 Freshman Math.	5	(5,0)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	17			17	

SOPHOMORE YEAR

Engl 203 Survey of Engl. Lit.	3	(3,0)	Engl 204 Survey of Engl. Lit.	3	(3,0)
In En 201 Metal Processes	2	(1,3)	Math 204 Integral Calculus	5	(5,0)
Math 203 Diff. Calculus	5	(5,0)	Mech 302 Statics	3	(3,0)
Phys 211 Gen. Phys. for Engr.	4	(4,0)	Phys 212 Gen. Phys. for Engr.	4	(4,0)
Phys 213 Gen. Phys. Lab.	1	(0,3)	Phys 214 Gen. Phys. Lab.	1	(0,3)
YM 201 Blend. & Cleaning	3	(2,3)	YM 202 Carding	3	(2,3)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	19			20	

JUNIOR YEAR

First Semester			*Second Semester*		
DD 305 Kinematics of Mach.	2	(1,3)	DD 306 Machine Design	2	(1,3)
EE 307 Basic Elect. Engr.	3	(3,0)	EE 308 Basic Elect. Engr.	3	(3,0)
EE 309 Elect. Engr. Lab.	1	(0,3)	EE 310 Elect. Engr. Lab.	1	(0,3)
Mech 303 Kinetics	3	(3,0)	Mech 304 Mech. of Matr.	3	(3,0)
WD 201 Fabric Design	3	(2,3)	WD 202 Fabric Design	2	(1,3)
WD 205 Cam Loom Mech.	1	(0,3)	WD 206 Cam Loom Mech.	2	(1,3)
YM 301 Roving Frames	3	(2,3)	YM 302 Spinning	3	(2,3)
Approved Elective *	3		Approved Elective*	3	
	19			19	

SENIOR YEAR

Econ 201 Prin. of Economics	3	(3,0)	Econ 312 Commercial Law	3	(3,0)
Engl 301 Public Speaking	3	(3,0)	ME 306 Engr. Thermodynamics	3	(3,0)
ME 305 Engr. Thermodynamics	3	(3,0)	ME 310 Mechanical Lab.	1	(0,3)
ME 309 Mechanical Lab.	1	(0,3)	TM 454 Motion and Time Study	3	(2,3)
TM 401 Textile Costing	5	(3,6)	TM 462 Textile Microscopy	2	(1,3)
TM 403 Textile Management	3	(3,0)	TM 464 Phys. Tex. Testing	2	(1,3)
Approved Elective*	3		WD 305 Dobby & Box Mech.	1	(0,3)
			Approved Elective*	3	
	21			18	

* Approved Electives:
Any courses beyond those required in Economics, English, Mathematics, Mechanics, Physics, Psychology, Sociology, and Textiles; any courses on the Junior-Senior level in Government, History and Religion; French or Spanish if four semesters completed; German if two semesters completed; Arch 409, Music 402.

Other Suggested Electives:			Other Suggested Electives:		
Ag Ec 401 Statistics	4	(3,3)	Ag Ec 352 Public Finance	3	(3,0)
AS or MS — Advanced	3	(4,1)	AS or MS — Advanced	3	(4,1)
Geog 301 Economic Geography	3	(3,0)	EE 320 Electronics	4	(3,3)
Gov 301 Am. G. & Pol. Par.	3	(3,0)	Geog 302 Political Geography	3	(3,0)
ME 421 Gas Engines	3	(3,0)	In En 302 Welding	2	(1,3)
ME 423 Gas Engine Design	1	(0,3)	In En 402 Metallurgy	3	(3,0)
ME 429 Heating and Vent.	2	(2,0)	ME 430 Air Conditioning	2	(2,0)
ME 431 Heating and Vent. Des.	1	(0,3)	ME 432 Air Conditioning Des.	1	(0,3)
			ME 434 Refrigeration	2	(2,0)
			WD 404 Throwing	3	(2,3)

TEXTILE MANUFACTURING

The Textile Manufacturing curriculum is followed by those textile students who intend to enter the production and management phases of the textile industry. Those students who desire training in the knitting field may elect to take the Knitting Option under Textile Manufacturing during the Junior and Senior years. The curriculum shows that they receive sixty-five of their college credits in subjects taught in the Textile School and that they are well prepared for rapid advancement in textile plants. It is recommended that all textile undergraduates find work in textile mills during summer vacations. This experience always aids them in their upperclass textile courses and also allows the students to make contacts with possible future employers.

TEXTILE MANUFACTURING

FRESHMAN YEAR

First Semester			*Second Semester*		
Chem 101 General Chemistry	4	(3,3)	Chem 102 General Chemistry	4	(3,3)
DD 105 Engr. Drawing	2	(0,6)	DD 106 Engr. Drawing	2	(0,6)
Engl 101 Comp. and Lit.	3	(3,0)	Engl 102 Comp. and Lit.	3	(3,0)
Gov 101 Am. Nat'l Gov't	3	(3,0)	Math 104 Freshman Math	5	(5,0)
Math 103 Freshman Math	5	(5,0)	TM 101 Intro. to Textiles	3	(2,3)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	18			18	

SOPHOMORE YEAR

Econ 201 Prin. of Economics	3	(3,0)	Econ 202 Prin. of Economics	3	(3,0)
Engl 203 Survey of Engl. Lit.	3	(3,0)	Engl 204 Survey of Engl. Lit.	3	(3,0)
Phys 201 General Physics	3	(3,0)	Phys 202 General Physics	3	(3,0)
Phys 203 General Physics Lab.	1	(0,3)	Phys 204 General Physics Lab.	1	(0,3)
WD 201 Fabric Design	3	(2,3)	WD 202 Fabric Design	2	(1,3)
WD 205 Cam Loom Mech.	1	(0,3)	WD 206 Cam Loom Mech.	2	(1,3)
YM 201 Blend. & Cleaning	3	(2,3)	YM 202 Carding	3	(2,3)
AS or MS — Basic	1	(2,1)	AS or MS — Basic	1	(2,1)
	18			18	

JUNIOR YEAR

Engl 301 Public Speaking	3	(3,0)	Econ 312 Commercial Law	3	(3,0)
TC 301 Textile Chemistry	2	(2,0)	TC 302 Textile Chemistry	2	(2,0)
TC 303 Textile Chemistry Lab.	1	(0,3)	TC 304 Textile Chemistry Lab.	1	(0,3)
WD 301 Fab. Struc. & Des.	2	(1,3)	WD 302 Fab. Analysis	2	(1,3)
WD 305 Dobby & Box Mech.	1	(0,3)	WD 306 Jacquard Mech.	2	(1,3)
WD 309 Knitting	1	(0,3)	YM 302 Spinning	3	(2,3)
YM 301 Roving Frames	3	(2,3)	YM 305 Cotton Marketing	1	(0,3)
Approved Electives *	6		YM 306 Combing	2	(1,3)
			Approved Elective *	3	
	19			19	

SENIOR YEAR

Econ 401 Accounting	3	(3,0)	Soc 301 Intro. Sociology	3	(3,0)
TC 401 Chem. Proc. Tex.	2	(2,0)	TC 402 Chem. Proc. Tex.	2	(2,0)
TC 403 Chem. Proc. Tex. Lab.	1	(0,3)	TC 404 Chem. Proc. Tex. Lab.	1	(0,3)
TM 401 Textile Costing	5	(3,6)	TM 454 Motion and Time Study	3	(2,3)
TM 403 Textile Management	3	(3,0)	TM 462 Textile Microscopy	2	(1,3)
WD 401 Warp Preparation	2	(1,3)	TM 464 Phys. Tex. Testing	2	(1,3)
Approved Elective *	3		WD 402 Fabric Development	2	(1,3)
			Approved Electives *	6	
	19			21	

* Approved Electives:

Any courses beyond those required in Economics, English, Mathematics, Physics, Psychology, Sociology, and Textiles; any courses on the Junior-Senior level in Education (if nine credits completed, accepting credit for lower course if it is a prerequisite), Government, History and Religion except Gov 301; French or Spanish if four semesters completed; German if two semesters completed; Arch 409, Music 402.

Other Suggested Electives:			Other Suggested Electives:		
Ag Ec 401 Statistics	4	(3,3)	Ag Ec 352 Public Finance	3	(3,0)
AS or MS — Advanced	3	(4,1)	AS or MS — Advanced	3	(4,1)
Geog 301 Economic Geography	3	(3,0)	Geog 302 Political Geography	3	(3,0)
			WD 404 Throwing	3	(2,3)

KNITTING OPTION

This option for the Junior and Senior years has been set up under Textile Manufacturing to embrace every phase of the knitting industry. Students will study such fields as circular body knitting and design, circular hosiery knitting and design, flat and warp

knitting, full fashioned knitting, knit garment manufacture, dyeing and finishing of knit goods, and knitting mill practices. Because of the selected courses in this curriculum, students will not only be prepared for the knitting industry, but for almost any other field in textiles, especially yarn manufacturing.

JUNIOR YEAR

First Semester			*Second Semester*		
Engl 301 Public Speaking	3	(3,0)	Econ 312 Commercial Law	3	(3,0)
Soc 301 Intro. Sociology	3	(3,0)	TC 302 Textile Chemistry	2	(2,0)
TC 301 Textile Chemistry	2	(2,0)	TC 304 Textile Chemistry Lab.	1	(0,3)
TC 303 Textile Chemistry Lab.	1	(0,3)	WD 310 Adv. Hos. Knitting	3	(2,3)
WD 309 Knitting	1	(0,3)	WD 312 Knit. Design & Anal.	2	(1,3)
WD 311 Flat Knitting Mech.	2	(1,3)	YM 302 Spinning	3	(2,3)
YM 301 Roving Frames	3	(2,3)	YM 306 Combing	2	(1,3)
YM 305 Cotton Marketing	1	(0,3)	Approved Elective	3	
Approved Elective	3				
	19			19	

SENIOR YEAR

Econ 401 Accounting	3	(3,0)	TC 402 Chem. Proc. Tex.	2	(2,0)
TC 401 Chem. Proc. Tex.	2	(2,0)	TC 404 Chem. Proc. Tex. Lab.	1	(0,3)
TC 403 Chem. Proc. Tex. Lab.	1	(0,3)	TM 403 Textile Management	3	(3,0)
TM 401 Textile Costing	5	(3,6)	TM 462 Textile Microscopy	2	(1,3)
TM 454 Motion and Time Study	3	(2,3)	TM 464 Phys. Tex. Testing	2	(1,3)
WD 411 Full Fashion Knit.	2	(1,3)	WD 410 Body Wear Knit.	2	(1,3)
Approved Electives	4		WD 412 Knit. Garment Mfg.	2	(1,3)
			Approved Electives	6	
	20			20	

DESCRIPTION OF COURSES

This list of courses includes for each course the catalog number, title of course, credit in semester hours, class and laboratory hours per week, and the description of the course. In general, courses numbered 100-199 are freshman courses, 200-299 sophomore courses, 300-399 junior courses, and 400-499 senior courses. Courses numbered 500 or above are graduate courses and are open only to students admitted to the Graduate School.

AGRICULTURAL CHEMISTRY

MR. WEBB MR. MAULDIN

AG CH 220—AGRICULTURAL ORGANIC CHEMISTRY—4 cr. (3 and 3)

A study of fundamentals of organic chemistry which will aid the student of agriculture to understand the various biochemical reactions which are involved in the study of plant and animal nutrition. *Prerequisite:* Chem 101 and 102. MR. MAULDIN

AG CH 411—AGRICULTURAL CHEMISTRY—4 cr. (2 and 6)

This course is designed to acquaint the student with the chemistry of substances and processes commonly encountered in all phases of agriculture. The chemistry of fertilizers, pesticides, feeds and other similar products is discussed. Attention is also given to the biochemical processes involved in food preservation and water sanitation. The laboratory work deals largely with analytical procedures concerned with agricultural chemicals and products. *Prerequisite:* Analytical and organic chemistry MR. WEBB

AG CH 412—AGRICULTURAL CHEMISTRY—4 cr. (2 and 6)

A continuation of Ag Ch 411. MR. WEBB

AG CH 421—GENERAL BIOCHEMISTRY—3 cr. (3 and 0)

This course includes a review of the basic chemical characteristics of carbohydrates, fats, proteins and minerals used as foods. A study is also made of enzyme action and digestion as carried on in the mouth, stomach and small intestine as well as the metabolism and calorimetry of foods. The composition of the blood and urine is investigated, as well as the detoxification of some of the by-products of digestion. An introduction to the endocrine glands and their secretions as well as chemistry of vitamins are included in the course. *Prerequisite:* Organic and physical chemistry. MR. MAULDIN

AG CH 422—GENERAL BIOCHEMISTRY—3 cr. (3 and 0)

A continuation of Ag Ch 421. MR. MAULDIN

AGRICULTURAL ECONOMICS

MR. AULL

MR. FERRIER, MR. SIMPSON, MR. STEPP, MR. BAUKNIGHT, MR. TODD

AG EC 201—INTRODUCTION TO AGRICULTURAL ECONOMICS—3 cr. (3 and 0)

A study of the economics of agricultural production and marketing and of the economic principles that are important in analyzing economic phenomena

having direct or indirect effects upon the incomes and living standards of farm people.

AG EC 302—FARM MANAGEMENT—4 cr. (3 and 3)

A study of business principles underlying the organization and operation of individual farms. Such factors as proper balance between enterprises and use of sound economic principles are considered from the viewpoint of continuous profits. *Prerequisite:* Ag Ec 201. MR. BAUKNIGHT

AG EC 305—FARM ACCOUNTING—3 cr. (2 and 3)

Double-entry bookkeeping is stressed in the foundation of this course. Study is then made of special journals, simplifications for farm record keeping, farm inventories, farm budgets, interpretation of financial statements and the factor method of farm business analysis. MR. FERRIER

AG EC 309—AGRICULTURAL MARKETING—3 cr. (2 and 3)

Examination is made of the characteristics of demand for and supply of farm products and the marketing system which brings them together, the changes which are taking place in marketing, and ways and means of narrowing the spread between farm and retail prices. *Prerequisite:* Ag Ec 201 or Econ 201 and 202. MR. FERRIER

AG EC 352—PUBLIC FINANCE—3 cr. (3 and 0)

A study of the principles of financing government, sources of public revenue, objects of public expenditure, problems of fiscal administration, and the application of fiscal policies in stabilizing the national economy.

MR. AULL, MR. STEPP

AG EC 357—CONSERVATION OF NATURAL RESOURCES—3 cr. (3 and 0)

A study of the principles and problems involved in the conservation of soil, water, and mineral resources with special emphasis on economic aspects of various methods of resource utilization and on the costs and benefits of various conservation practices. *Prerequisite:* Ag Ec 201 or its equivalent.

MR. AULL, MR. BAUKNIGHT

AG EC 361—MARKETING LIVESTOCK AND LIVESTOCK PRODUCTS—3 cr. (3 and 0)

The course deals generally with all the steps and conditions attending the marketing of livestock and livestock products. Included are such things as selling methods at the farm, practices and methods of buyers and slaughterers, activities of the government in marketing, marketing news services, methods by which prices are determined, psychology and preferences of consumers. *Prerequisite:* Junior standing. MR. SIMPSON

AG EC 401—STATISTICS—4 cr. (3 and 3)

An elementary course dealing with organization and presentation of statistical data, measures of central tendency, sampling, and the usual statistical tests of significance and reliability. MR. TODD

AG EC 405—SEMINAR—1 cr. (1 and 0)

An examination of the relation of economics and sociology to specific problems. *Prerequisite:* Senior standing and major in Agricultural Economics.

MR. AULL AND STAFF

AG EC 406—SEMINAR—1 cr. (1 and 0)

A continuation of Ag Ec 405. MR. AULL AND STAFF

AG EC 451—AGRICULTURAL COOPERATION—2 cr. (2 and 0)

A study of the principles governing cooperative business enterprise and methods of applying these principles to purchasing, selling, processing, and financing in agriculture. Major emphasis is placed upon the possibilities and limitations of cooperation in increasing the incomes of farmers or rendering them better services for their money. *Prerequisite:* Ag Ec 201 or Econ 201 and 202 MR. FERRIER

AG EC 452—AGRICULTURAL POLICY—3 cr. (3 and 0)

A critical examination of government policies and programs affecting agriculture. MR. AULL

AG EC 456—PRICES—3 cr. (3 and 0)

A study of the factors affecting prices of farm products and the adjustments necessary to meet price changes, including such topics as prices of farm products in relation to agricultural and industrial conditions, measures of value, parity price concept, and price movements. *Prerequisite:* Ag Ec 201 or Econ 201 and 202, and permission of instructor. MR. STEPP

AG EC 460—AGRICULTURAL FINANCE—2 cr. (2 and 0)

A critical study of the financial needs of agriculture and of the organization, functions and interrelationships of agencies developed to meet these needs. *Prerequisite:* Ag Ec 201 or Econ 201 and 202. MR. FERRIER, MR. BAUKNIGHT

AG EC 462—APPLIED STATISTICS—3 cr. (2 and 3)

A study of methods used in collecting, analyzing and presenting statistical data, with special emphasis upon economic and sociological problems. *Prerequisite:* Ag Ec 401 or permission of instructor. MR. TODD

AG EC 501—ADVANCED FARM MANAGEMENT—3 cr. (2 and 3)

AG EC 503—LAND ECONOMICS—3 cr. (3 and 0)

AG EC 505—ECONOMIC THEORY—3 cr. (3 and 0)

AG EC 507—AGRICULTURAL MARKETING PROBLEMS—3 cr. (3 and 0)

AG EC 512—EXPERIMENTAL DESIGNS—3 cr. (3 and 0)

AG EC 514—CONTEMPORARY ECONOMIC PROBLEMS—3 cr. (3 and 0)

AG EC 591—RESEARCH—3 cr.

AG EC 592—RESEARCH—3 cr.

AGRICULTURAL ENGINEERING

Mr. Nutt

Mr. Dunkelburg, Mr. Rogers, Mr. Snell, Mr. Craig, Mr. McLeod

Ag En 201—Farm Machinery—3 cr. (2 and 3)

Construction, adjustment, operation, maintenance and adaptation of farm machinery. Special emphasis is given to production, harvesting and processing problems common to the Southeast. Mr. McLeod

Ag En 202—Farm Equipment—3 cr. (2 and 3)

A general study of all equipment used for modern farming practices. Special emphasis is placed on proper selection for the job, adaptation to special conditions, care, adjustments and operation. Mr. McLeod

Ag En 203—Agricultural Engineering Problems—2 cr. (1 and 3)

A detailed study of the slide rule to familiarize the student with all the scales and their efficient use. Logical approach to all types of problems is stressed. Neatness and accuracy in all computations are emphasized and a review of the application of trigonometric functions and logarithms is made. *Prerequisite:* Math 103 and 104. Mr. Dunkelburg, Mr. Rogers

Ag En 205—Farm Shop—3 cr. (2 and 3)

A study designed to train students in the proper use and maintenance of hand shop tools commonly found on the farm. Principal topics: Measuring and marking, sawing, planing and smoothing, wood chisels and their use, boring and drilling holes, wood fastenings, painting, finishing, glazing, cutting rafters, sharpening tools, bench and vise work, bolt threading, pipe fitting, soldering and farm concrete work. A course for agricultural and agricultural education students. Mr. Craig

Ag En 207—Farm Mechanics—2 cr. (1 and 3)

A course in which the student acquires certain skills in the use of all types of tools and equipment necessary for the care and maintenance of farm machines and farm structures. Mr. Craig

Ag En 301—Soil Conservation—3 cr. (2 and 3)

Causes, extent and control of erosion; uses of irrigation, layout, construction and maintenance of terrace systems; drainage, elementary surveying. A course for agricultural and agricultural education students. Mr. Snell

Ag En 304—Rural Electrification—3 cr. (2 and 3)

Distribution and utilization of electrical power on farms and rural areas. Special emphasis is given to adequate wiring and adaptation of electrical appliances to the farm home and in the production and primary processing of farm commodities. *Prerequisite:* EE 303. Mr. Rogers

Ag En 351—Farm Tractors—3 cr. (2 and 3)

History of the internal combustion engine, principles of operation, power and its measurements, valves, carburetion and fuel injection, ignition systems,

engine cooling, clutches, transmissions, brakes, final drives, engine troubles and general repair. Tractor servicing and efficient operation in the field.

MR. CRAIG

AG EN 352—FARM POWER—3 cr. (2 and 3)

A detailed study of farm tractors and stationary power units. Principles of operation, preventive maintenance, adjustment and general repair are emphasized. A course designed for agricultural and agricultural education majors. *Prerequisite:* Ag En 201. MR. CRAIG

AG EN 401—SOIL AND WATER CONSERVATION ENGINEERING—3 cr. (2 and 3)

The causes, extent, and control of erosion. Embodies study of elementary meteorology and hydrology, critical runoffs, design and construction of water-control structures such as terraces, outlet channels, diversions, reservoirs, spillways, drainage systems. Recommended *prerequisite:* CE 101, Agron 202 and Mech 401. MR. SNELL

AG EN 402—DRAINAGE AND IRRIGATION—3 cr. (2 and 3)

Survey of areas for drainage rainfall and runoff, drainage requirements, design and construction of open ditch and tile systems. Gravity and sprinkler irrigation systems studied as well as water requirements and the use of pumps. *Prerequisite:* CE 101 and Mech 401. MR. SNELL

AG EN 406—ADVANCED FARM MACHINERY—3 cr. (2 and 3)

This course is designed for seniors majoring in agricultural engineering. Design, development, manufacturing, advertising and sales of farm machinery are considered. *Prerequisite:* Ag En 202 and 351. MR. ROGERS

AG EN 409—AGRICULTURAL ENGINEERING SEMINAR—1 cr. (1 and 0)

This course is provided to acquaint the student with research technique in the agricultural engineering field. *Prerequisite:* Senior standing in Agricultural Engineering. MR. NUTT

AG EN 410—AGRICULTURAL ENGINEERING SEMINAR—1 cr. (1 and 0)

A continuation of Ag En 409. MR. NUTT

AG EN 451—FARM STRUCTURES—3 cr. (2 and 3)

This course is planned to develop within the student an appreciation and understanding of the problems involved in determining the functional requirements of farm structures for livestock, crop storage and processing, as well as the analysis and determination of structural requirements for various types of buildings. The use and workability of materials available for construction of farm buildings are also included. *Prerequisite:* ME 302 and 304.

MR. DUNKELBURG

AG EN 452—ADVANCED FARM STRUCTURES—3 cr. (2 and 3)

A continuation of Ag En 451 with emphasis on farmstead arrangement and layout, design and evaluation of farm structure requirements, bills of materials and specifications. *Prerequisite:* Ag En 451. MR. DUNKELBURG

AG EN 501—SPECIAL PROBLEMS IN AGRICULTURAL ENGINEERING—3 cr. (3 and 0)

Ag En 511—Design of Farm Machinery—3 cr. (3 and 0)

Ag En 512—Design of Farm Machinery—3 cr. (2 and 3)

Ag En 591—Research—3 cr.

Ag En 592—Research—3 cr.

AGRONOMY

Mr. Pitner

Mr. Collings, Mr. Cooper, Mr. J. W. Jones, Mr. C. M. Jones, Mr. Boykin, Mr. Shelley

Agron 101—Farm Crops—3 cr. (3 and 0)

A fundamental course in general field crops including the study of the origin, botanical characteristics, varieties, breeding, soil adaptation, fertilizer requirements, and cultural methods employed in the production of the most important field crops of South Carolina and the United States. Mr. Boykin

Agron 202—Soils—3 cr. (2 and 3)

A study of the basic principles of soil physics, soil fertility, and soil biology as they apply to the production of crops. The course deals with the soil as a reservoir for water, a medium for root development, a source of nutrients, and a home for organisms. *Prerequisite:* Chem 101 and 102.

Mr. Collings and Staff

Agron 301—Fertilizers and Manures—3 cr. (3 and 0)

A study of the sources, mining and manufacturing, composition, physical characteristics, and use of fertilizers and manures. A detailed study is also made of crop responses to fertilizer use. *Prerequisite:* Agron 202.

Mr. Collings

Agron 302—Genetics—3 cr. (2 and 3)

The purpose of this course is to instruct students in the basic principles of genetics. The principal topics studied include heredity and variation, laws of inheritance, physical basis of inheritance, origin of hereditary differences, and the inheritance of quantitative characters. Mr. C. M. Jones

Agron 306—Forage Crops and Weed Identification and Control—4 cr. (3 and 3)

A course dealing with the characteristics of the various forage crops, with emphasis being laid on those grown in this state. These crops are studied with special reference to their adaptations, growing, harvesting, composition, value and uses, and also with reference to their place in our cropping system. *Prerequisite:* Agron 101. Mr. Shelley

Agron 401—Advanced Crop Laboratory—1 cr. (0 and 3)

A study of the laboratory procedures used in field crop laboratories, followed by a detailed study of the morphological characters, classification, and yielding capacities of important varieties of various farm crops. In addition, atten-

tion is given to the study of seed certification, seed laws, market grades of grains, seed germination and purity tests, and weed identification.

MR. C. M. JONES

AGRON 405—PLANT BREEDING—3 cr. (2 and 3)

The purpose of this course is to present the application of the basic principles of genetics to the improvement of crop plants. Principal topics studied include the genetic and cytogenetic basis of plant breeding, mode of reproduction in relation to breeding methods, techniques in selfing and crossing, methods of breeding, inheritance in the major farm crops, and biometrical methods. *Prerequisite:* Agron 302. MR. J. W. JONES, MR. C. M. JONES

AGRON 409—COTTON AND TOBACCO—3 cr. (3 and 0)

A study of the history, morphology, physiology, fertilization, cultivation, insect and disease control, varieties, breeding, harvesting, grading and marketing of American Upland cotton and flue cured tobacco. The two crops are studied separately, about half a semester being devoted to each. *Prerequisite:* Agron 101. MR. SHELLEY

AGRON 451—MINERAL NUTRITION OF PLANTS—2 cr. (2 and 0)

In this course attention is given to the nutrition of crop plants and the nutrient requirements of various soils for different crops. MR. COOPER

AGRON 452—SOIL CLASSIFICATION, FERTILITY, AND MANAGEMENT—2 cr. (2 and 0)

An advanced study of soil composition, soil classification, and soil management practices. Attention is given to the subject of physical and chemical composition of the soil, influence of crop rotations and fertilizers on soil productivity, influence of various methods of tillage on crop yields, and a general study is made of those factors essential for the practical utilization of soils. *Prerequisite:* Agron 202, 301, and major in Agronomy. MR. COLLINGS

AGRON 454—ADVANCED SOIL LABORATORY—1 cr. (0 and 3)

A laboratory course designed to teach students laboratory technique and to make students proficient in making simple physical and chemical determinations of soils. *Prerequisite:* Agron 202. MR. COLLINGS

AGRON 455—SEMINAR—1 cr. (1 and 0)

A study of current agronomic topics of special interest in crop production appearing in recent scientific journals and other publications. MR. COOPER

AGRON 456—SEMINAR—1 cr. (1 and 0)

A study of the latest published and available unpublished information concerning recent developments in the field of soil science. Topics for discussion are taken from latest published bulletins, reports, and professional magazines.

MR. COLLINGS

AGRON 457—INTRODUCTION TO RESEARCH AND THESIS—1 cr. (0 and 3)

The purpose of this course is to instruct students in the methods employed in attacking and solving an agronomic research problem. A suitable research problem is assigned each student for solution. The results of this study are presented in thesis form. MR. COLLINGS

Agron 458—Introduction to Research and Thesis—1 cr. (0 and 3)
A continuation of Agron 457. Mr. Collings

Agron 501—Advanced Nutrition of Crops—3 cr.

Agron 502—Advanced Pedology and Soil Classification—3 cr.

Agron 503—Advanced Crop Production—3 cr.

Agron 504—Advanced Plant Breeding and Genetics—3 cr.

Agron 505—Soil Fertility—3 cr. (3 and 0)

Agron 591—Research—3 cr.

Agron 592—Research—3 cr.

AIR SCIENCE

Colonel Tull
Lt. Col. Carpenter, Lt. Col. Cummins, Maj. Moore, Maj. Newman, Capt. Austell, Capt. Martin, 1st Lt. Adams, 1st Lt. Luna, M/Sgt. Crane, M/Sgt. Eldridge, M/Sgt. Jones, M/Sgt. Slivka, T/Sgt. Benson, T/Sgt. Hallford, S/Sgt. Burke, S/Sgt. Dallas

AS 109—The Airplane and the Air Age—1 cr. (2 and 1)

A course especially designed to provide an introduction to the Air Force ROTC program and aviation. Attention is focused on the airplane, its development, anatomy, the basic principles of flight and fundamentals of global geography including map projections, world regions, geography of weather and the geographical basis of military power. The laboratory phase of this course provides training in the wearing of the uniform, military courtesy and customs of the service, principles of discipline, and leadership development.
Capt. Martin, Lt. Luna

AS 110—The Airplane and the Air Age—1 cr. (2 and 1)

A continuation of AS 109. A study of international tensions, international security structures and the instruments of national security including factors and forces in world politics, the world military situation, United States Armed Forces and the employment of military aviation. The laboratory phase of this course is a continuation of the laboratory of AS 109. Principal additional developments include military orders and commands, basic drill maneuvers, parades, reviews and ceremonies. Capt. Martin, Lt. Luna

AS 209—Elements and Potentials of Air Power—1 cr. (2 and 1)

An analysis of the Air Force combat mission, especially as related to the tools and primary problems encountered in accomplishment of this mission including the basic elements of target types and intelligence procedures; atomic, gun and rocket, and chemical type weapons; and delivery aircraft of conventional, jet-powered, and guided types. The laboratory phase of this course is a continuation of the AS 110 laboratory. Additional topics include: duties and

responsibilities of non-commissioned officers concerning drill, supervision of personnel, and leadership training activities. Primary emphasis is placed on Squad and Flight Drill. MAJ. MOORE, MAJ. NEWMAN

AS 210—ELEMENTS AND POTENTIALS OF AIR POWER—1 cr. (2 and 1)

A continuation of AS 209. Emphasis is given to the air ocean and considerations of weapon delivery including the types and location of air bases, and delivery and support organizations. Orientation to the Air Force Career Fields, personal and professional opportunities and officer responsibilities in the Air Force Career Program is given. The laboratory phase of this course is a continuation of the laboratory given in AS 209. Added emphasis is given to leadership development and, in addition, stress is placed on Flight, Squadron and drill activities. MAJ. MOORE, MAJ. NEWMAN

AS 309—THE AIR FORCE OFFICERS IN THE AIR AGE—3 cr. (4 and 1)

A study of the basic principles of command and staff concepts encompassing the Air Force Commander, his staff organization and the principles of effective staff work including problem solving techniques, communication processes and correspondence; and techniques and principles of instructing in the Air Force. The laboratory phase of this course is a continuation of AS 210 laboratory. Emphasis is placed on principles and techniques of leadership; individual differences; and the relationship of psychology and leadership. Practice in conducting of drill to include demonstrations, explanations, and practical applications are provided. CAPT. AUSTELL, LT. ADAMS

AS 310—THE AIR FORCE OFFICER IN THE AIR AGE—3 cr. (4 and 1)

A continuation of AS 309. Technical subjects include procedures and instruments of aerial navigation; development, reports, and maps and charts of weather information. Consideration is given to the military system of law, courts, and boards. The Air Force Base, its function and the function of key base officer personnel are considered in the non-technical field. The laboratory phase of this course is a continuation of the AS 309 laboratory with emphasis on the functions of leadership with respect to morale, rewards, and corrections, promotion and assignment, and development of group spirit and discipline. Further training is provided in practical experience to include demonstrations, explanations, and practical applications. CAPT AUSTELL, LT. ADAMS

AS 409—LEADERSHIP AND AIR POWER CONCEPTS—3 cr. (4 and 1)

A critique of Summer Camp, Air Force Career Guidance, Moral responsibility of Air Force Leaders, Leadership and Management Seminar, and Military Aviation and the Evolution of Warfare are the areas of study. The laboratory phase is a continuation of the AS 310 laboratory. Senior students are responsible for the efficient operation and conduct of all phases of drill and exercise of command for the laboratory with a minimum of supervisory assistance. Seminars are conducted in the maxims of leadership and related activities to provide opportunities to develop management proficiency.

LT. COL. CARPENTER, LT. COL. CUMMINS

AS 410—LEADERSHIP AND AIR POWER CONCEPTS—3 cr. (4 and 1)

A continuation of AS 409. A study of the military aspects of World Political Geography comprises the major portion of the course. Briefing for Commis-

sioned Service provides the future Air Force Officer with an insight into the implications, requirements, and customs of the service. The laboratory phase of this course is a continuation of the AS 409 laboratory with particular emphasis to supervision in the drill of Squadron, Group, and Wing. Additional experience includes the accomplishment and supervision of parades, ceremonies, and reviews. LT. COL. CARPENTER, LT. COL. CUMMINS

ANIMAL HUSBANDRY

MR. STARKEY

MR. RITCHIE, MR. COOK, MR. GODLEY, MR. WHEELER, MR. HANDLIN

AH 101, 103—TYPES AND BREEDS—3 cr. (2 and 3)

A study of types, breeds, and market classes of beef cattle, horses, sheep, and swine. In laboratory the judging, grading, selection and management of farm animals is given considerable emphasis.

MR. RITCHIE, MR. COOK, MR. HANDLIN

AH 301—FEEDS AND FEEDING—3 cr. (3 and 0)

A study of feed nutrients, digestion, metabolism of feed stuffs, nutritive ratios, feeding standards, and the balancing of rations. *Prerequisite:* AH 101, 103 and Ag Ch 220. MR. COOK

AH 303—FEEDS AND FEEDING LABORATORY—1 cr. (0 and 3)

Practical work in mixing and balancing rations and identifying feed stuffs. *Prerequisite:* AH 101, 103 and Ag Ch 220. MR. COOK

AH 306—JUDGING—1 cr. (0 and 3)

Judging classes of cattle, horses, sheep, and swine. A course in the selection and judging of breeding and fat animals. *Prerequisite:* AH 101 and 103.

MR. HANDLIN

AH 310, 314—PORK PRODUCTION—3 cr. (2 and 3)

Feeding, breeding, management, and marketing of hogs. Emphasis is placed on winter and summer forages, protein supplements, mineral mixtures, and sanitation. *Prerequisite:* AH 301. MR. STARKEY, MR. COOK

AH 312—BREEDS OF LIVESTOCK—2 cr. (2 and 0)

A study of the origin, characteristics, and adaptability of the different breeds of livestock: beef cattle, swine, sheep and horses. *Prerequisite:* AH 101 and 103. MR. COOK

AH 401, 403—BEEF PRODUCTION—3 cr. (2 and 3)

Breeding, feeding, management and grading of beef cattle. Emphasis is placed on year-round grazing. *Prerequisite:* AH 301.

MR. STARKEY, MR. RITCHIE

AH 402—HORSE AND SHEEP PRODUCTION—2 cr. (2 and 0)

A study of the breeding, feeding, training, stabling, and care of horses. Also a study of the breeding, feeding, shearing, and marketing of sheep. The adaptability of breeds. Parasites and diseases. *Prerequisite:* AH 301.

MR. GODLEY

AH 405—ADVANCED JUDGING—1 cr. (0 and 3)

A continuation of AH 306 designed for students who are interested in participating in judging contests or in receiving special training in the selection of breeding stock. *Prerequisite:* AH 306. MR. HANDLIN

AH 406—SEMINAR—2 cr. (2 and 0)

Special problems in animal production. Each student is given a subject on which he makes weekly reports of progress before the seminar group. A thesis is required. *Prerequisite:* AH 301. MR. STARKEY

AH 451—ADVANCED FEEDS—2 cr. (2 and 0)

A study of the relative values of the different feeds used in livestock production. The nutrient requirements of the different classes of livestock, and the digestible nutrients in our most common feeds. The balancing of rations for all classes of livestock. *Prerequisite:* AH 301. MR. WHEELER

AH 452, 454—ANIMAL BREEDING—3 cr. (2 and 3)

A study of the fundamental principles relating to the breeding and improvement of livestock including variation, heredity, selection, linebreeding, inbreeding, cross-breeding, breed analysis, and other related subjects. *Prerequisite:* Agron 302. MR. GODLEY

AH 455—FARM MEATS—2 cr. (0 and 6)

The selection and grading of meat animals and carcasses. Practical work in slaughtering of animals and in the cutting, curing and freezing of meats. Emphasis is placed on the identification of wholesale and retail cuts. *Prerequisite:* AH 101, 103. MR. WHEELER

AH 456—ADVANCED MEATS—1 cr. (1 and 0)

A study of the chemical and physical composition of meat. Meat hygiene, nutritive value, curing, freezing and meat by-products are also topics for discussion. *Prerequisite:* AH 101, 103. MR. WHEELER

AH 502—TOPICAL PROBLEMS—1-3 cr. (1-3 and 0)

AH 504—METHODS IN ANIMAL BREEDING—3 cr. (3 and 0)

AH 505—NUTRITION OF MEAT ANIMALS—3 cr. (3 and 0)

AH 591—RESEARCH—3 cr.

AH 592—RESEARCH—3 cr.

ARCHITECTURE

Mr. Gunnin

Mr. St. Hubert, Mr. Ellner, Mr. Means, Mr. Speer, Mr. Gunther, Mr. Stakely, Mr. Young, Mr. Graves

Arch 101—Graphics—3 cr. (0 and 9)

A study of elementary techniques of architectural drawing, including lettering, orthographic projection, perspective and shades and shadows; and related experiences in composition.

Arch 102—Graphics—3 cr. (0 and 9)

A continuation of Arch 101.

Arch 105—Visual Arts Laboratory—2 cr. (0 and 6)

Exercises in drawing, painting, and three-dimensional materials, designed to develop the student's fluency in these various media, his perception of the elements of design, and his facility in representation essential to architecture and architectural delineation.

Arch 106—Visual Arts Laboratory—2 cr. (0 and 6)

A continuation of Arch 105. *Prerequisite:* Arch 105.

Arch 115—Building Materials—2 cr. (2 and 0)

A study planned to give the student a knowledge of materials used in building construction. The course is designed to trace the building material from its source as a raw material, through its manufacturing processes, and to its uses in the various types of buildings.

Arch 116—Dwelling House Construction—2 cr. (2 and 0)

A study intended to familiarize the student with the construction of the small dwelling. The course begins with the selection of the site and embraces all the necessary steps and methods of construction, terminating with the completed structure. Inspection trips to dwellings under construction are part of this course.

Arch 121—Introduction to Architecture—2 cr. (2 and 0)

A study of the highlights of the evolution of architecture, the rudiments of architectural philosophy, the place of the architect in society, and the character and intention of contemporary design.

Arch 122—Introduction to Architecture—2 cr. (2 and 0)

A continuation of Arch 121.

Arch 201—Architectural Design—3 cr. (0 and 9)

Design of simple structures with emphasis on the basic elements of circulation, functional relationship of rooms, spaces, and services, interior and exterior appearance. *Prerequisite:* Arch 105 and 106.

Arch 202—Architectural Design—3 cr. (0 and 9)

A continuation of Arch 201.

ARCH 207—VISUAL ARTS LABORATORY—1 cr. (0 and 3)

A continuation of Arch 106, with emphasis on application to delineation of architectural design problems. *Prerequisite:* Arch 106.

ARCH 208—VISUAL ARTS LABORATORY—1 cr. (0 and 3)

A continuation of Arch 207. *Prerequisite:* Arch 207.

ARCH 215—BUILDING MATERIALS—2 cr. (2 and 0)

A study of building materials and their applications and relations to residential construction types. The course includes the study of the material's sources, manufacturing processes, and uses. Designed primarily for Industrial Education majors.

ARCH 216—BUILDING DESIGN—2 cr. (2 and 0)

A continuation of Arch 215, with emphasis on types of construction other than residential types. The course includes a study of all of the phases of construction from the selection of the site to the completed structure. Designed primarily for Industrial Education majors. *Prerequisite:* Arch 215.

ARCH 217—ELEMENTARY CONSTRUCTION—1 cr. (1 and 0)

A study planned to familiarize the student with ordinary, heavy timber, steel frame, and concrete frame construction. The course includes foundations, wall assemblies, roof systems, floor systems, and exterior and interior finishes. Field trips to buildings under construction are included.

ARCH 218—ELEMENTARY WORKING DRAWINGS—2 cr. (0 and 6)

A study of the methods, materials, and details related to the construction used in residences and the preparation of working drawings for a small residence. *Prerequisite:* Arch 116.

ARCH 301—ARCHITECTURAL DESIGN—4 cr. (0 and 12)

Problems involving planning, elevation and mass composition in Architecture. Work includes the planning of public buildings, with emphasis on function, studies in entourage, elements of landscape with relation to plan and elevation, interior architecture, indication and presentation sketch problems. *Prerequisite:* Arch 202.

ARCH 302—ARCHITECTURAL DESIGN—4 cr. (0 and 12)

A continuation of Arch 301.

ARCH 307—VISUAL ARTS LABORATORY—1 cr. (0 and 3)

A continuation of Arch 208, with emphasis on the development of artistic talent in the use of watercolor, pastel, casein, and other media. *Prerequisite:* Arch 208.

ARCH 309—HISTORY OF ARCHITECTURE—3 cr. (3 and 0)

This study acquaints the student with the development of architecture from prehistoric to Romanesque time, as a problem both of construction and aesthetics. Influence of various geographic, geological, social, and psychological factors; structural problems and their solution, post and lintel, arch,

vault, pendentive, dome; planning problems and their solutions; temples, churches, public buildings; decorative problems and their solution, as revealed in the buildings of the Egyptian, Greek, Roman, Early Christian and Byzantine periods, are topics covered.

Arch 310—History of Architecture—3 cr. (3 and 0)

A continuation of Arch 309. A study of the Romanesque period, its spread through western Europe as a system of building of great variety which preceded the organic Gothic of the Ile-de-France. The revival of classic form in Italy during the Renaissance, the spread of the Renaissance in England and France. *Prerequisite:* Arch 309.

Arch 318—Working Drawings—2 cr. (0 and 6)

A study of the construction methods, materials, and details related to buildings of a non-residential construction type. A completed set of architectural working drawings is required. *Prerequisite:* Arch 218 or CE 317.

Arch 401—Architectural Design—6 cr. (0 and 18)

The designing of complex buildings, site and group planning; analysis and development of the plan and design problems from its most elemental to its final form; and sketch problems. *Prerequisite:* Arch 302.

Arch 402—Architectural Design—6 cr. (0 and 18)

A continuation of Arch 401 to include advanced problems in design, elements of civic planning, composition of involved types of buildings or groups of buildings, housing, and landscaping.

Arch 406—Visual Arts Laboratory—1 cr. (0 and 3)

A continuation of Arch 307 with emphasis on the opportunity for mature, individual expression or experiment in the various media. *Prerequisite:* Arch 307.

Arch 408—Industrial Design—1 cr. (0 and 3)

A study presented to give the student the fundamentals in design of everyday useful and simple objects that could be personally constructed for use in the home, office or actually maufactured in a small shop with limited production capacity. Practice is given in design sketches, detail drawings, as well as model shop work covering objects and problems assigned under this course.

Arch 409—Art Appreciation—3 cr. (3 and 0)

This study is intended to give the student a general idea of the field of art, to develop knowledge and taste through contact with the best examples. Principal topics covered are: Periods of styles of architecture, painting, sculpture, ornament, decorative and interior composition, furniture, given by lecture and lantern slides.

Arch 411—History of Architecture—2 cr. (2 and 0)

The development of Architecture from the Renaissance period in France and England to modern time, as a problem both of construction and aesthetics and with the influence of various geological, social and psychological factors.

The topics are: First, the Colonial period; a summary in North American architecture followed by a thorough study of the same period in South Carolina. Second, the National period; Classicism, Romanticism, Romanesque phase, classical phase, Gothic phase, Functionalism, beginning and development of modern architecture. *Prerequisite:* Arch 310.

ARCH 412—HISTORY OF ART—3 cr. (3 and 0)

History of Art considered as an insight into a moving process of life and presented both by argument and by objective evidence. Its oldest expression, evolution similarities, influences and reactions are considered in order to arrive at a true and complete understanding of the growth of the new tradition in architecture, showing its interrelations with city planning, painting, and science.

ARCH 415—STRUCTURAL METHODS—2 cr. (2 and 0)

A lecture course surveying concrete and steel structural systems in relation to and a part of architectural design. A study of demands made by building codes is included along with the major emphasis on the demands made by the function of the architectural subject. Attention is given to current developments in structural methods. *Prerequisite:* Arch 217.

ARCH 418—WORKING DRAWINGS—2 cr. (0 and 6)

A study of the methods, materials, and details related to the construction of a steel frame building. The preparation of working drawings for a steel frame building is required. *Prerequisite:* Arch 415 and 218.

ARCH 428—WORKING DRAWINGS—3 cr. (0 and 9)

Drafting room practice. The student is required to make a complete set of architectural and structural working drawings of reinforced concrete or steel framed building as prepared in the practicing architect's office. *Prerequisite:* Arch 318.

ARCH 451—ARCHITECTURAL DESIGN—6 cr. (0 and 18)

This course includes advanced problems in design, elements of civic planning, composition of involved types of buildings or groups of buildings, housing, and landscaping. *Prerequisite:* Arch 401.

ARCH 452—THESIS—6 cr. (0 and 18)

As a final synthesis of all knowledge, skill, and talent previously developed, the student working individually will carefully program an architectural problem of appropriate scope, and will conduct his own comprehensive research. He will make a thorough and mature visual, oral, and written presentation of his solution. *Prerequisite:* Arch 451. *Corequisite:* Arch 468.

ARCH 461—ENVIRONMENTAL PLANNING—3 cr. (3 and 0)

The study of the organization of outer space in relation to architecture, from the garden to the housing estate. Examples of past and present will be examined from functional and aesthetic viewpoints. *Prerequisite:* Senior standing.

Arch 462—Environmental Planning—3 cr. (3 and 0)

A continuation of Arch 461, with emphasis on the social, legal, financial, and physical factors contributing to urban problems. *Prerequisite:* Arch 461, or graduate standing.

Arch 465—Advanced Construction—2 cr. (1 and 3)

A course based on the more advanced types of construction. Experimentations with models of structural systems and elements is required. *Prerequisite:* Arch 415.

Arch 468—Working Drawings—2 cr. (0 and 6)

Final development and summation of structural knowledge and working drawing skills, directly applied to fifth-year design and thesis problems. Prints of drawings will accompany presentation of thesis problem. *Prerequisite:* Arch 418. *Corequisite:* Arch 452.

Arch 471—Mechanical Plant—2 cr. (1 and 3)

A course designed to familiarize the student with the water supply, plumbing, heating and ventilating systems of present-day buildings. *Prerequisite:* Senior standing.

Arch 472—Mechanical Plant—2 cr. (1 and 3)

A study of air conditioning, electrical systems, lighting, vertical transportation, and acoustics as applied to buildings. *Prerequisite:* Senior standing.

Arch 475—Architectural Office Practice—2 cr. (2 and 0)

General consideration of the entire architectural office practice procedure with especial emphasis on the professional relationship of the architect to client and contractor. The full scope of architectural services is covered including administrative procedures. *Prerequisite:* Senior standing.

Arch 476—Architectural Office Practice—2 cr. (2 and 0)

Basic tenets of specification writing and their application along with other "contract documents" to the architect's supervision of construction. Sample specifications are prepared by the student who also participates in the Seminar on supervisory duties. Field trips to buildings in progress are included. *Prerequisite:* Senior standing.

Arch 478—Structural Thesis—6 cr. (0 and 18)

This course requires the research, analysis, and presentation of one or more structural systems, methods, or elements. *Prerequisite:* Must be accompanied or preceded by CE 452.

BACTERIOLOGY

Mr. Rush Mr. Bond

Bact 301, 303—General Bacteriology—4 cr. (3 and 3)

Morphology, classification, distribution, cultivation, observation, and physiology of microorganisms; effects of organisms on their environment; microorganisms and health. *Prerequisite:* Bot 101, 103; Chem 101, 102.

Mr. Rush, Mr. Bond

BACT 310, 312—ADVANCED BACTERIOLOGY—4 cr. (2 and 6)

The first part of this course is devoted to discussions of the nutrition, metabolism, growth, and death of bacteria, microbiological assays, and industrial fermentations. This is followed by a detailed survey of those bacteria most important in water, milk, foods, and industry, together with some of the technics used in their study. *Prerequisite:* Bact 301, 303; Ag Chem 220 or Chem 221, 222.

BACT 402, 404—DAIRY BACTERIOLOGY—3 cr. (2 and 3)

Bacterial counts on milk, milk fermentations, contamination of milk and cream, reducing the contamination of milk, growth of microorganisms in milk and cream, spread of diseases through milk and its derivatives; preservation of milk and cream, bacteriology of prepared milks, ice cream, butter cultures, fermented milks, butter, cheese, tests for the quality of milk and cream. *Prerequisite:* Bact 301 and 303. MR. RUSH

BACT 406, 408—SANITARY BACTERIOLOGY—4 cr. (3 and 3)

This course is designed primarily for Engineering students. After a consideration of the fundamentals of bacteriology, the course is designed to give a knowledge of the relation of bacteriology to water purification and sewage disposal. *Prerequisite:* Chem 101 and 102. MR. RUSH

BACT 410, 412—SOIL MICROBIOLOGY—3 cr. (2 and 3)

The role of microbes in the decomposition of organic substances, transformation of nitrogen, transformation of mineral substances in soil by the action of microorganisms, interrelationships between higher plants and soil microorganisms, modification of the soil population, importance of microbes in soil fertility. *Prerequisite:* Bact 301 and 303. MR. BOND

BACT 502, 504—ADVANCED BACTERIOLOGICAL TECHNIC—4 cr. (2 and 6)

BOTANY

MR. ARMSTRONG

MR. ROSENKRANS, MR. MATHEWS, MR. RUTLEDGE, MR. WHITNEY

BOT 101, 103—GENERAL BOTANY—4 cr. (3 and 3)

The first part of the semester is devoted to a study of the form, structure, and physiology of the higher plants, followed by a study of algae, bacteria, fungi, liverworts, mosses, and ferns, with the application of the biological laws. Descriptions, life histories and adaptation of the representative organisms are considered.

MR. ROSENKRANS, MR. MATHEWS, MR. RUTLEDGE, MR. WHITNEY

BOT 351, 353—PLANT MORPHOLOGY—4 cr. (2 and 6)

A study of the structure of vegetative and reproductive parts of plants representing most of the major groups except the fungi. Most of the time is spent on the higher vascular plants. *Prerequisite:* Bot 101 and 103.

MR. RUTLEDGE

BOT 352, 354—PLANT PHYSIOLOGY—4 cr. (3 and 3)

A study of all the relations and processes which have to do with the maintenance, growth, and reproduction of plants. Principal topics are absorption of matter and energy, water relations of the plant, utilization of reserve products and liberation of energy, growth, movement and reproduction. *Prerequisite:* Bot 101 and 103; Chem 101 and 102; Phys 201 and 203 or Phys 211 and 213. MR. WHITNEY

BOT 355—HISTOLOGY—2 cr. (0 and 6)

This course gives the student a knowledge of the principles of fixing, cutting, and staining plant tissues and the various other processes of microtechnique as well as their application to specific forms of plants. *Prerequisite:* Bot 101 and 103; Chem 101 and 102. MR. ROSENKRANS

BOT 356, 358—TAXONOMY—3 cr. (1 and 6)

The identification, classification, distribution, and interrelationship of flowering plants with particular emphasis on the flora of South Carolina. Laboratory work includes a study of native trees and shrubs in winter condition, the collection and identification of local plants, and the preparation of a small herbarium. *Prerequisite:* Bot 101 and 103. MR. ROSENKRANS

BOT 401, 403—PLANT PATHOLOGY—3 cr. (2 and 3)

To acquaint the student with the major plant diseases of the South, symptoms of the diseases, the nature of the causal agencies or factors, and methods of control. *Prerequisite:* Bot 101 and 103. MR. ARMSTRONG, MR. MATHEWS

BOT 402, 404—ECONOMIC BOTANY—3 cr. (2 and 3)

A study of plants and plant products and their relationship to human history and contemporary life. Sources of plant products, especially those outside the scope of courses in Agronomy and Horticulture, such as woods, resins, tanning materials, rubber, textiles, cereals, sugar, oils, fruits, spices, beverages and drugs. Library research, periodic reports, and the examination of special material replace formal laboratory work. *Prerequisite:* Bot 101 and 103. Other students who present evidence of good scholarship may elect.

BOT 405—SEMINAR AND THESIS—2 cr. (1 and 3) MR. ARMSTRONG

BOT 406—SEMINAR AND THESIS—2 cr. (1 and 3) MR. ARMSTRONG

BOT 451, 453—MORPHOLOGY OF THE FUNGI—3 cr. (2 and 3)

A course to acquaint the student with the morphology and taxonomy of the fungi through lectures, reports, laboratory work, and field trips. Special attention is devoted to practice in the methods of pure culture as they apply to the different saprophytic and parasitic forms. *Prerequisite:* Bot 101, 103; Bot 401, 403. MR. MATHEWS

BOT 452, 454—ECOLOGY—4 cr. (2 and 6)

A study of the fundamental principles of the relations between plants and environmental conditions. Special attention is given to ecological relationships and problems in this region. *Prerequisite:* Bot 101, 103. MR. RUTLEDGE

BOT 501—METHODS OF RESEARCH IN PLANT PHYSIOLOGY—3 cr. (2 and 3)

BOT 503—ADVANCED PLANT PATHOLOGY—4 cr. (3 and 3)

CERAMIC ARTS

MR. ROBINSON

CR AR 101—POTTERY MATERIALS—3 cr. (2 and 3)

A study of the occurrence and properties of pottery raw materials. Special attention is devoted to the occurrence of natural pottery materials in South Carolina, and the methods and equipment used in preparing these materials. A discussion is included on materials available from commercial supply houses.

CR AR 102—POTTERY DRYING AND FIRING—3 cr. (3 and 0)

A study of the drying and firing processes used in pottery making. A discussion is included on the design and construction of simple pottery kilns and the student is required to build and operate a small outdoor kiln. The laboratory work demonstrates the drying and firing behavior of pottery.

CR AR 301—POTTERY GLAZES—3 cr. (3 and 0)

A study of the materials and methods used in preparing glazes and a study of the methods used in decorating pottery products. *Prerequisite:* Cr Ar 101 and 102.

CR AR 401— ADVANCED POTTERY—3 cr. (2 and 3)

The student is given advanced training in pottery techniques and pottery equipment. *Prerequisite:* Cr Ar 101 and 102.

CERAMIC ENGINEERING

MR. ROBINSON

MR. WILSON MR. FAIN

CR EN 201—INTRODUCTION TO CERAMIC ENGINEERING—2 cr. (2 and 0)

A description of the different ceramic industries with introductory information on manufacturing methods and properties and uses of ceramic products.

CR EN 202—CERAMIC MATERIALS—3 cr. (3 and 0)

A study of the occurrence, mining, and properties of clays and ceramic minerals.

CR EN 301—THE DRYING AND FIRING OF CERAMIC PRODUCTS—4 cr. (3 and 3)

A study of the theory, equipment and control of the drying and firing processes. *Prerequisite:* Cr En 202, Phys 212 and 214.

CR EN 303—CERAMIC PRODUCTS—2 cr. (2 and 0)

This course is intended as an elective course for architects, architectural, chemical, civil, electrical and mechanical engineers to acquaint them with the various ceramic products used in their professions. The properties, uses and methods of manufacture of such products as structural clay, refractories, whitewares, porcelain enamel and glass are included in this course.

CR EN 305—SILICATES—5 cr. (3 and 6)

A study of one, two, three and multi component equilibrium diagrams concerning ceramic compositions. A study of tests and calculations performed to determine the physical, electrical, optical, thermal and chemical properties of ceramic materials and products. *Prerequisite:* Cr En 301 or enrollment in Cr En 301.

CR EN 402—REFRACTORIES—3 cr. (3 and 0)

A study of refractory materials, the manufacture of refractory products, and the use of refractories in industrial furnaces. *Prerequisite:* Cr En 305.

CR EN 403—WHITEWARES AND GLAZES—3 cr. (3 and 0)

A study of the formulation, preparation, manufacture and application of whiteware bodies and glazes. *Prerequisite:* Cr En 305.

CR EN 404—ENAMELS—3 cr. (3 and 0)

A study of the raw materials, methods of manufacture, and properties of porcelain enamel coatings for metals. *Prerequisite:* Cr En 305.

CR EN 405—PLANT DESIGN—2 cr. (0 and 6)

The application of the fundamentals of ceramic engineering to specific problems in plant design. *Prerequisite:* Senior standing in Ceramic Engineering and Cr En 305.

CR EN 406—CERAMIC PROJECT—2 cr. (0 and 6)

The completion of an original research into a ceramic problem. *Prerequisite:* Cr En 305.

CR EN 408—PLANT DESIGN—2 cr. (0 and 6)

A continuation of Cr En 405.

CR EN 410—GLASS—3 cr. (3 and 0)

A study of the manufacture and properties of various glass products.

CR EN 412—RAW MATERIAL PREPARATION—3 cr. (3 and 0)

A study of the equipment and processes used in the crushing and grinding of raw materials, the separation and classification of particle sizes, and the separation and purification of minerals by mineral dressing methods.

CR EN 416—CEMENT, LIME AND PLASTER—3 cr. (3 and 0)

A study of the manufacturing methods, properties and uses of various cementing materials.

CR EN 418—PROCESS CONTROL—3 cr. (1 and 6)

The application of laboratory techniques to the control of product quality and process efficiency.

CR EN 501—ADVANCED ANALYTICAL PROCEDURES AND EQUIPMENT—3 cr. (2 and 3)

CR EN 502—SILICATE CRYSTALLOGRAPHY—3 cr. (3 and 0)

CR EN 503—CERAMICS PRODUCTION CONTROL—3 cr. (3 and 0)

CR EN 504—CERAMICS QUALITY CONTROL—3 cr. (3 and 0)

CR EN 505—ADVANCED DRYING—3 cr. (2 and 3)

CR EN 506—ADVANCED FIRING—3 cr. (2 and 3)

CR EN 507—SPECIALIZED CERAMICS—3 cr. (3 and 0)

CR EN 591—RESEARCH—3 cr.

CR EN 592—RESEARCH—3 cr.

CHEMICAL ENGINEERING

MR. BERNE-ALLEN MR. LITTLEJOHN

CH EN 202—INTRODUCTION TO CHEMICAL ENGINEERING—2 cr. (1 and 3)

This course is designed to acquaint students with the profession of Chemical Engineering and to introduce them to certain basic concepts and methods used by the chemical engineer. Technical topics include conversion of units, use of the slide rule, pressure and temperature, the gas laws, molecular quantities, and material and energy balances. *Prerequisite:* Chem 104 and Math 104.

CH EN 301—PRINCIPLES OF CHEMICAL ENGINEERING—3 cr. (3 and 0)

An introduction to the general principles of Chemical Engineering and a study of the following unit operations: Fluid Flow, Fluid Transportation, Heat Transmission and Evaporation. Special emphasis is placed on theory and its practical application. This is accomplished through the presentation of comprehensive calculations. *Prerequisite:* Ch En 202.

CH EN 302—PRINCIPLES OF CHEMICAL ENGINEERING—3 cr. (3 and 0)

A study of the following unit operations based on diffusion: Humidification and Air Conditioning, Drying and Distillation. Special attention is given to theories involved and practical applications thereof. Theory is correlated with practice by the solution of comprehensive problems. *Prerequisite:* Ch En 301.

CH EN 306—UNIT OPERATIONS—1 cr. (0 and 3)

This course covers laboratory work in the unit operations of fluid flow, heat transfer, and evaporation. Stress is laid on the relation between theory and experimental results and on report writing. *Prerequisite:* Ch En 301.

CH EN 330—CHEMICAL ENGINEERING THERMODYNAMICS—2 cr. (2 and 0)

An introduction to the general realm of thermodynamics thought. Topics include the First and Second Law of Thermodynamics, real and ideal gases, thermodynamic properties of fluids, phase changes, and heats of reaction. *Prerequisite:* Ch En 301, Chem 331, and Math 306 or enrollment in Math 306.

CH EN 401—PRINCIPLES OF CHEMICAL ENGINEERING—3 cr. (3 and 0)

A study of the following unit operations: Gas Absorption and Solvent Extraction, Filtration, Crystallization, Mixing, Conveying, Size Reduction and

Size Separation. Special emphasis is placed on theory and its practical application. Theory is related to practice by solution of comprehensive problems. *Prerequisite:* Ch En 301 and 302.

CH EN 403—CHEMICAL INDUSTRIES—3 cr. (3 and 0)

A study of various chemical industries. Economics and the interrelation of unit operations and unit processes are considered. Attention is given to the dependence of each industry on the chemical field as a whole. *Prerequisite:* Senior standing in Chemical Engineering or Chemistry.

CH EN 404—CHEMICAL INDUSTRIES—3 cr. (3 and 0)

A continuation of Ch En 403. *Prerequisite:* Senior standing in Chemical Engineering or Chemistry.

CH EN 406—INDUSTRIAL CHEMICAL CALCULATIONS—2 cr. (2 and 0)

Advanced Chemical Engineering calculations involving particle size separation, cyclone separators, agitation, combustion and the solution of other stoichiometric problems on the industrial plant scale.

CH EN 407—UNIT OPERATIONS—2 cr. (0 and 6)

This course covers laboratory work for the diffusional unit operations. Competent technical reports are required. *Prerequisite:* Enrollment in Ch En 401.

CH EN 409—PLANT DESIGN—2 cr. (0 and 6)

A detailed study of the design of a chemical plant involving such factors as process to be employed, equipment selection, specification writing and cost accounting, and plant location. *Prerequisite:* Senior standing in Chemical Engineering.

CH EN 411—CHEMICAL ENGINEERING LIBRARY MATERIALS—1 cr. (1 and 0)

This course is designed as the first semester of the senior thesis. Thesis projects are assigned. The student reviews the literature of the chosen field and writes the literature review section of his thesis. The use of the technical literature in the solution of chemical engineering problems is stressed. *Prerequisite:* Completion of all required 300 courses in chemistry and chemical engineering.

CH EN 412—THESIS—2 cr. (0 and 6)

The investigation of a research project in Chemical Engineering. A competent bachelors thesis is required. *Prerequisite:* Ch En 411.

CH EN 415—INTRODUCTION TO NUCLEAR ENGINEERING—3 cr. (3 and 0)

This course is designed to acquaint the non-nuclear engineer with some of the engineering aspects of nuclear science. Topics include a brief survey of particle physics; nuclear reactions; energy transformations; nuclear reactors, their design construction and use; radiation damage to materials of construction; and special problems in nuclear engineering peculiar to the basic engineering disciplines. *Prerequisite:* Senior standing.

CH EN 422—INDUSTRIAL WASTE TREATMENT—2 cr. (2 and 0)

This course is designed to acquaint the student with the various types of industrial waste and the treatments required to prevent further pollution of our natural water resources.

CH EN 430—CHEMICAL ENGINEERING THERMODYNAMICS—3 cr. (3 and 0)

A continuation of Ch En 330. Subjects include heat engines, compressors, refrigeration, phase equilibria and chemical reaction equilibria. *Prerequisite:* Ch En 330.

CHEMISTRY

MR. SCHIRMER

MR. BROWNLEY, MR. CARODEMOS, MR. HOBSON, MR. H. L. HUNTER, MR. DINWIDDIE, MR. POLK, MR. HODGES, MR. GILLESPIE, MR. KRAMER, MR. SALLEY, MR. RHYNE

CHEM 101—GENERAL CHEMISTRY—4 cr. (3 and 3)

The purpose of this course is to give the student a general knowledge of the fundamentals of the science of chemistry through lectures, lecture experiments, and laboratory exercises. Consideration is given to the common substances. MR. POLK

CHEM 102—GENERAL CHEMISTRY—4 cr. (3 and 3)

A continuation of Chem 101. MR. HUNTER

CHEM 104—GENERAL CHEMISTRY—4 cr. (3 and 3)

This course is required of students majoring in Chemistry, Ceramic Engineering, Chemical Engineering, Textile Chemistry, Pre-Medicine or Pre-Veterinary Medicine. It is similar to Chem 102, except that it gives a more thorough covering of those fundamentals which are necessary for advanced work in Chemistry. MR. HOBSON

CHEM 215—QUALITATIVE ANALYSIS—4 cr. (2 and 6)

A study of the fundamental principles of Qualitative Analysis and their application in the systematic separation and identification of the common cations and anions in the laboratory. The topics discussed are: chemical equilibrium and the law of mass action, solution and ionization, solubility product, hydrolysis and complex ions. *Prerequisite:* Chem 101, and 102 or 104. MR. SCHIRMER

CHEM 216—QUANTITATIVE ANALYSIS—4 cr. (2 and 6)

A study of the fundamental principles of Quantitative Analysis and their application in the analysis of unknown mixtures in the laboratory. Standard volumetric and gravimetric procedures are employed. *Prerequisite:* Chem 101, and 102 or 104. MR. BROWNLEY

CHEM 217—QUALITATIVE ANALYSIS— 2 cr. (2 and 0)

This course covers the theory only of Chem 215 and is designed primarily for graduate students in other departments. *Prerequisite:* Chem 101, and 102 or 104 and permission of the instructor. MR. SCHIRMER

CHEM 218—QUANTITATIVE ANALYSIS—2 cr. (2 and 0)

This course covers the theory only of Chem 216 and is designed primarily for graduate students in other departments. *Prerequisite:* Chem 101, and 102 or 104 and permission of the instructor. MR. BROWNLEY

CHEM 323—ELEMENTARY ORGANIC CHEMISTRY—4 cr. (3 and 3)

A thorough study of the aliphatic compounds with special emphasis upon structural characteristics of the various classes. In the laboratory, typical compounds are prepared in which technique, purity and yield are stressed. *Prerequisite:* Chem 101, and 102 or 104. MR. CARODEMOS

CHEM 324—ELEMENTARY ORGANIC CHEMISTRY—4 cr. (3 and 3)

The alicyclic, heterocyclic, and aromatic compounds are thoroughly studied. Typical members of these series of compounds are synthesized in the laboratory in which technique, purity and yield are stressed. *Prerequisite:* Chem 221. MR. CARODEMOS

CHEM 331—PHYSICAL CHEMISTRY—5 cr. (3 and 6)

The student is given a foundation in the theories of atomic and molecular structure and in the elements of thermodynamics. These theories are applied to the studies of the states of matter and to solution. The laboratory work is designed to acquaint the student with the techniques used in studies of the physical nature of gases, liquids, solids, and solutions. *Prerequisite:* Math 203 and 204, Chem 216. MR. HOBSON

CHEM 332—PHYSICAL CHEMISTRY—5 cr. (3 and 6)

A continuation of Chem 331 which will include colloidal studies, phase rule, chemical equilibria, kinetics of chemical processes and electrochemistry. MR. HOBSON

CHEM 335—PHYSICAL CHEMISTRY—3 cr. (3 and 0)

Topics from physical chemistry which are of especial interest to ceramic engineering and textile chemistry students are considered. *Prerequisite:* Chem 216, Math 203 and 204. MR. HOBSON

CHEM 336—PHYSICAL CHEMISTRY—2 cr. (2 and 0)

A continuation of Chem 335. MR. HOBSON

CHEM 337—PHYSICAL CHEMISTRY—4 cr. (3 and 3)

The theory in this course is identical with that in Chem 331 but the laboratory is only one period per week and the experiments are selected in such a way as to be of maximum value to Chemical Engineering majors. *Prerequisite:* Same as for Chem 331. MR. HOBSON

CHEM 338—PHYSICAL CHEMISTRY—4 cr. (3 and 3)

A continuation of Chem 337. MR. HOBSON

CHEM 339—INTRODUCTION TO PHYSICAL CHEMISTRY—3 cr. (3 and 0)

This course is designed for those students who wish a brief and not too mathematical approach to the basic laws of physical chemistry. Among the topics discussed are the gas laws, diffusion, osmotic pressure, theory of solu-

tions, oxidation and reduction, colloids, and electrochemistry. A brief review of such fundamentals as ionization, pH and mass action is also included. *Prerequisite:* General Chemistry and Analytical Chemistry. MR. DINWIDDIE

CHEM 401—INORGANIC CHEMISTRY—2 cr. (1 and 0)

A comprehensive survey of the field of inorganic chemistry through lectures and lecture experiments. Development of modern theories of atomic structure and valence, and a detailed study of the elements and their compounds, based on the periodic system and including both well known and rarer elements. *Prerequisite:* Chem 216. *Suggested:* Chem 331 and 332.

MR. SCHIRMER

CHEM 402—INORGANIC CHEMISTRY—3 cr. (2 and 3)

A continuation of Chem 401 theory with the addition of a laboratory in which typical inorganic syntheses are carried out. MR. SCHIRMER

CHEM 411—INSTRUMENTAL ANALYSIS—3 cr. (1 and 6)

The demonstration and operation of modern optical and electronic precision measuring devices as they apply to the processes of analytical, physical and organic chemistry. *Prerequisite:* Physical Chemistry. MR. BROWNLEY

CHEM 421—QUALITATIVE ORGANIC ANALYSIS—3 cr. (1 and 6)

The systematic identification of pure organic compounds and mixtures.

MR. CARODEMOS

CHEM 441—GLASS MANIPULATION—2 cr. (0 and 6)

A course designed to teach the fundamentals of glass manipulation and its application to the construction and repair of simple laboratory apparatus. *Prerequisite:* Senior standing. MR. SCHIRMER

CHEM 442—CHEMICAL LITERATURE—2 cr. (1 and 3)

This course is designed to give the student practice in the use of chemical literature, the writing of technical reports and the presentation of same before the faculty of the School of Chemistry. *Prerequisite:* Junior standing in Chemistry.

CHEM 443—RESEARCH PROBLEMS—3 cr. (0 and 9)

Original investigation of an assigned problem in a fundamental branch of Chemistry. This work must be carried out under the supervision of a qualified member of the staff. *Prerequisite:* Senior standing in Chemistry.

CHEM 444—RESEARCH PROBLEMS—3 cr. (0 and 9)

A continuation of Chem 443.

CHEM 454—INORGANIC SYNTHESIS—2 cr. (0 and 6)

A laboratory course designed to acquaint the student with various methods and techniques employed in the preparation and handling of inorganic compounds. *Prerequisite:* Chem 401. MR. SCHIRMER

CHEM 472—ORGANIC SYNTHESIS—3 cr. (1 and 6)

A review and more intensive study of representative classes of organic compounds. The laboratory work consists of synthesis of more complex compounds.

In this course the student is introduced to the methods of consulting Beilstein's "Handbuch der organischen chemie." *Prerequisite:* Chem 421 and Ger 102.
Mr. Carodemos

Chem 503—Inorganic Chemistry—2 cr. (2 and 0)

Chem 504—Inorganic Chemistry—2 cr. (2 and 0)

Chem 505—Advanced Inorganic Chemistry—3 cr. (3 and 0)

Chem 511—Advanced Analytical Chemistry—3 cr. (3 and 0)

Chem 512—Chemical Spectroscopic Methods—3 cr. (2 and 3)

Chem 520—Intermediate Organic Chemistry—3 cr. (3 and 0)

Chem 521—Advanced Organic Chemistry—3 cr. (3 and 0)

Chem 530—Physical Chemistry—3 cr. (3 and 0)

Chem 531—Physical Chemistry—3 cr. (3 and 0)

Chem 532—Advanced Physical Chemistry—3 cr. (3 and 0)

Chem 541—Atomic and Molecular Structure—3 cr. (3 and 0)

Chem 591—Research—3 cr.

Chem 592—Research—3 cr.

CIVIL ENGINEERING

Mr. Lowry
Mr. H. E. Glenn, Mr. Trively, Mr. Ford, Mr. J. D. Glenn, Mr. J. H. Hunter, Mr. Moss, Mr. Rostron

CE 101—Elementary Surveying—2 cr. (1 and 3)

An introductory course given to all Engineering freshmen. This course comprises field and office computations involving the use of the tape, transit, level and leveling rod; the making of simple surveys and computing the areas.

CE 201—Surveying—2 cr. (2 and 0)

A detailed study of the construction of all surveying instruments, and methods of adjusting same; a comprehensive consideration of the mathematical principles involved in making surveys: computations involved in computing and subdividing areas. For pre-forestry students only. *Prerequisite:* CE 101, Math 102.

CE 202—Surveying—2 cr. (2 and 0)

This is a continuation of CE 201, and comprises the application of surveying principles to the various phases of surveying problems, including land surveying, topographic surveying, route surveying, mine surveying and hydrographic surveying. This course includes sufficient elementary astronomy for making solar or stellar observations for the determination of Azimuth and Time. For pre-forestry students only. *Prerequisite:* CE 201.

CE 203—TOPOGRAPHIC SURVEYING AND MAPPING—1 cr. (0 and 3)

The field and office work necessary to make a complete topographic map, including contours of a prescribed area. For pre-forestry students only. *Prerequisite:* CE 101, Math 101.

CE 205—CIVIL ENGINEERING PROBLEMS—1 cr. (0 and 3)

This course, designed to familiarize the student with simple problems in civil engineering, includes a review of the applications of trigonometric functions and logarithms, and a study of graphs, tables, and the slide rule. Some emphasis is given to a systematic analysis of problems and a neat and orderly arrangement of computations. *Prerequisite:* Math 103, 104 and registration in Phys 211.

CE 301—SURVEYING—3 cr. (2 and 3)

Care and adjustment of all surveying instruments; mathematical principles involved in making surveys; field and office work necessary to make a detailed map, including contours of a prescribed area; special surveying problems including solar and stellar observations. *Prerequisite:* CE 101, Math 103 (CE 301 taught in summer only.)

CE 305—ROUTE SURVEYING—3 cr. (2 and 3)

A study of the special problems which arise in connection with the location of a route for a railroad, highway, canal, sewer, water main or transmission line; the theory of simple, compound, and reversed curves; parabolic curves, transition, spiral, vertical, curves, railroad turnouts; computations of earthwork. Field work includes a route survey for a highway. *Prerequisite:* Accompanied or preceded by CE 301. (CE 305 taught in summer only.)

CE 306—PRINCIPLES OF SANITATION—2 cr. (2 and 0)

This course covers the theory of sanitation and its relation to man's well-being. The engineering techniques in the problems associated with milk, food, insects, rodents, sewage, water, etc. are discussed. *Prerequisite:* Junior standing.

CE 307—ROADS AND PAVEMENTS—3 cr. (2 and 3)

Theory and practice in design, location, construction and maintenance of low cost, intermediate, and high type, road surfaces, including a study of physical properties of bituminous construction materials, and the standard tests for determining these properties. Highway economics and administration. Study of factors relating to highway construction methods and materials. *Prerequisite:* CE 305.

CE 309—TRUSSES—1 cr. (0 and 3)

Analytical and graphical analysis and design of simple trusses under static load conditions. *Prerequisite:* Mech 302.

CE 310—STRUCTURES—3 cr. (2 and 3)

Analysis of determinate and indeterminate beams under static load conditions. Introduction to Moment Distribution. Design and detail of steel beams, girders, columns, and their connections. *Prerequisite:* Mech 304 and CE 309

CE 312—Structural Design—3 cr. (1 and 6)

A study of steel structures with emphasis on the design and layout as applied to buildings. *Prerequisite:* Preceded or accompanied by Mech 304.

CE 317—Materials and Methods of Construction—2 cr. (2 and 0)

This course is intended to familiarize the student with the common materials and technical terms used in construction and the ways in which the materials are used. *Prerequisite:* Sophomore standing.

CE 319—General Photogrammetry—3 cr. (2 and 3)

An introduction to the fundamentals of mapping by use of aerial photographs. A study of the characteristics and uses of aerial photographs, detailed interpretation and simple photogrammetric instruments such as the stereocomparagraph. Practice in use of simple mapping instruments, problems in scale determination, construction of photomosaics. *Prerequisite:* CE 301.

CE 401—Structural Design—3 cr. (2 and 3)

Analysis of beams and trusses subjected to dynamic loads. Use of influence lines. Design and detail of steel bridges. *Prerequisite:* CE 310.

CE 402—Structural Analysis—2 cr. (2 and 0)

Analysis of statically indeterminate structures by the method of moment distribution. *Prerequisite:* CE 310.

CE 409—Reinforced Concrete Structures—4 cr. (3 and 3)

Study of mechanics of reinforced concrete, beams, slabs, columns and footings. Designs and estimates of concrete structures. A study of the standard tests for determining the properties of materials used in reinforced concrete construction. *Prerequisite:* Mech 304 and 306.

CE 410—Municipal and Sanitary Engineering—3 cr. (2 and 3)

A study of water consumption, its source, development, treatment, storage, and distribution; storm and sanitary sewage and treatment methods. Field trips to municipal and industrial water and sewage treatment plants. *Prerequisite:* CE 306 and Mech 401.

CE 412—Reinforced Concrete Design—2 cr. (1 and 3)

The complete analysis and design of a reinforced concrete bridge or building. *Prerequisite:* CE 409.

CE 413—Sanitation Controls—3 cr. (2 and 3)

A study of the various methods of treatment in the solution of physical, chemical, and biological problems in water supply and sewerage. *Prerequisite:* CE 306.

CE 414—Soil Mechanics—3 cr. (2 and 3)

Study of mechanical and physical properties of soils and their relation to soil action in problems of engineering, such as classification, permeability, shearing strength, consolidation, stress distribution and bearing capacity of soils. *Prerequisite:* Mech 304.

CE 417—CITY PLANNING—2 cr. (2 and 0)

A study of the special problems, confronting a city engineer, which are not specifically of an engineering nature, but for the solution of which the public looks to the city officials; viz. street systems, traffic control, parking facilities, railroad and water traffic problems, airports, parks and playgrounds and zoning; legal problems involved. *Prerequisite:* Senior standing.

CE 420—CONCRETE MIXES—1 cr. (0 and 3)

Investigation and selection of aggregates for concrete; latest methods of design of concrete mixes; field control and adjustments; air-entrained concrete; field trips to nearby construction jobs. *Prerequisite:* Preceded or accompanied by CE 409.

CE 422—BUSINESS, LEGAL, AND ETHICAL PHASES OF ENGINEERING—3 cr. (3 and 0)

A study of business economy, cost determination, business law, and engineering procedures as related to the engineer. It is the major objective of this course to emphasize the importance of competence in the social and personal areas. *Prerequisite:* Econ 201 and senior standing.

CE 434—CONSTRUCTION COSTS AND ESTIMATES—3 cr. (2 and 3)

This course covers the interpretation of specifications and plan reading necessary for the proper estimation of quantities of materials and costs of engineering structures. The course is presented from both the designer's and the constructor's viewpoint in order to fit the young engineer with the essential details an inspector or a construction engineer should have at his command. *Prerequisite:* Senior standing.

CE 452—ADVANCED STRUCTURAL ANALYSIS—2 cr. (2 and 0)

A study of the various methods for computing the deflections of beams and trusses. *Prerequisite:* CE 310.

CE 499—THESIS—1-3 cr.

Civil Engineering students of exceptional ability, with the permission of the Head of the Civil Engineering Department, may choose as an elective the preparation and submission of a thesis covering some phase of Civil Engineering. This thesis may be either an independent experimental investigation entered into with the hope of discovery of new engineering knowledge, or the independent prosecution of some already somewhat stabilized problem in engineering design. Those students who desire to submit a thesis, as a part of their free electives, must present to the Head of the Civil Engineering Department not less than one month prior to the opening of the semester during which the thesis work is intended to be done, a complete outline of the work contemplated in the proposed thesis and the projected method of procedure. (Amount of credit given depends upon the nature of the subject, the amount of time devoted to it, and the quality of the work.)

CE 501—ADVANCED STRUCTURAL ENGINEERING—3 cr. (2 and 3)

CE 502—ADVANCED STRUCTURAL ENGINEERING—3 cr. (2 and 3)

CE 503—MODEL ANALYSIS—3 cr. (2 and 3)

CE 510—HIGHWAY SAFETY AND TRAFFIC CONTROL—3 or 2 cr. (3 and 0) or (2 and 0)

CE 511—HIGHWAY DESIGN—3 cr. (2 and 3)

CE 519—HIGHWAY RESEARCH—2 to 4 cr.

CE 520—CONCRETE MIXES AND MATERIALS—3 cr. (2 and 3)

CE 531—SOIL ENGINEERING—3 cr. (2 and 3)

CE 591—RESEARCH—3 cr.

CE 592—RESEARCH—3 cr.

DAIRY DEPARTMENT

MR. LAMASTER

MR. GOODALE, MR. KING, MR. BRANDT, MR. BRANNON, MR. HURST, MR. LAZAR, MR. GRAHAM

DAIRY 201—INTRODUCTORY DAIRYING—3 cr. (2 and 3)

A course designed to give a practical working knowledge of dairy husbandry and dairy products. Studies include history of dairying, dairy breeds, feeds and feeding, judging dairy animals, dairy farm buildings, quality milk production, testing milk and some of its products, the manufacture of milk products, and the value of milk and milk products. MR. LAZAR

DAIRY 302—DAIRY TECHNOLOGY AND ENGINEERING—3 cr. (2 and 3)

The chemical and physical properties of milk and milk products are studied in the classroom and laboratory as they apply to the processing of dairy products. Some of the dairy engineering subjects studied are: Heat measurement, transfer and control; power transmission, electrical power and equipment, hydraulics and pumping, steam and its use in the dairy, refrigeration, insulation, heaters and coolers, ice cream equipment, homogenizers, pasteurizing equipment, evaporating and drying equipment, washing and sterilizing equipment fillers, equipment maintenance, general mechanics, and dairy plant design and layout. *Prerequisite:* Junior standing. MR. GOODALE

DAIRY 304—JUDGING DAIRY PRODUCTS—1 cr. (0 and 3)

Organoleptic examinations of various grades of butter, cheese, cream, ice cream and milk familiarize the student with the quality of dairy products. Physical character, flavor and aroma are discussed in their relation to taste appeal. Basic techniques of commercial grading and quality control are emphasized. *Prerequisite:* Junior standing. MR. GRAHAM

DAIRY 305—DAIRY CATTLE JUDGING—1 cr. (0 and 3)

Students are given an understanding of dairy form, breed type, and relations between form and function of dairy cattle. Emphasis is placed on the score card, show ring requirements and classifications, fitting dairy cattle for show and sale, values as influenced by form, buying dairy cattle, practice in judging Brown Swiss, Guernsey, Holstein, and Jersey cattle of all ages. *Prerequisite:* Junior standing. MR. BRANNON

DAIRY 306—MARKET MILK—3 cr. (3 and 0)

This course is designed to give a comprehensive understanding of the care and handling of market milk, the following subjects are studied: History and development of the market milk industry, composition of milk and its properties, microorganisms, enzymes and cells of milk and cream, milk and public health, safeguarding the milk supply, sanitary production of market milk, construction and arrangement of buildings (farm and station), transportation of milk, flavors of milk, construction and arrangement of city milk plants, milk plant operation, pasteurization of milk, cooling systems, creaming, separation, special milk products, business management, the dairy laboratory, dairy mathematics. *Prerequisite:* Dairy 201. MR. GOODALE

DAIRY 308—ADVANCED DAIRY CATTLE JUDGING—1 cr. (0 and 3)

This course is a continuation of Dairy 305 to provide more practice in judging cattle form in relation to reproduction and milk production. The study of dairy cattle behavior and management is included in this course. *Prerequisite:* Dairy 305. MR. BRANNON

DAIRY 309—ANIMAL NUTRITION—3 cr. (3 and 0)

A chemical and physiological treatment of digestion, absorption and metabolism of nutrients. The physiology of and nutritional requirements for body maintenance, growth, reproduction and lactation of dairy cattle. *Prerequisite:* Ag Ch 220. MR. KING

DAIRY 352—ADVERTISING AND MARKETING—3 cr. (3 and 0)

In this course giving the fundamentals in important fields of sales and marketing, the following topics are studied: Evolution of advertising, advertising allied with journalism, rise of national advertising, social aspects of advertising, advertisers' policies and objectives, modern advertising procedure, marketing research, names, trade marks, packages, psychology of selling, incentives to attention, incentives to interest, establishing associations, building the advertisement, substance of advertising copy, typography, illustrations and color, layout and visualization, advertising program, advertising production, media, radio advertising. *Prerequisite:* Junior standing. MR. GOODALE

DAIRY 354—ENDOCRINOLOGY—3 cr. (3 and 0)

This course includes a study of the anatomy and physiology of the glands of internal secretion. The chemistry of the hormones is considered. Emphasis is placed on the relationship of the endocrine glands to growth, reproduction, and lactation. *Prerequisite:* Junior standing. MR. HURST

DAIRY 401—DAIRY MANUFACTURES—3 cr. (2 and 3)

A thorough study is made of the manufacture of creamery butter, and the processing of soft cheeses. Some of the topics covered are: History of buttermaking, care of cream on the farm, buying and grading cream, inspection and testing methods, neutralization, pasteurization, starters and ripening, churning, and all subsequent processes until butter is ready for market, composition control, butter scoring, butter storage, marketing butter, refrigeration and sanitation. Studies are conducted on complete processing methods for common varieties of soft cheeses. *Prerequisite:* Dairy 201 and 302. MR. GOODALE

Dairy 402—Dairy Manufactures—4 cr. (2 and 6)

A study of ice cream manufacture and related problems of producing condensed and powdered milks. Some subjects covered are: History of ice cream making, classification of frozen products, composition, ingredients used, standardization of mixes, processing mixes, testing, freezing, whipping defects in ice cream, packaging, hardening, shipping sugars, egg products, stabilizers, chocolate products, vanillas, fruits, ices, sherbets, specials, costs and merchandising, ice cream as a food, and bacteriology of ice cream. *Prerequisite:* Dairy 201 and 302. Mr. Goodale

Dairy 405—Dairy Cattle Breeding—3 cr. (2 and 3)

The student is given an understanding of the methods used in developing and improving the breeds of cattle. Principal topics are: Breed history, advanced register, pedigrees, methods of indexing proved sires, statistical study of the relations of environment to production. *Prerequisite:* Agron 302.

Mr. LaMaster

Dairy 409—Dairy Seminar—2 cr. (2 and 0)

Special research problems in production and manufactures are studied. Individual topics not fully covered in class work are assigned for special reports before class and Dairy Staff. *Prerequisite:* Senior standing.

Dairy 410—Dairy Seminar—2 cr. (2 and 0)

This course is a continuation of Dairy 409 with emphasis on current research literature. Each student is required to conduct a research project in production or manufactures and report the exposition of the results by thesis. *Prerequisite:* Senior standing.

Dairy 452—Dairy Cattle Feeding and Management—3 cr. (2 and 3)

This course gives the fundamental principles in the care, feeding, and management of dairy cattle of all ages. Principal topics include: General considerations in selecting a breed, selecting the individual cow, calf raising, growth and development, raising dairy heifers, care and management of the milking herd, milking factors, feeding for milk production, stables for cows, dairy barn equipment and handling manure. *Prerequisite:* Senior standing.

Mr. LaMaster

Dairy 501—Topical Problems—1 to 3 cr.

Dairy 502—Genetics of Dairy Cattle Improvement—3 cr. (3 and 0)

Dairy 503—Physiology of Reproduction and Milk Secretion—3 cr. (3 and 0)

Dairy 505—Newer Knowledge of Animal Nutrition—3 cr. (3 and 0)

Dairy 591—Research—3 cr.

Dairy 592—Research—3 cr.

DRAWING AND DESIGNING

MR. SHIGLEY

MR. BRADBURY, MR. MCHUGH, MR. BANISTER, MR. CARTER, MR. HAMMOND, MR. HUGHES, MR. DOYLE

DD 101—FREEHAND DRAWING—1 cr. (0 and 3)

A study of the principles of technical sketching, including the development of skills in technical lettering and freehand drawing.

DD 102—TECHNICAL DRAWING—1 cr. (0 and 3)

A study of the elementary principles of multi-view projection with emphasis upon the reading of technical drawings rather than upon their execution. *Prerequisite:* DD 101.

DD 105—ENGINEERING DRAWING—2 cr. (0 and 6)

A comprehensive study of the language of the engineer. The course includes lettering, use of instruments, technical sketching, multi-view drawing, auxiliary projection, sectional views, dimensioning, fasteners, pipe drawings, and simple detail and assembly drawings.

DD 106—ENGINEERING DRAWING—2 cr. (0 and 6)

A continuation of DD 105. The course includes detail and assembly drawings, welding drawings, pictorial drawings, simple problems involving the point, line, and plane in descriptive geometry, structural drawing, and developments and intersections of plane and curved surfaces. *Prerequisite:* DD 105.

DD 205—APPLIED DESCRIPTIVE GEOMETRY—3 cr. (2 and 3)

A study of the theory of orthographic projection and its application to the graphical solution of three-dimensional space problems. A wide variety of practical problems are solved including problems dealing with points, lines, planes, single curved surfaces, and double curved surfaces. *Prerequisite:* DD 106

DD 305—KINEMATICS OF MACHINES—2 cr. (1 and 3)

A study of cams, linkages, and related mechanisms. The determination of velocities and accelerations in simple machines. A comprehensive study of toothed gearing, simple and planetary gear trains and miscellaneous mechanisms. *Prerequisite:* DD 106. Must parallel or follow Mech 303.

DD 306—MACHINE DESIGN—2 cr. (1 and 3)

A study of the various "factors" which influence the design engineer's decision upon the size, material, or shape of a machine part, and its location in a machine. Review of materials and processes from the standpoint of design. The design of various machine elements. A selected group of laboratory problems to bring out the student's judgment, initiative, and ingenuity, and to unite all his previous experience and studies and focus them towards the solution of each problem. *Prerequisite:* DD 305. Must parallel or follow Mech 304.

DD 460—Mechanical Vibrations—3 cr. (3 and 0)

A study of mechanical vibrations with emphasis upon the solution of practical problems in the design and construction of machinery and structures. The study includes free vibrations with and without damping; forced vibrations; systems of one, two, and many degrees of freedom; Raleigh's method applied to linear vibrations; Holzer's method applied to torsional vibrations; equivalent systems; measuring instruments; absorbers and dampers; the seismograph; self-excited vibrations; non-linear systems. *Prerequisite:* Mech 303 and 304.

DD 461—Photoelasticity—2 cr. (1 and 3)

A method of determining exact stresses and areas of stress concentration in complex shapes with both static and dynamic loading. The course includes study of the polariscope, development of fundamental relations, practice in the use of the photoelastic method, and finally original research on a project chosen by the instructor.

DD 501—Design Problems in Vibrations and Dynamics—3 cr. (3 and 0)

The application of vibration theory and dynamics to the design of machinery, critical speeds and inertia disturbances, equivalent systems, non-linear systems, isolators, damping devices, and vibration instruments. *Prerequisite:* Math 455 or approval of instructor.

ECONOMICS

Mr. Biggs, Mr. Trevillian, Mr. Davis, °Mr. Macaulay, Mr. Wood

Econ 201—Principles of Economics—3 cr. (3 and 0)

This course, with its continuation, Econ 202, furnishes a basic introduction to the science of economics. Beginning with an examination of fundamental concepts, the course deals with principles of production and exchange, business organization and combination, and principles of money, banking and credit. Special emphasis is given to current economic problems.

Econ 202—Principles of Economics—3 cr. (3 and 0)

Continuation of Econ 201 with special attention to the distribution of national income, value and price, foreign trade and exchange, economic problems of government such as taxation and government spending. Comparison is made of the economic structures of capitalism, socialism and communism. Consideration is given to current economic problems. *Prerequisite:* Econ. 201.

Econ 301—Labor Problems—3 cr. (3 and 0)

Studies in the development of present-day labor conflict and causes of industrial unrest. An analytical survey is made of such aspects as unemployment, low wages, industrial accidents and diseases, intervention of the State in behalf of the worker and the status of the worker in modern industrial society. Trade unionism and collective bargaining are contrasted with state legislation as devices for dealing with these problems. *Prerequisite:* Econ 201 and 202, or permission of the instructor. Mr. Wood

° On leave.

ECON 302—MONEY AND BANKING—3 cr. (3 and 0)

A survey of the financial organization of society. Consideration of monetary systems, foreign exchange, credit instruments and principal types of financial institutions. Problems of credit control, monetary stabilization, banking regulation and reform are given special emphasis. *Prerequisite:* Econ 201 and 202.

MR. TREVILLIAN

ECON 312—COMMERCIAL LAW—3 cr. (3 and 0)

An introduction to business law with primary attention given to contracts, agency and negotiable instruments. *Prerequisite:* Junior standing.

ECON 313—COMMERCIAL LAW—3 cr. (3 and 0)

Continuation of Econ 312 with emphasis on business organization, personal and real property, trade regulations and related topics. *Prerequisite:* Econ 312.

MR. WOOD

ECON 314—INTERMEDIATE ECONOMIC THEORY—3 cr. (3 and 0)

A study of the modern theories of value, price and distribution; the analytical tools of modern economics considered on an advanced level. *Prerequisite:* Econ 201 and 202.

MR. WOOD

ECON 401—ELEMENTARY ACCOUNTING—3 cr. (3 and 0)

Practice in handling real and nominal accounts, together with an introduction to the use of various types of books of original entry, statements of profit and loss, and balance sheets. The work of the course consists of lectures and problems. *Prerequisite:* Econ 201 and Junior standing.

ECON 412—INTERNATIONAL TRADE—3 cr. (3 and 0)

A study of the principles governing interregional and international trade. Attention is devoted to the pioneering philosophy of Adam Smith, the achievements of the classical economists, monopolistic competition, monetary nationalism, the balancing of payments between national economies, and the instruments of international cooperation. *Prerequisite:* Econ 201 and 202, or permission of the instructor.

MR. TREVILLIAN

EDUCATION

MR. WASHINGTON

MR. BOOKER, MR. BROCK, MR. MONROE, MR. WHITE, MR. BOWEN, MR. GENTRY, MR. KIRKLEY, MR. STRIBLING

EDUC 101—ORIENTATION—1 cr. (1 and 0)

The purpose of this course is to aid the freshman in adjusting himself to the college environment and his course of study.

EDUC 275—BUILDING PROGRAMS FOR ASSEMBLIES—3 cr. (3 and 0)

Present day methods and materials for a school assembly will be stressed. Original ideas, resources, and inexpensive materials will be given ample consideration. A list of free materials will be compiled. (Offered in summer session only.)

MISS HOLLEMAN

EDUC 301—INTRODUCTION TO EDUCATION—3 cr. (2 and 3)

This course includes the principles of Education, the aims, purposes, and objectives of Vocational Education; and the basic principles underlying the development of programs of instruction for the various groups of farm people.

MR. WHITE, MR. MONROE

EDUC 302—EDUCATIONAL PSYCHOLOGY—3 cr. (3 and 0)

A study of the nature, capacities, equipment, growth and development of the learner, the role of the environment, the nature and promotion of learning, the growth and maturity of personality and the evaluation of progress in education. MR. STRIBLING

EDUC 305—PRINCIPLES OF EDUCATION—3 cr. (3 and 0)

A study is made of the principles and practices of general and vocational education, characteristics of learning, knowledge and thinking ability, motor, moral, and appreciative reactions, choice of subjects and activities, influence of age, maturity and individual differences, appraising results of education. MR. GENTRY

EDUC 307—INDUSTRIAL EDUCATION LABORATORY—2 cr. (0 and 6)

The purpose of this course is to develop an industrial background for the teacher who is to have charge of a comprehensive industrial program in a community where an effort is being made to train young men and adult industrial workers in the individual skills of productive employment in industrial occupations. This includes woodworking, painting, metal working, and drafting, and also the interplay of skills between these as adapted to teaching situations. MR. BROCK

EDUC 308—INDUSTRIAL EDUCATION LABORATORY—2 cr. (0 and 6)

The student is required to select his projects, furnish materials, make preliminary plans and sketches for them, and have these approved by the instructor. At the completion of each project in the laboratory the student is carefully examined concerning the work he has done. MR. BROCK

EDUC 310—METHODS OF TRADE TEACHING—3 cr. (3 and 0)

This course is designed to give basic instructions to beginning teachers in trade work. The psychological factors of learning are discussed; individual differences; the different methods of teaching subject; the special methods used in teaching skills; classroom management and organization; grading of students and keeping of proper records and reports. (Offered in Summer Session only.) MR. BOOKER

EDUC 320—MODERN TEACHING PRACTICES—3 cr. (3 and 0)

Included is a study of significant educational trends. Emphasis will be placed on the school's resources of understanding and methods of meeting the needs of pupils in social development. Individual help will be given those teachers or groups of teachers for particular schools. (Offered in Summer Session only.) MISS HOLLEMAN

EDUC 321—TEACHING OF NUMBERS IN THE ELEMENTARY SCHOOL—3 cr. (3 and 0)

A study of methods to be used in developing number concepts basic to a sound understanding and use of numbers so that remedial work will be reduced to a minimum. It will include a study of materials, instructional use of testing, grade placement of topics, and a mastery of fundamentals. (Offered in Summer Session only.) MISS SKELTON

EDUC 322—TEACHING OF SPEECH IN THE ELEMENTARY SCHOOL— 3 cr. (3 and 0)

This course is a study of methods and materials used in teaching speech for effective communication as well as recognition and diagnosis of speech defects and simple corrective procedures. (Offered in Summer Session only.)

MISS SKELTON

EDUC 327—TEACHING OF SCIENCE IN THE ELEMENTARY SCHOOL—3 cr. (3 and 0)

This course is intended to provide teachers with basic background for the teaching of Science to children of the elementary school age. Nature study has received attention for a long time; but with the coming of the atomic age, children have become interested in many of their readings in newspapers, observations at moving picture shows, comments over the radio and television. Parents are often limited in their explanation and children ask their teachers for information. With the great amount of science at Clemson, teachers have opportunities for planning to introduce children to the study of science. (Offered in Summer Session only.) MISS SKELTON

EDUC 332—ORGANIZATION OF COURSES OF STUDY—3 cr. (3 and 0)

A study is made of purpose, scope, and use of job analysis in writing courses of study, writing and using instruction sheets for teaching, constructing achievement tests in industrial subjects. The student is required to select some subject and write a course of study based upon analyses of work covered under that subject. Prospective teachers are urged to select subjects which they expect to teach later. MR. BROCK

EDUC 356—PUBLIC EDUCATION IN THE UNITED STATES—3 cr. (3 and 0)

Public education in the United States with special emphasis on education in South Carolina affords a means of studying public education in other states in comparison with South Carolina's set-up. Present and emerging patterns will be reviewed. (Offered in Summer Session only.) MR. HAWTHORNE

EDUC 371—LANGUAGE ARTS IN THE ELEMENTARY SCHOOL—3 cr. (3 and 0)

This course will study ways to make the subject areas of language practical and effective tools for the elementary child's use. It will include reading, language usage, both oral and written, spelling, handwriting and literature. (Offered in Summer Session only.) MISS SKELTON

EDUC 372—ARTS AND CRAFTS FOR THE ELEMENTARY CHILD—3 cr. (3 and 0)

This course will deal with creative expression and appreciation, basic art principles and the use of various art materials and media. Especial emphasis will be placed on the integration of the arts with school and life experiences, which experiences include poster and finger painting, clay modeling, simple work with wood, paper and paperboard as craft activities. (Offered in Summer Session only.) MISS SKELTON

EDUC 381—METHODS AND MATERIALS OF TEACHING IN ELEMENTARY SCHOOLS—3 cr. (3 and 0)

This course gives particular attention to the latest acceptable methods in techniques for presenting materials of instruction, special techniques, observa-

tion and evaluation of teaching elementary school children. Library reading will supplement class periods. (Offered in Summer Session only.)

Miss Skelton

Educ 382—Directed Teaching in the Elementary School—6 cr. (0 and 18)

The equivalent of six weeks full-time observation, participation and evaluation with related activities make up this course. This course integrates all other phases of professional preparation. Materials and techniques are used. Conferences with regular and college teachers add to the student teacher's individual efforts. At least two-thirds of the student teacher's time is devoted to participation and actual teaching. (Offered in Summer Session only.)

Miss Skelton

Educ 401—Methods in Agricultural Education—3 cr. (3 and 0)

In this course, problems in teaching vocational agriculture in high school are considered. Some of the problems are as follows: organizing the teaching program; planning the course of study; making lesson plans; conducting field trips; farm shop work; Future Farmer work; supervised practice programs; and visual aids.

Mr. Monroe

Educ 402—Directed Teaching in Industrial Subjects—6 cr. (1 and 15)

A study is made of organizing class, selection of teaching materials, planning work, discipline, teaching methods, examinations and grading, cooperation with school personnel, records and reports, inventories, and upkeep of equipment. Each student teacher periodically is given an opportunity to teach some industrial subject. During his teaching period, he is responsible for his class just as if he were an employed teacher of that subject, including conforming to the high school schedule and registration period. *Prerequisite:* Senior standing and approval of instructor.

Mr. Brock

Educ 406—Directed Teaching—6 cr. (0 and 18)

The purpose of this course is to develop the ability of prospective teachers to organize courses in vocational agriculture based on community farm problems and practices, to conduct classes in accordance with sound educational principles of teaching, to gain experience in teaching, and to develop confidence in themselves as teachers. During the course, opportunity is given to observe and teach in high school departments of vocational agriculture, under the supervision of the local teacher and a member of the agricultural education faculty. The teaching of adult groups is given special consideration, as well as teaching farmers to use the cannery, shop and other community services. Some observation and practice teaching will be done near the college. Six weeks of directed teaching away from the campus will be required. All back work must be completed before this period. *Prerequisite:* Educ 401 and Educ 422.

Educ 412—Directed Teaching in High School Subjects—6 cr. (1 and 15)

Supervised practice teaching is given in the natural and physical sciences, mathematics, civics, etc., in order to develop skill in the best methods of teaching these subjects. (Enrollment is by individual approval and may be dependent upon observing the high school schedule including registration.)

A study is made of selection of subject-matter, planning work, methods of teaching, examinations, grading, discipline, cooperation with school personnel, records, and reports. *Prerequisite:* Senior standing and approval of instructor.

MR. GENTRY

EDUC 415—ADMINISTRATION OF VOCATIONAL AND OTHER SCHOOLS—3 cr. (3 and 0)

A course intended to acquaint the prospective teacher with modern administration technique in public education. Topics covered include: the public school curriculum, the administration of vocational departments, the duties of the principal and his relationship to the school board. Attention is also given to certain legal phases of school administration.

EDUC 420—EDUCATIONAL AND VOCATIONAL GUIDANCE—3 cr. (3 and 0)

A study is made of need, meaning, basic assumptions, aims and objectives of guidance; general methods of investigation; use of school records, explanatory activities, tests, estimates of personality traits, and self-analysis as methods of studying the individual; methods of study of occupations; guidance of students in choice of occupation; choice of training, and organization of guidance.

MR. MONROE

EDUC 421—COORDINATION METHODS IN VOCATIONAL EDUCATION—2 cr. (2 and 0)

A study is made of the major occupations in the United States and in South Carolina in order that prospective teachers may become informed as to possibilities in them and more intelligently give guidance to high school students. A survey is made of the youth problem, employment trends, general industrial conditions, kind of men industries want, survey of industrial plants, testing for mechanical aptitude, organizing occupations course in high school.

MR. BOOKER

EDUC 422—PROBLEMS IN ADULT EDUCATION—3 cr. (3 and 0)

This course should follow or be taken concurrently with Educ 404. Determining the needs, securing and organizing necessary instructional material, planning lessons; teaching and supervising adult farmers or special groups receive major emphasis. The use of surveys, visual aids, publicity, school canneries, shop and other community services is included. MR. STRIBLING

EDUC 424—TECHNIQUE OF TEACHING—3 cr. (3 and 0)

The purpose of this course is to acquaint the prospective teacher with the most significant problems in trade and industrial teaching, to propose solutions for these problems consistent with most authoritative information available. The course covers methods of teaching mathematics, science and other appropriate subject-matter; organizing classes; selection of equipment and tools; ways of securing materials and supplies for school shop; introducing, financing, and advertising a shop program; methods of teaching; and discipline.

MR. BROCK

EDUC 431—METHODS IN CONSERVATION EDUCATION—3 cr. (3 and 0)

Student teachers will study various techniques appropriate to teaching conservation in the public schools. Emphasis will be placed upon the individual

farm home, private and public grounds, and buildings including schools, churches, forests, orchards, and flower gardens. Problems and projects, individual group, will be utilized. The coordination of elementary, high school, young farmer, and other efforts in soil and forest conservation will be basic. (Offered in Summer Session only.) MISS HOLLEMAN, MR. KIRKLEY

EDUC 442—TRADE COMPETENCY TESTING—3 cr. (3 and 0)

This course is especially designed for trade teachers who have assisted in making trade tests for S. C. Certification program. Teachers who expect to assist in making trade tests are also urged to enroll in this course. The course will be devoted to revising present trade tests and developing tests in new fields. (Offered in Summer Session only.)

EDUC 446—SHOP PLANNING AND LAYOUT—3 cr. (3 and 0)

This course is designed for shop teachers, coordinators, local supervisors, department heads, and directors. The content will cover the actual planning of unit shop and general shops for schools giving vocational trade and industrial art courses, including machine layouts for various kinds of shops in order to make instruction effective. Emphasis will be placed on all aspects of shop organization and management. (Offered in Summer Session only.)

MR. BOOKER, MR. BROCK

EDUC 451—PROBLEMS IN VOCATIONAL EDUCATION—3 cr. (3 and 0)

The expanding program of vocational education under the George-Barden Act and problems on national, state and local levels are discussed. Major specific problems involved in unit trade programs, out-of-school youth, selection and training of teachers, veterans training and others will be covered. (Offered in Summer Session only.) MR. BOOKER

EDUC 452—CHILD PSYCHOLOGY—3 cr. (3 and 0)

A study of child growth and development as related to the problems of teaching, cultural factors in development, physical and mental growth, behavior, growth of meanings, play emotions, character development and personality, learning and the educative process. Readings, discussions and special reports. (Offered in Summer Session only.)

EDUC 453—CHILD GROWTH AND DEVELOPMENT—3 cr. (3 and 0)

Child growth and development as related to the problems of teaching, cultural factors in developments, physical and mental growth, behavior, growth of meanings, play emotions, character development and personality, learning and the educative process. Readings, discussions and special reports. A continuation of Educ 452. (Offered in Summer Session only.) MR. HAWTHORNE

EDUC 458—HEALTH EDUCATION—3 cr. (3 and 0)

The purpose of this course is to provide prospective teachers with information which is needed in order that they may cooperate effectively with public health agencies in the promotion of improvement in the health of school pupils. Emphasis is placed on problems of sanitation, nutrition, personal hygiene, health records, and immunization. A study of safety practices is also included. MR. GENTRY

EDUC 461—CURRICULUM DEVELOPMENT IN THE ELEMENTARY SCHOOL—3 cr. (3 and 0)

This course is an analysis and evaluation of the newer practices in the elementary school. Time will be given individuals or groups desiring to work on individual problems as related to their curriculum. MISS HOLLEMAN

EDUC 463—ADVANCED CONSERVATION EDUCATION—3 cr. (3 and 0)

The broader aspects of Conservation Education as applied to soil, water, forests, and other natural resources will be considered in this course. Persons who have administrative responsibilities in extending the study of Conservation may select an individual problem which may be investigated and a special report submitted if graduate credit in this course is desired. The general course involves historical, geographical, and national conservation problems. National Agencies which participate in the promotion of Conservation Education may be called upon. The United States Office of Education and the Soil Conservation Service of the United States Department of Agriculture will be cited if helpful in this field. Representatives may visit with the classes and lead specific discussions. (Offered in Summer Session only.) MR. KIRKLEY

EDUC 494—SCHOOL AND COMMUNITY RELATIONSHIPS—3 cr. (3 and 0)

In this course attention is directed to the necessity of community and school people understanding the interdependence of each upon the other. Special attention is directed to the educational implications based on local interrelationships and understandings. (Offered in Summer Session only.)

MR. HAWTHORNE

EDUC 496—PUBLIC AND INDUSTRIAL RELATIONS FOR VOCATIONAL TEACHERS AND SUPERVISORS—3 cr. (3 and 0)

This course is to give vocational teachers the techniques and methods of effective public and industrial relations which will contribute to the understanding and cooperation of labor, business, professional and industrial groups with the school program. The major topics to be emphasized in the discussions are: importance and nature of public relations in the school; establishing the structure for effective public relations in school; methods of cooperating with industrial, business and professional groups; school personnel service, placement and followup of vocational students; use of school papers, newspapers, radio and television as public relations mediums; dealing with organized and unorganized labor; cooperation of school in apprentice training; trade extension classes and development of courses by the school to meet community needs. (Offered in Summer Session only.)

EDUC 497—AUDIO-VISUAL AIDS IN EDUCATION—3 cr. (3 and 0)

The purpose of this course is to provide opportunities for study and use of moving pictures, film strips, cameras, photographs, charts, maps, globes, recording and sound devices, *X*-rays, radio, and other devices for preparing material and for teaching. MR. BROCK

EDUC 501—RECENT DEVELOPMENTS IN THE TECHNOLOGY OF AGRICULTURE—3 cr. (2 and 3)

Educ 502—Recent Developments in the Technology of Agriculture—3 cr. (2 and 3)

Educ 503—Advanced Methods in Teaching—3 cr. (3 and 0)

Educ 504—Special Problems in Teaching Vocational Agriculture—3 cr. (2 and 3)

Educ 505—Occupational Guidance and Placement—3 cr. (3 and 0)

Educ 506—History and Philosophy of Education—3 cr. (3 and 0)

Educ 508—Educational Tests and Measurements—3 cr. (3 and 0)

Educ 509—Analysis of the Individual—3 cr. (3 and 0)

Educ 511—Public School Administration (Finance)—3 cr. (3 and 0)

Educ 513—Educational and Occupational Information—3 cr. (3 and 0)

Educ 515—Advanced Methods of Teaching Farm Mechanics—3 cr. (3 and 0)

Educ 516—History and Philosophy of Vocational Education—3 cr. (3 and 0) (Offered in Summer Session only.)

Educ 517—Audio-Visual Aids in Teaching—3 cr. (2 and 3)

Educ 518—Organization and Administration of Elementary School—3 cr. (3 and 0) (Offered in Summer Session only.)

Educ 520—Teaching Young Farmers—3 cr. (3 and 0)

Educ 521—Adult Education Development and Administration—3 cr. (3 and 0)

Educ 525—Supervision of Student Teaching—3 cr. (3 and 0)

Educ 530—Techniques of Supervision—The Public Schools—3 cr. (3 and 0) (Offered in Summer Session only.)

Educ 561—Administration and Supervision of Vocational Education—3 cr. (3 and 0)

Educ 591—Introduction to Research in Education—3 cr.

Educ 592—Research in Agricultural Education—3 cr.

Educ 594—Research in Education—3 cr.

Educ 596—Research in Industrial Education—3 cr.

ELECTRICAL ENGINEERING

MR. THURSTON

MR. TINGLEY, MR. ADAMS, MR. LONG, MR. POE, MR. BALL, MR. GILES, MR., GOODIN, MR. JONES, MR. KERSEY

EE 214—ELECTRIC CIRCUITS AND FIELDS—3 cr. (3 and 0)

An introductory course in the fundamental theory of electric and magnetic circuits and fields. *Prerequisite:* Math 204 and Phys 214 and 216 or enrollment in Math 204 and Phys 214 and 216.

EE 303—BASIC ELECTRICITY—4 cr. (3 and 3)

An elementary course in electric circuits, machinery, and electronics, planned for students in Industrial Education. *Prerequisite:* Math 104 and Phys 202 and 204.

EE 305—ELECTRIC CIRCUITS AND MACHINES—4 cr. (3 and 3)

An elementary course in circuits and machines, with examples from industry to illustrate the theory. Planned for Agricultural Engineering, Ceramic Engineering and Civil Engineering students. *Prerequisite:* Math 204 and Phys 212 and 214.

EE 307 BASIC ELECTRICAL ENGINEERING—3 cr. (3 and 0)

A course in electrical engineering for students who need a sound background in the subject, but who are not planning to specialize in electrical engineering. The first term includes a study of d-c and a-c circuits, magnetic phenomena, and principles of basic machinery. *Prerequisite:* Math 204 and Phys 212 and 214.

EE 308—BASIC ELECTRICAL ENGINEERING—3 cr. (3 and 0)

A continuation of EE 307. Topics include a more complete study of rotating machinery, basic electromechanical control system, instrumentation, and fundamentals of electronics. *Prerequisite:* EE 307.

EE 309—ELECTRICAL ENGINEERING LABORATORY—1 cr. (0 and 3)

A laboratory course designed to accompany EE 307. *Prerequisite:* EE 307 or enrollment in EE 307.

EE 310—ELECTRICAL ENGINEERING LABORATORY—1 cr. (0 and 3)

A laboratory course designed to accompany EE 308. *Prerequisite:* EE 308 or enrollment in EE 308.

EE 311—DIRECT-CURRENT MACHINERY—4 cr. (3 and 3)

The theory, construction, and operating characteristics of direct generators, motors and control equipment, accompanied by a coordinated series of laboratory tests. *Prerequisite:* EE 214.

EE 313—BASIC ELECTRICAL MEASUREMENTS—3 cr. (2 and 3)

Principles of Electrical Measurements. Use of various types of indicating instruments with emphasis upon precision of measurement, and how to minimize the effects of unavoidable errors. *Prerequisite:* EE 214.

EE 315—ALTERNATING-CURRENT CIRCUITS—3 cr. (3 and 0)

A comprehensive study of alternating-current fundamentals. Use of the vector algebra method of solution of circuit problems. *Prerequisite:* EE 214.

EE 316—ALTERNATING-CURRENT CIRCUITS—4 cr. (3 and 3)

A continuation of EE 315 including the solution of problems involving non-sinusoidal currents, coupled circuits and balanced and unbalanced polyphase systems. Coordinated laboratory experiments included. *Prerequisite:* EE 315.

EE 320—ELECTRONICS—4 cr. (3 and 3)

An introduction to electron tubes and circuits. Embraces thermionic emission, vacuum and gas filled tubes, photo-sensitive devices, cathode-ray tubes and rectifiers. Includes laboratory investigations and demonstrations. *Prerequisite:* EE 315; and enrollment in EE 316.

EE 405—ENGINEERING ANALYSIS—1 cr. (0 and 3)

The application of engineering principles and methods to the study of typical problems that arise in the various fields of electrical engineering. *Prerequisite:* EE 320 and credit for or enrollment in EE 411.

EE 406—ENGINEERING ANALYSIS—1 cr. (0 and 3)

A continuation of EE 405. *Prerequisite:* EE 405.

EE 411—ALTERNATING-CURRENT MACHINERY—5 cr. (3 and 6)

The application of fundamental circuit theory to alternating-current machinery. Study of the construction, theory, and operating characteristics of transformers and synchronous generators. *Prerequisite:* EE 311, 316.

EE 412—ALTERNATING-CURRENT MACHINERY—4 cr. (3 and 3)

A continuation of EE 411 covering the theory, operating characteristics and industrial applications of synchronous motors, induction motors, and single-phase motors. *Prerequisite:* EE 411.

EE 415—ADVANCED CIRCUITS—3 cr. (3 and 0)

A continuation of EE 316 embracing studies of transmission line calculations, electric filters, symmetrical components and power short-circuit calculations. *Prerequisite:* EE 316.

EE 422—ELECTRIC DISTRIBUTION—2 cr. (2 and 0)

Technical and economic features of electrical power distribution systems for urban and rural areas. Includes reference studies. *Prerequisite:* EE 311, 316 and enrollment in EE 411.

EE 425—ELECTRIC TRANSIENTS—3 cr. (3 and 0)

A course covering the physical phenomena and mathematical analysis of linear electric circuits in the transient state. Both the classical and Laplace—transform methods are used. *Prerequisite:* EE 316, Math 306 and enrollment or credit for EE 411.

EE 427—ADVANCED A.C. MACHINERY—3 cr. (3 and 0)

Supplementary to EE 411 and EE 412 and covering special and more complex features of power equipment. Planned for Electrical Engineering students electing Electric Power engineering. *Prerequisite:* EE 411, and enrollment in or credit for EE 412.

EE 431—RADIO COMMUNICATION—4 cr. (3 and 3)

A study of the component circuits involved in radio communication systems; audio and radio frequency amplifiers, detectors, oscillators, amplitude modulation systems, power supplies and transmitter and receiver circuits. *Prerequisite:* EE 316, 320, and enrollment in EE 415.

EE 432—RADIO COMMUNICATION—4 cr. (3 and 3)

A continuation of EE 431. Includes frequency modulation, antennas and radio frequency transmission lines, ultra high frequency oscillators and detectors, and elementary acoustics and sound systems. *Prerequisite:* EE 431.

EE 434—INDUSTRIAL ELECTRONIC CONTROLS—3 cr. (2 and 3)

The theory and application of electronics to industrial control equipment. Includes fundamentals of servo-mechanisms, speed and voltage regulators, power rectifiers, high frequency heating, photo-electric control, *X*-ray control, etc. *Prerequisite:* EE 308 and EE 310 or 411.

EE 436—RADIATION AND WAVE PROPAGATION—3 cr. (3 and 0)

An advanced study of electric fields, vector analysis, Maxwell's equations, wave guides, radiation, antennas and propagation of waves in space. *Prerequisite:* EE 431.

EE 501—ADVANCED ELECTRIC TRANSIENTS—3 cr. (2 and 3)

EE 511—ELECTRIC POWER STATIONS—3 cr. (3 and 0)

EE 520—ULTRA-HIGH FREQUENCY TECHNIQUES—4 cr. (3 and 3)

EE 521—RADIATION AND WAVE PROPAGATION—3 cr. (3 and 0)

EE 591—RESEARCH—3 cr.

EE 592—RESEARCH—3 cr.

ENGLISH

MR. COX

MR. C. B. GREEN, MR. J. C. GREEN, MR. KINARD, MR. LANE, MR. OWINGS, MR. TAYLOR, MR. MACINTOSH, MR. WILSON, MR. BAIR, *MR. BENNETT, MR. CASKEY, MR. FELDER, *MR. GOLDGAR, MR. HOLT, MR. MCGEE, MR. PURSER, MR. WATSON, MR. WINTER, MR. ABEL

ENGL 100—REMEDIAL ENGLISH—Non-credit (3 and 0)

A refresher course for students failing the placement test for English 101; a thorough review of grammar, punctuation, and sentence structure with drill in general correctness.

* On leave.

ENGL 101—COMPOSITION AND LITERATURE—3 cr. (3 and 0)

A course intended to train the student in correct and effective expression. *Prerequisite:* Satisfactory score on the English placement test or successful completion of Engl 100.

ENGL 102—COMPOSITION AND LITERATURE—3 cr. (3 and 0)

A continuation of the work of English 101 with special attention to longer pieces of expository writing. *Prerequisite:* Engl 101.

ENGL 203—A SURVEY OF ENGLISH LITERATURE—3 cr. (3 and 0)

A study of the chief authors and works in English literature from *Beowulf* to the beginning of the Romantic movement. *Prerequisite:* Engl 102.

ENGL 204—A SURVEY OF ENGLISH LITERATURE—3 cr. (3 and 0)

A continuation of English 203 including a study of the chief authors of the Romantic and Victorian periods. *Prerequisite:* Engl 102.

ENGL 300—ENGLISH AT WORK—1 to 4 cr.

A study of the duties and responsibilities assumed by students who edit uncensored publications. Professional journalists and other qualified individuals from the campus and elsewhere lead the discussions and offer constructive criticism. As often as practicable, the most recent issue of a student publication is selected for discussion. Enrollment is limited to staff members of student publications. Extra credits by approval of Faculty Adviser only. *Prerequisite:* Engl 102. MR. LANE

ENGL 301—PUBLIC SPEAKING—3 cr. (3 and 0)

A course of practical training in public speaking; the improvement of diction, voice, and platform presence; an introduction to parliamentary procedure; practice in writing and delivering short speeches; attention to the factors of communication: speaking, listening, reading, and writing. *Prerequisite:* Engl 203 and 204.

ENGL 401—ADVANCED COMPOSITION—3 cr. (3 and 0)

A writing course for students who wish additional exercise in writing under supervision. Following minimum instruction and exercise in the basic types of writing—narration, description, and exposition— the course becomes a laboratory, with each student undertaking writing projects according to his interests. Some attention is given to reports, business letters, and research methods and materials. Students majoring in English minimize technical aspects of writing and concentrate upon the essay. Weekly papers and some longer exercises. Spring term only. Enrollment limited to twelve. *Prerequisite:* English 203 and 204.

ENGL 405—SHAKESPEARE—3 cr. (3 and 0)

A course intended to give the student a comprehensive acquaintance with Shakespeare's plays and some understanding of his development as a dramatist. *Prerequisite:* Engl 203 and 204. MR. TAYLOR

ENGL 406—SHAKESPEARE—3 cr. (3 and 0)

A continuation of Engl 405. *Prerequisite:* Engl 203 and 204. MR. TAYLOR

ENGL 409—CHAUCER—3 cr. (3 and 0)

A study of Chaucer as an artist, beginning with a reading of the " Prologue" for historical and linguistic orientation. The *Canterbury Tales, House of Fame,* and *Parliament of Fowls* are studied as art forms. *Prerequisite:* Engl 203 and 204. MR. OWINGS

ENGL 415—INTRODUCTION TO DRAMA—3 cr. (3 and 0)

A study of principles and progress of drama from Aeschylus to Ibsen, analysis of representative plays, writing of critical reports, practice in classroom reading of great scenes. *Prerequisite:* Engl 203 and 204. MR. LANE

ENGL 416—INTRODUCTION TO DRAMA—3 cr. (3 and 0)

A study of principles and progress of drama from Ibsen to the present days, analysis of representative plays, writing of critical reports, classroom reading of great scenes, and discussion of all important aspects of modern drama. *Prerequisite:* Engl 203 and 204. MR. LANE

ENGL 419—SELECTED MASTERPIECES—3 cr. (3 and 0)

A study of a variety of literary masterpieces, principally from English literature but including some world literature in English translation, with emphasis on acquaintance with and appreciation of individual outstanding works. *Prerequisite:* Engl 203 and 204. MR. KINARD

ENGL 420—SELECTED MASTERPIECES—3 cr. (3 and 0)

A continuation of English 419 using different selections. *Prerequisite:* Engl 203 and 204. MR. KINARD

ENGL 423—AMERICAN LITERATURE—3 cr. (3 and 0)

A course intended to give the student a more thorough knowledge and a deeper appreciation of the literature of the United States; beginning with the earlier selections and outstanding authors, the study ends with the period immediately preceding the Civil War; special emphasis is given to Poe, Emerson, Hawthorne, and Melville. *Prerequisite:* Engl 203 and 204.

MR. J. C. GREEN

ENGL 424—AMERICAN LITERATURE—3 cr. (3 and 0)

A continuation of study from Whitman to the present with emphasis upon the literature of the South. *Prerequisite:* Engl 203 and 204.

MR. J. C. GREEN

ENGL 425—THE ROMANTIC REVIVAL—3 cr. (3 and 0)

A study of the rise of Romanticism in English Literature; an evaluation of the contribution of the Eighteenth Century forerunners, followed by a study of Wordsworth, Coleridge, and Scott. *Prerequisite:* Engl 203 and 204.

MR. OWINGS

ENGL 426—THE ROMANTIC REVIVAL—3 cr. (3 and 0)

Continuation of the work of English 425 with particular emphasis on the poets: Byron, Shelley, and Keats and on the essayists: Hazlitt, Lamb, DeQuincey, and Leigh Hunt. *Prerequisite:* Engl 203 and 204. MR. OWINGS

ENGL 427—VICTORIAN LITERATURE—3 cr. (3 and 0)

A study of representative works from Tennyson, Browning, Carlyle, and John Stuart Mill, including some consideration of the intellectual, social, and political life of England in the first half of the nineteenth century. *Prerequisite:* Engl 203 and 204. MR. C. B. GREEN

ENGL 428—VICTORIAN LITERATURE—3 cr. (3 and 0)

A study of representative works from Arnold, Swinburne, Ruskin, and Pater, and an examination of some of the theories of life and art which influenced the writings of these men. *Prerequisite:* Engl 203 and 204.
MR. C. B. GREEN

ENGL 429—THE ENGLISH NOVEL—3 cr. (3 and 0)

A survey of major English novelists from Defoe to Scott. Selections vary from year to year, and students are allowed some latitude in their choice of readings. *Prerequisite:* Engl 203 and 204. MR. COX

ENGL 430—THE ENGLISH NOVEL—3 cr. (3 and 0)

A continuation of English 429, with emphasis upon English Victorian novelists. *Prerequisite:* Engl 203 and 204. MR. COX

ENGL 431—RESTORATION AND EIGHTEENTH CENTURY—3 cr. (3 and 0)
Readings in Dryden, Swift, Pope, and Dr. Johnson. MR. MACINTOSH

ENTOMOLOGY

MR. COCHRAN

MR. DUNAVAN MR. WARNHOFF

ENT 301—ELEMENTARY AND ECONOMIC ENTOMOLOGY—3 cr. (2 and 3)

A general introduction to Entomology with emphasis on anatomy, metamorphosis, life-histories of our most important species and methods of control. *Prerequisite:* Zool 101 and 103. MR. WARNHOFF

ENT 302—GENERAL ENTOMOLOGY—3 cr. (2 and 3)

This course designed especially for students who take major work in Entomology provides basic training in general phases of Entomology covering especially metamorphosis, classification, habits and characteristics of members of principal families of all orders of insects. Special attention is also given to technique of collecting and preserving insects. *Prerequisite:* Zool 101, 103 and Ent 301. MR. DUNAVAN

ENT 401—ECONOMIC ENTOMOLOGY—3 cr. (2 and 3)

This course affords training in identification and life-histories of injurious insects, their damage, and control measures. Common pests of the following are studied: corn, small grains, legume field crops, tobacco, sugar cane, stored grain and seed, livestock and man. *Prerequisite:* Zool 101, 103 and Ent 301.
MR. WARNHOFF

ENT 402—ECONOMIC ENTOMOLOGY—3 cr. (2 and 3)

An intensive study of insecticides and other control measures for insects. This is followed by detailed study of habits, life-histories and approved

control measures for insect pests of all fruit and vegetable crops. *Prerequisite:* Zool 101, 103 and Ent 301. MR. WARNHOFF

ENT 405—INSECT MORPHOLOGY—3 cr. (2 and 3)

A course especially arranged for students with major work in Entomology. A detailed study of external and internal anatomy of insects. *Prerequisite:* Ent 301 and Ent 302. MR. WARNHOFF

ENT 406—BEEKEEPING—3 cr. (2 and 3)

A study of practical beekeeping methods. Each student personally manages a hive of bees throughout the term. Special attention is given to bee behavior, spring and fall management and honey production methods. *Prerequisite:* Ent 301. MR. DUNAVAN

ENT 451—RESEARCH TECHNIQUES AND METHODS—2 cr. (1 and 3)

A study of approved methods of investigating entomological problems. Each student conducts a study of the life history of several insects. Laboratory techniques using insects for biological research are applied to a minor problem. MR. COCHRAN

ENT 452—TAXONOMIC ENTOMOLOGY—2 cr. (1 and 3)

A study of principles involved in the systematic classification of insects with some attention to historical aspects including great taxonomists of the past. Intensive studies of generic characteristics of insects in several major families are made. *Prerequisite:* Zool 101, 103, Ent 301, and 302. MR. DUNAVAN

ENT 455—MEDICAL AND VETERINARY ENTOMOLOGY—3 cr. (2 and 3)

A course designed to study the insects and their arthropod relatives which are of considerable economic importance in their effect on man and animals. MR. WARNHOFF

ENT 456—PARASITOLOGY—3 cr. (2 and 3)

Designed to give technical training in parasites affecting man and domestic animals. Life cycles, vectors, and practical controls are emphasized. MR. WARNHOFF

ENT 460—SEMINAR—2 cr. (2 and 0)

Students review the principal journals pertaining to insects and related animals; also review the lives and activities of prominent pioneer entomologists. *Prerequisite:* Zool 101, 103 and 301; Ent 301 and 302. MR. COCHRAN

ENT 505—ADVANCED MORPHOLOGY—3 cr. (2 and 3)

ENT 552—ADVANCED SYSTEMATIC ENTOMOLOGY—2 cr. (0 and 6)

ENT 556—MEDICAL ENTOMOLOGY—3 cr. (2 and 3)

ENT 561—INSECT TOXICOLOGY—3 cr. (2 and 3)

ENT 562—INSECT PHYSIOLOGY—3 cr. (2 and 3)

ENT 591—RESEARCH—3 cr.

ENT 592—RESEARCH—3 cr.

FORESTRY

MR. LEHOTSKY

FOR 201, 203—INTRODUCTION TO FORESTRY—3 cr. (2 and 3)

A general introduction to and survey of the field of forestry. An introductory course for pre-forestry students, and a survey of the field of regional, national and world forestry problems arranged for non-foresters. The forest resource and its place in human welfare.

FOR 202, 204—DENDROLOGY—4 cr. (3 and 3)

The identification of the commercially important trees of the United States including nomenclature; family, genus and species characteristics; range and distribution. Field identification of the trees native to South Carolina and of commonly planted exotics. *Prerequisite:* Bot 101 and 103.

FOR 205, 207—FARM FORESTRY—3 cr. (2 and 3)

A study of the general problems dealing with the scientific management of small forest areas. Tree identification, tree measurements, forest measurements, forest products, silvicultural management of the important forest types of the region, intermediate and final cuttings, plantations, marketing of forest products and forest protection. Laboratory and field work on college forest lands and forestry operations. *Prerequisite:* Bot 101 and 103.

FRENCH

MR. DEAN *MR. HARDEE

FR 101—ELEMENTARY FRENCH—3 cr. (3 and 0)

A course for beginners, in which through conversation, composition, and dictation the fundamentals of the language are taught and a foundation provided for further study and the eventual ability to read and speak the language. MR. DEAN

FR 102—ELEMENTARY FRENCH—3 cr. (3 and 0)

A continuation of Fr 101, in which a reader is also used. MR. DEAN

FR 201—INTERMEDIATE FRENCH—3 cr. (3 and 0)

A short review of grammar, with conversation, composition, and dictation continued from Fr 102 and the beginning of more serious reading of French prose in short stories or novels. MR. DEAN

FR 202—INTERMEDIATE FRENCH—3 cr. (3 and 0)

While attention is paid to writing and speaking French, more stress is laid on the rapid reading of more difficult French prose than in the earlier courses. MR. DEAN

FR 301—ADVANCED FRENCH—3 cr. (3 and 0)

Rapid reading of difficult literary or scientific French prose. MR. DEAN

FR 302—ADVANCED FRENCH—3 cr. (3 and 0)

A continuation of Fr 301, with selections being made to suit the needs of the students. MR. DEAN

* On leave.

GEOGRAPHY

MR. CARPENTER

GEOG 301—ECONOMIC GEOGRAPHY—3 cr. (3 and 0)

A study of the geographic conditions fundamental to the world's resources—agricultural, mineral, and industrial, and the conditions which affect their production, exchange, and consumption. A special study is made of the South. *Prerequisite:* Junior standing.

GEOG 302—POLITICAL GEOGRAPHY—3 cr. (3 and 0)

A study of the geopolitical pattern of great powers, nations and dependencies; their territorial structure, resources, and connections. An examination of the principles of political geography, their application to current history, from an American geographical viewpoint. *Prerequisite:* Junior standing.

GEOLOGY AND MINERALOGY

MR. BROWN

GEOL 201—AGRICULTURAL GEOLOGY—3 cr. (3 and 0)

An introduction to physical geology with emphasis on the application of geology to problems in agriculture.

GEOL 304—HISTORICAL GEOLOGY—3 cr. (3 and 0)

Evolution, both organic and inorganic, is traced from the beginning of the record up through the ages to the present.

GEOL 306—MINERALOGY—3 cr. (2 and 3)

In this course the student gains a working knowledge of crystallography and a comprehensive knowledge of determinative mineralogy. Identification of the minerals is based on their physical and chemical properties.

GEOL 307—OPTICAL MINERALOGY—3 cr. (2 and 3)

The purpose of this course is to enable the student to identify minerals under the microscope on the basis of their optical properties.

GEOL 406—ENGINEERING GEOLOGY—3 cr. (2 and 3)

This course is similar to Geol 201 except that progress is faster and emphasis is on the relationship of geology to engineering rather than to agriculture.

GERMAN

MR. RHYNE

GER 101—ELEMENTARY GERMAN—3 cr. (3 and 0)

A course for beginners, in which through conversation, composition and dictation the fundamentals of the language are taught and a foundation provided for further study and the eventual ability to read and speak the language.

Ger 102—Elementary German—3 cr. (3 and 0)

A continuation of Ger 101, in which a reader is also used.

Ger 201—Intermediate German—3 cr. (3 and 0)

A short review of grammar, with conversation, composition, and dictation continued from Ger 102 and the beginning of more serious reading of German prose in short stories or novels.

Ger 202—Intermediate German—3 cr. (3 and 0)

While attention is paid to writing and speaking German, more stress is laid on the rapid reading of more difficult German prose than in the earlier courses.

Ger 301—Advanced German—3 cr. (3 and 0)

Rapid reading of difficult literary or scientific German prose.

Ger 302—Advanced German—3 cr. (3 and 0)

A continuation of Ger 301, with selections being made to suit the needs of the students.

GOVERNMENT

Mr. Epting

Mr. Bolen, Mr. Crouch, Mr. Lander, Mr. Williams, Mr. Carpenter, Mr. Tuttle, Mr. Webb

Gov 101—American National Government—3 cr. (3 and 0)

A survey of the principles, structure, and functions of the national government of the United States. Not open to Juniors and Seniors.

Gov 301—American Government and Political Parties—3 cr. (3 and 0)

A study of the constitution; powers and functions of executive, legislative, and judicial branches; citizenship; expansion of governmental activities; relations to the states, and territories. A study of the nature, development, organization, and methods of political parties, and the conduct of elections. *Prerequisite:* Not open to those who have completed Gov 101.

Gov 302—State and Local Government—3 cr. (3 and 0)

An integrated study of American state and local government structural features and functions, and their legislative, administrative, and judicial processes. Mr. Epting

Gov 401—Comparative Government—3 cr. (3 and 0)

A study of the historical development of present-day political institutions and a comparison of the functioning of these institutions in the United States, Great Britain, Russia, Switzerland, and other countries. *Prerequisite:* Gov 101 and permission of the instructor. Mr. Bolen

Gov 403—International Relations—3 cr. (3 and 0)

To acquaint the student with current world movements and conditions, so that he may be able to think intelligently on the problems confronting our nation. *Prerequisite:* Senior standing. Mr. Crouch

HISTORY

MR. EPTING
MR. BOLEN, MR. LANDER, MR. WILLIAMS, MR. CARPENTER, MR. TUTTLE, MR. WEBB

HIST 101—AMERICAN HISTORY—3 cr. (3 and 0)

A survey of the political, economic, and social development of the American people from the period of discovery to the end of the Civil War.

HIST 102—AMERICAN HISTORY—3 cr. (3 and 0)

A survey of the political, economic and social development of the American people from the end of the Civil War to the present.

HIST 301—HISTORY OF THE UNITED STATES SINCE 1865—3 cr. (3 and 0)

An advanced study of the political, social, and economic development of the United States since the end of the Civil War. *Prerequisite:* Junior standing. Not open to students who have completed Hist 102.

HIST 303—HISTORY OF CIVILIZATION—3 cr. (3 and 0)

A study of the political, economic and social institutions, as well as the outstanding personalities of Western Civilization from ancient times to 1648. *Prerequisite:* Junior standing or permission of instructor. MR. BOLEN

HIST 304—HISTORY OF CIVILIZATION—3 cr. (3 and 0)

A study of the political, economic, and social conditions and institutions, as well as the outstanding personalities of Western Civilization from 1648 to the present. *Prerequisite:* Junior standing or permission of instructor. MR. BOLEN

HIST 306—AMERICAN BIOGRAPHY—3 cr. (3 and 0)

A study of political leaders of the United States with emphasis on the significance of leadership in United States history and critical appreciation of biographical writing. *Prerequisite:* Junior standing. MR. WEBB

HIST 307—A DIPLOMATIC HISTORY OF THE UNITED STATES—3 cr. (3 and 0)

A history of United States foreign relations from 1775 to date with emphasis being placed upon the directing forces, particularly public opinion, that have shaped American diplomatic policies. Also stressed are the causes and results of all foreign wars in which the United States has been engaged. *Prerequisite:* Junior standing. MR. LANDER

HIST 308—EUROPE SINCE 1918—3 cr. (3 and 0)

A history of Europe since the end of World War I with emphasis being placed upon the rise to power of the Communist, Fascist, and National Socialist regimes in Russia, Italy, and Germany, respectively. *Prerequisite:* Junior standing. MR. BOLEN

HIST 309—HISTORY OF ENGLAND—3 cr. (3 and 0)

A study of the economic, political, and social institutions of the English people from early times to the present. *Prerequisite:* Junior standing.
MR. BOLEN

HIST 311—HISTORY OF LATIN AMERICA—3 cr. (3 and 0)

A survey of the political, economic, social, and cultural development of Latin America. *Prerequisite:* Junior standing. MR. EPTING

HIST 315—CONSTITUTIONAL HISTORY OF THE U. S.—3 cr. (3 and 0)

A study designed to acquaint the student with the development of the constitution of the United States, and the changes which it has undergone, through the different interpretations of the Supreme Court. *Prerequisite:* Junior standing. MR. TUTTLE

HIST 401—HISTORY OF SOUTH CAROLINA—3 cr. (3 and 0)

A study of the political, economic and social conditions and institutions of South Carolina from 1670 up to the present.

A special feature is a study of the outstanding personalities and of the historical literature. *Prerequisite:* Junior or Senior standing or permission of instructor. MR. EPTING

HIST 403—HISTORY OF THE SOUTH TO 1865—3 cr. (3 and 0)

A study of the geography and climate of the South and the origins and development of political, economic, social, and cultural institutions. *Prerequisite:* Junior standing. MR. WILLIAMS

HIST 404—HISTORY OF THE SOUTH SINCE 1865—3 cr. (3 and 0)

A study of the economic and social changes in the South during the Reconstruction period and of trends in industrialization, agriculture, politics, race relations, and culture to the present. *Prerequisite:* Junior standing. MR. LANDER

HIST 405—THE AMERICAN FRONTIER—3 cr. (3 and 0)

A course dealing specifically with American expansion westward from the original colonies. This course considers the westward movement in respect to population, political, economic, social and cultural development; analyzes the process of national adjustments; and weighs the contributions of each succeeding period. It considers both the early West and the Trans-Mississippi West. *Prerequisite:* Junior standing. MR. WILLIAMS

HIST 406—HISTORY OF MANUFACTURING IN THE UNITED STATES—3 cr. (3 and 0)

A study of the sustained growth of manufacturing in the United States since the Revolutionary War. Particular emphasis is placed on the history of major basic industries. The course considers the economic, political, and social effects of industrial growth on American history. *Prerequisite:* Junior standing, or permission of the instructor. MR. WILLIAMS

HORTICULTURE

MR. MUSSER

MR. HAMILTON, MR. SEFICK, MR. SENN, MR. THODE, MR. VAN BLARICOM

HORT 201—GENERAL HORTICULTURE—3 cr. (2 and 3)

A study of the fundamental plant processes, the influence of light, temperature, water and nutrients upon vegetative growth and reproduction of horti-

cultural crops. Production practices, harvesting, storage and marketing of the principal fruit, vegetable and ornamental crops are discussed with demonstrations and practice in greenhouse and orchard. *Prerequisite:* Bot 101, 103 and Chem 101. MR. SEFICK, MR. SENN

HORT 301—PRINCIPLES OF VEGETABLE PRODUCTION—3 cr. (2 and 3)

A study of the general principles of vegetable growing and handling. Phases receiving special emphasis are: economic importance, producing areas, management practices, plant forcing, cultural practices, irrigation, quality factors, harvesting, grading, packing, storage, market inspection, transportation, refrigeration, exhibition, roadside marketing, and seed production. *Prerequisite:* Hort 201. MR. HAMILTON

HORT 305—PLANT PROPAGATION AND NURSERY MANAGEMENT—3 cr. (2 and 3)

A study of methods of propagation; time, manner, and material for making cuttings; temperature and media for rooting cuttings of ornamental trees, shrubs and flowering plants; propagating structures, soils, fertilizers, and management methods for commercial nurseries. Practical instruction given in field and greenhouse. *Prerequisite:* Hort 201. MR. THODE

HORT 306, 308—ELEMENTARY LANDSCAPE DESIGN—3 cr. (2 and 3)

A study of plant material used in landscape design; instruction in landscaping and developing home grounds and execution of design. MR. THODE

HORT 401, 403—LANDSCAPE DESIGN—3 cr. (2 and 3)

Instruction in the use of plant material used in landscaping homes, parks and small estates and designing of larger areas. Designs to be executed in detail. *Prerequisite:* Hort 306 and 308. MR. THODE

HORT 402, 404—GARDEN DESIGN—3 cr. (2 and 3)

Instruction in design of both formal and informal gardens; use of herbaceous plant material and execution of plans. *Prerequisite:* Hort 306 and 308. MR. THODE

HORT 405—NUT CULTURE AND SPRAYS—3 cr. (2 and 3)

Part I—Nut Culture—a study of production, harvesting and marketing of the principal nut crops with emphasis on the pecan.

Part II—Sprays and application equipment—a study of the properties of spray chemicals, their influence on plant functions, effectiveness in controlling pests of horticultural crops and methods of application. *Prerequisite:* Hort 201. MR. SEFICK

HORT 409—SEMINAR—1 cr. (1 and 0)

A study of recent research work on various phases of horticulture, methods of conducting investigations and preparation of report of investigations. MR. MUSSER AND STAFF

HORT 410—SEMINAR—1 cr. (1 and 0)

A continuation of Hort 409. MR. MUSSER AND STAFF

HORT 415—FLORICULTURE—3 cr. (2 and 3)

A study of greenhouse production of commercial flower crops, soils, fertilizers, greenhouse diseases and insects, flower crops (major crops: roses, carnations, chrysanthemums; minor crops: sweet peas, snapdragons, violets, calendula, asters, gardenia, poinsettia, bulbs in variety) to be grown on benches and as pot plants; marketing and costs of production. *Prerequisite:* Hort 201 and 305. MR. THODE

HORT 451—SYSTEMATIC POMOLOGY AND SMALL FRUIT CULTURE—3 cr. (2 and 3)

Part I—Systematic Pomology—A study of the structure of fruit plants—physiological characters; methods of work in systematic pomology; habitat, history, color, form, structure, flavor and use of fruits; judging and displaying fruits.

Part II—Small Fruit Culture—A study of varieties, soils, sites, culture, fertilizers, harvesting and preparation for marketing of grapes, strawberries, dewberries, blackberries, raspberries and other small fruits. *Prerequisite:* Hort 201. MR. MUSSER

HORT 452—COMMERCIAL POMOLOGY—3 cr. (2 and 3)

A study of fruit bud formation, rest period and water relations of fruit plants, soils, fruit setting; orchard soil management and responses of various fruits to fertilizers, principles of pruning, effect of climatic differences, freezing of tissues and means of avoiding injury, harvesting, transportation, and storage. *Prerequisite:* Hort 201. MR. MUSSER

HORT 455—BREEDING HORTICULTURAL CROPS—3 cr. (2 and 3)

A study of the principles and practices of plant breeding. The principal topics include: inheritance of characters, modes of reproduction, techniques of selfing and crossing, selection, hybridization, disease and insect resistance, application of biometrical analysis, and field plot technique. *Prerequisite:* Agron 302. MR. HAMILTON

HORT 456—TRUCK CROPS—3 cr. (2 and 3)

A detailed study of the principles and practices employed in the growing and marketing of truck crops. Emphasis is placed on plant characteristics, varieties, soils, fertilizers, harvesting, and preparation for market. *Prerequisite:* Hort 201. MR. HAMILTON

HORT 460—ADVANCED LANDSCAPE DESIGN—3 cr. (2 and 3)

A study of civic improvement, mill villages, public buildings, squares, parks, storm water control, water courses, lakes, lawns, drives, and walks; trees and shrubs and their requirements; study of finished problems in landscape design, original problems, field work and costs. *Prerequisite:* Hort 306, 308 and 401, 403. MR. THODE

HORT 464—FOOD PRESERVATION—3 cr. (2 and 3)

Theoretical background and fundamental processes of food preservation. The course includes modern canning technique for community and commercial canneries; frozen food preservation; study of important crops grown in South

Carolina suitable for canning; factors which influence the commercial operation of a cannery; causes of food spoiling; factors which influence quality packs; U. S. Standard grades for canned goods; and a study of jams, jellies and preserves, dehydration and pickle manufacturing. *Prerequisite:* Bact 301 and 303.

MR. VAN BLARICOM

HORT 466—RESEARCH METHODS—3 cr. (2 and 3)

A study of the development and changes in research methods which are valuable or of potential value in investigating horticultural problems. Students obtain practice in the use and maintenance of various research instruments and equipment. *Prerequisite:* Senior standing. MR. SENN

HORT 501—PROBLEMS IN SMALL FRUIT PRODUCTION—3 cr. (2 and 3)

HORT 503—ADVANCED VEGETABLE CROPS—3 cr. (3 and 0)

HORT 505—FOOD TECHNOLOGY—3 cr. (1 and 6)

HORT 507—ADVANCED POMOLOGY—3 cr. (2 and 3)

HORT 591—RESEARCH—3 cr.

HORT 592—RESEARCH—3 cr.

INDUSTRIAL ARTS

MR. MARSHALL MR. BROCK

IN AR 101—GENERAL WOODWORK—1 cr. (0 and 3)

A general course designed to teach the fundamental principles of woodworking. Tool processes, common to all woodworking trades, are stressed. Cabinet making is emphasized throughout the course, because of its universal interest and appeal.

IN AR 302—TEACHING INDUSTRIAL ARTS—2 cr. (1 and 3)

A course designed to give prospective teachers of Industrial Arts intensive practice in the use of hand woodworking tools, the object being to develop those skills necessary in demonstrating tool operations to first year high school students in woodwork. Practice teaching of the above subject is also given during the theory hour under the guidance of the instructor.

IN AR 303—INDUSTRIAL ARTS—2 cr. (1 and 3)

A course including project construction, finishing, care of shop tools and equipment, characteristics of woods, fasteners, finishing materials, glues, and the shop budget.

IN AR 304—SCHOOL SHOP MANAGEMENT—2 cr. (1 and 3)

An advanced course in machine woodworking for teachers. Adjusting, care, and appreciation of woodworking machines. Safety first in operation is stressed. Good furniture construction, finishing and finishing materials and their application by both hand and spray technique. Planning and equipping the ideal school shop along with the shop budget is stressed.

In Ar 306—Industrial Arts—3 cr. (2 and 3)

Introduction to elementary woodworking principles and machine operation. Construction of visual aid projects for use in both primary and elementary school rooms. Demonstration of repair and refinish to selected article of schoolroom furniture. *Prerequisite:* Approval of instructor.

In Ar 307—Industrial Arts—3 cr. (1 and 6)

At least three projects adapted to visual aid instruction in public school education. Projects to require elementary knowledge of woodworking principles and machines. Distinguishing features of period furniture to enable to identify styles of Chippendale, Sheraton, etc. Introduction to principles of woodturning. *Prerequisite:* In Ar 306.

INDUSTRIAL ENGINEERING

Mr. Freeman

Mr. Marshall, Mr. Brock, Mr. Stenstrom, Mr. Couch, Mr. Meeks

In En 101—Manufacturing Processes—2 cr. (0 and 6)

A general course in industrial processes and materials for engineering students giving them an insight into materials and methods employed in the engineering profession. This course covers briefly the following: pattern making, foundry, heat treating, sheet metal layout, electric and gas welding. The work is handled through lecture, demonstration and practical work.

In En 201—Metal Processes—2 cr. (1 and 3)

A study of metal cutting processes, including the possibilities and limitations in machine tool operation, job order, lot intermittent and mass production principles. The work is covered by lecture and shop practice with the fundamental machine and hand tools. *Prerequisite:* DD 106, Math 103, In En 101.

In En 202—Wood Processes—2 cr. (0 and 6)

A study of the most suitable materials, hand and machine tools used in the construction of wood patterns. The fundamental processes involved in the fashioning of typical patterns, keeping in mind the relations of the allied department, particularly those of the foundry.

In En 302—Welding—2 cr. (1 and 3)

A study of the identification and weldability of metals; the equipment used; safe practices; welding materials and supplies; pre-treatment and after-treatment of welds; jigs and fixtures; inspection and testing; the cost of welding. *Prerequisite:* In En 101.

In En 303—Job Evaluation and Wage Incentives—3 cr. (3 and 0)

An analysis of the mental and physical requirements, responsibilities and working conditions of jobs and the several systems of determining the relative worth of jobs including wage determination. Job evaluation plans and wage incentive systems installed and their maintenance are also studied. *Prerequisite:* Junior or Senior standing.

IN EN 304—MOTION AND TIME STUDY—3 cr. (2 and 3)

The scientific analysis of work methods, human motion, and time standards. Examples and projects are chosen from a wide variety of industries to acquaint the student with the general application of Motion and Time Study. *Prerequisite:* Junior or Senior standing.

IN EN 402—METALLURGY—3 cr. (2 and 3)

A general course in the fundamentals of engineering physical metallurgy. The course is designed to give students in other fields of engineering a general working knowledge of problems involving ferrous and nonferrous physical metallurgy. *Prerequisite:* Chem 101 and 102.

MATHEMATICS

MR. SHELDON

MR. BREWSTER, MR. HIND, MR. MILLER, MR. BELL, MR. COKER, MR. KELLY, MR. KIRKWOOD, MR. LAGRONE, MR. STANLEY, MR. ARMSTRONG, MR. BROWN, MR. HARDEN, MR. JOHNSON, MR. PARK, MR. STUART, MR. SULLIVAN

MATH 100—REMEDIAL MATHEMATICS—Non-credit (5 and 0)

Required of all entering freshmen who fail to make a satisfactory grade on the placement examination in mathematics.

An intensified review of the basic principles of high school mathematics which are prerequisite for the study of college mathematics.

MATH 101—COLLEGE ALGEBRA—3 cr. (3 and 0)

A study of elementary college algebra including the fundamental operations, factoring and fractions, equations, ratio and proportion, functions and their graphs, exponents, radicals, quadratic equations. *Prerequisite:* A satisfactory grade on the placement examination.

MATH 102—TRIGONOMETRY (PLANE)—3 cr. (3 and 0)

A study of the trigonometric functions, the solution of right and oblique triangles, trigonometric identities, trigonometric equations, graphs of the trigonometric functions, inverse trigonometric functions. *Prerequisite:* A satisfactory grade on the placement examination.

MATH 103—FRESHMAN MATHEMATICS—5 cr. (5 and 0)

Six weeks of college algebra followed by twelve weeks of plane trigonometry. *Prerequisite:* A satisfactory grade on the placement examination.

MATH 104—FRESHMAN MATHEMATICS—5 cr. (5 and 0)

A further six weeks study of college algebra followed by twelve weeks of plane analytic geometry. *Prerequisite:* Math 103.

MATH 203—DIFFERENTIAL CALCULUS—5 cr. (5 and 0)

A study of differentiation and its application to maxima and minima problems, curve tracing, curvature, rates, differentials. *Prerequisite:* Math 104.

MATH 204—INTEGRAL CALCULUS—5 cr. (5 and 0)

A study of integration and its application to areas, volumes, lengths of curves, multiple integration, engineering problems. *Prerequisite:* Math 203.

MATH 301—ADVANCED ALGEBRA—3 cr. (3 and 0)

An advanced treatment of ratio and proportion, variation, progressions, surds, imaginary quantities, equations, permutations, binomial and multinomial expansions, inequalities. *Prerequisite:* Math 104. MR. STANLEY

MATH 302—THEORY OF EQUATIONS—3 cr. (3 and 0)

A study of complex numbers, theorems on roots of polynomial equations, constructibility, approximations, determinants, matrices and symmetric functions. *Prerequisite:* Math 104. MR. ARMSTRONG

MATH 303—STATISTICS—3 cr. (3 and 0)

A study of graphs, frequency distributions, averages, measures of dispersion, moments, the normal curve, curve fitting, correlation, and index number. *Prerequisite:* Math 104. MR. SULLIVAN

MATH 304—STATISTICS—3 cr. (3 and 0)

A continuation of Math 303. The mathematical basis of statistics is emphasized in this course. The topics covered include the theory of probability, the binomial distribution, the Chi-square distribution, theory of sampling, reliability of statistical differences, sequential analysis. *Prerequisite:* Math 104. MR. SULLIVAN

MATH 305—INTERMEDIATE CALCULUS—3 cr. (3 and 0)

A short review of the theory of differentiation and integration followed by a study of parametric equations, polar equations, curvature, theorem of mean value, reduction formulas, series, expansion of functions, averages, hyperbolic functions, some solid analytic geometry, partial differentiation, multiple integrals. *Prerequisite:* Math 204. MR. BREWSTER

MATH 306—ORDINARY DIFFERENTIAL EQUATIONS—3 cr. (3 and 0)

Differential equations of the first order and first degree, equations of the first order but not of the first degree, linear differential equations, applications to physics and engineering. *Prerequisite:* Math 204. MR. MILLER, MR. KIRKWOOD

MATH 307—ELEMENTARY PARTIAL DIFFERENTIAL EQUATIONS—3 cr. (3 and 0)

Partial differentiation and space geometry, origins of partial differential equations, linear and non-linear equations of the first order, Fourier series, linear equations of the second and higher orders. *Prerequisite:* Math 306. MR. KELLY

MATH 401—COLLEGE GEOMETRY—3 cr. (3 and 0)

Theorems and concepts more advanced than those of high-school geometry. Detailed treatment of the various properties of the triangle, including the notable points, lines, and circles associated with it. *Prerequisite:* Math 104. MR. HARDEN

MATH 451—VECTOR ANALYSIS—3 cr. (3 and 0)

A study of the algebra and calculus of vectors in two and three dimensions with applications to physics, geometry and engineering problems. *Prerequisite:* Math 305. MR. MILLER

MATH 453—ADVANCED CALCULUS—3 cr. (3 and 0)

A more extensive study of the differential and integral calculus than is given in the intermediate course with emphasis on applications and an introduction to theoretical questions. Topics include: power series, partial differentiation, implicit functions, the definite integral. *Prerequisite:* Math 305. MR. COKER

MATH 454—ADVANCED CALCULUS—3 cr. (3 and 0)

A continuation of Math 453. Topics include: Gamma and Beta functions; line, surface, and space integrals; Bessel functions; partial differential equations; calculus of variations; introduction to functions of a complex variable. *Prerequisite:* Math 453. MR. COKER

MATH 455—ADVANCED MATHEMATICS FOR ENGINEERS—3 cr. (3 and 0)

A study of advanced mathematical topics pertinent to the field of engineering. Physical applications are stressed by the presentation of problems relating to the several branches of engineering. Topics include ordinary and partial differential equations, hyperbolic functions, infinite series, Fourier series, and Gamma and Bessel functions. *Prerequisite:* Math 306. MR. PARK

MATH 456—ADVANCED MATHEMATICS FOR ENGINEERS—3 cr. (3 and 0)

A continuation of Math 455. Further topics include functions of a complex variable, vector analysis, probability, and operational calculus. *Prerequisite:* Math 306. MR. PARK

MATH 501—PARTIAL DIFFERENTIAL EQUATIONS—3 cr. (3 and 0)

MATH 502—DETERMINANTS AND MATRICES—3 cr. (3 and 0)

MATH 503—THEORY OF FUNCTIONS OF COMPLEX VARIABLES—3 cr. (3 and 0)

MATH 504—THEORY OF FUNCTIONS OF COMPLEX VARIABLES—3 cr. (3 and 0)

MATH 591—RESEARCH—3 cr.

MATH 592—RESEARCH—3 cr.

MECHANICAL ENGINEERING

MR. COOK

MR. FERNOW, MR. LEWIS, MR. RAUSCH, MR. SAMS, MR. SCHILDHAUER, MR. WATSON, MR. EDWARDS, MR. SUTTON, MR. HUDSON, MR. PERRY

ME 211—MECHANICAL ENGINEERING—2 cr. (2 and 0)

A study of the fundamentals of steam power, boilers, fuels, combustion and auxiliary equipment, gas power, internal combustion engines, auxiliary apparatus and related equipment. *Prerequisite:* Math 103, 104 and enrollment in ME 213 or permission of the instructor.

ME 213—Engineering Problems—1 cr. (0 and 3)

This course is designed to develop neatness, self-confidence, and an analytical approach to the solution of engineering problems. A review of logarithms; fundamentals of the slide rule and its application to practical engineering problems. A wide variety of problems are presented, stressing fundamentals and the engineering method. *Prerequisite:* Math 103, 104.

ME 302—Elementary Thermodynamics—3 cr. (3 and 0)

Introduction to the fundamentals of thermodynamics. The First and Second Laws of Thermodynamics, concept of thermodynamic properties, processes, and cycles. Application of the fundamentals to appropriate equipment. (Designed for Civil and Agricultural Engineering students.) *Prerequisite:* Phys 211, 212; Math 204 or enrollment in Math 204.

ME 305—Engineering Thermodynamics—3 cr. (3 and 0)

Thermodynamics including gas laws, energy equations, processes, cycles, gas flow, and combustion together with application to appropriate power plant machinery. Designed for Electrical and Textile Engineering students. *Prerequisite:* Math 203 and 204; Physics 211 and 212.

ME 306—Engineering Thermodynamics—3 cr. (3 and 0)

A continuation of ME 305. Thermodynamics of vapors with application to steam boilers, engines, turbines, power plant cycles, refrigeration and heat transfer problems. *Prerequisite:* ME 305.

ME 307—Mechanical Engineering Laboratory—1 cr. (0 and 3)

Study and calibration of weights, pressure, area, and fluid flow measuring devices, testing of pumps, engines, fans and compressors. Designed primarily for Agricultural Engineering students. *Prerequisite:* Enrollment in ME 302 or 305.

ME 309—Mechanical Laboratory—1 cr. (0 and 3)

The study and calibration of weight, pressure, area, and fluid flow measuring devices, flue gas analysis, power plant piping, lifting devices, centrifugal pump, and heat transfer. Designed for Electrical and Textile Engineering students. *Prerequisite:* Enrollment in ME 305.

ME 310—Mechanical Laboratory—1 cr. (0 and 3)

A continuation of ME 309. A study of the performance tests of steam turbines, blowers, Diesel engines, unaflow engines, air compressors and hydraulic turbines. *Prerequisite:* ME 309 and enrollment in ME 306.

ME 311—Engineering Thermodynamics—3 cr. (3 and 0)

Thermodynamics including gas laws, energy equations, processes, cycles, gas flow, and combustion together with application to appropriate power plant machinery. *Prerequisite:* Math 203 and 204; Physics 211 and 212; ME 211 and 213.

ME 312—Engineering Thermodynamics—3 cr. (3 and 0)

A continuation of ME 311.

ME 313—HEAT POWER LABORATORY—1 cr. (0 and 3)

Study and calibration of weight, pressure, area, and fluid flow measuring devices, flue gas, and liquid fuel analysis, triplex pump, powerhouse piping and auxiliaries, friction test on steam engine and internal combustion engine. *Prerequisite:* Enrollment in ME 311.

ME 314—HEAT POWER LABORATORY—1 cr. (0 and 3)

Practical work in connection with coal analysis, tests of lifting devices, ram, injector, centrifugal pump, calorimeters, and study of water plant. *Prerequisite:* ME 313.

ME 411—HEAT POWER—3 cr. (3 and 0)

Organization of steam, Diesel and hydro power plants with reference to the design and performance characteristics of the individual pieces of apparatus involved, variable load, costs, and economics. Buildings and foundations are briefly covered. *Prerequisite:* ME 312.

ME 412—HEAT POWER—3 cr. (3 and 0)

A continuation of ME 411, stressing the design, arrangement and economic justification of the boilers, prime movers, condensers, fuel handling equipment, stokers, pulverized fuel equipment, combustion, refuse handling equipment, fans, chimneys, water treatment, water heaters and deaerators, pumps, feed water regulation and the piping system design and layout. *Prerequisite:* ME 411.

ME 413—HEAT POWER LABORATORY—2 cr. (0 and 6)

A practical application of the theory covered in ME 411. Performance tests of steam turbines, blowers, boilers, refrigeration plants, hydraulic turbines, all types of internal combustion engines, auxiliaries, and fuels are studied. *Prerequisite:* ME 314 and enrollment in ME 411.

ME 414—HEAT POWER LABORATORY—2 cr. (0 and 6)

A continuation of ME 413. *Prerequisite:* Senior Mechanical Engineering standing.

ME 417—MECHANICAL DESIGN—2 cr. (1 and 3)

A study of fatigue of metals, failure theories, including the von Mises-Hencky theory, and dynamic and static deflections, as applied to the design and selection of machine elements. *Prerequisite:* Senior Mechanical Engineering standing.

ME 418—MECHANICAL DESIGN—2 cr. (1 and 3)

The theorem of Costigliano applied to the design of machine frames and elements. Lubrication analysis of journal bearings. *Prerequisite:* Senior Mechanical Engineering standing.

ME 420—ADMINISTRATION—3 cr. (3 and 0)

Instruction in the principles of organizing, financing, and incorporating business enterprises; organization of the manufacturing establishment; buying and selling; contracts, accounting; management problems. *Prerequisite:* Senior standing.

ME 421—Gas Engines—3 cr. (3 and 0)

Theoretical and actual cycles, performance characteristics, fuels, combustion, cooling, dynamics, ignition and injection of the two and four stroke cycle spark ignition and compression ignition engine. *Prerequisite:* ME 311 and 312.

ME 422—Gas Turbines—3 cr. (2 and 3)

Simple open-cycle gas turbines, variation of the basic cycle, closed cycle gas turbine plants, axial-flow compressors, centrifugal and positive displacement compressors, axial-flow turbines, combustion systems, structural design and plant performance. *Prerequisite:* ME 311, 312.

ME 423—Gas Engine Design—1 cr. (0 and 3)

Limits and requirements in the design of both air cooled and liquid cooled spark ignition and compression ignition engines, the principle of similitude, detail design and sketching of the engine parts and an assembly drawing of an engine. *Prerequisite:* DD 306, ME 311, 312, and enrollment in ME 421.

ME 426—Steam Turbines—3 cr. (3 and 0)

Structural features, performance, and design of all types of steam turbines. *Prerequisite:* ME 312.

ME 428—Turbine Design—1 cr. (0 and 3)

Complete design of nozzle and blade elements of impulse and reaction steam turbines. *Prerequisite:* Enrollment in ME 426.

ME 429—Heating and Ventilation—2 cr. (2 and 0)

A study of the principles of heating and ventilation with emphasis on the following topics: factors affecting human comfort, the theory of heat transfer and the calculation of heat transmission coefficients, heat losses from buildings, heating load, fuels and combustion, heat disseminators, heating boilers and their accessories and auxiliaries, steam heating, hot water heating systems, and warm air heating systems. *Prerequisite:* ME 305 or 311.

ME 430—Air Conditioning—2 cr. (2 and 0)

A study of the principles of air conditioning embodied in air distribution and air cleaning, humidification and dehumidification, cooling systems, automatic control apparatus, unit heaters, and unit air conditioners. *Prerequisite:* ME 312 or 306.

ME 431—Heating and Ventilation Design—1 cr. (0 and 3)

The practical application of the theory covered in ME 429 in the design of heating and ventilation systems for specific conditions. *Prerequisite:* Enrollment in ME 429.

ME 432—Air Conditioning Design—1 cr. (0 and 3)

The practical application of the theory covered in ME 430 in the design of air conditioning systems. *Prerequisite:* Enrollment in ME 430.

ME 433—Elementary Aerodynamics—2 cr. (2 and 0)

Physical properties of air, effects of deflecting air streams, air flow, airfoils, drag, power plants, propellers, control surfaces and stability; performance at

sea level and at altitude. Calculations are made for an airplane to determine its performance at sea level and at altitude, including take off and landing distance, endurance, range and load during turns. *Prerequisite:* Mech 304.

ME 434—REFRIGERATION—2 cr. (2 and 0)

Underlying thermodynamics of refrigeration and design and operating characteristics of compression and absorption systems. Ice making and cold storage. *Prerequisite:* ME 312.

ME 437—CENTRIFUGAL MACHINERY—3 cr. (3 and 0)

Theory and performance of centrifugal pumps, blowers, hydraulic turbines and hydrodynamic power transmissions. Includes one and two dimensional theory, hydraulic losses, cavitation, specific speed, pump and turbine paralleling and allied topics. *Prerequisite:* Senior standing or by special permission.

ME 438—FUEL AND COMBUSTION—2 cr. (2 and 0)

Composition, sources, and physical characteristics of solid, liquid and gaseous fuels and a study of how the combustion of these fuels is treated in practical engineering. *Prerequisite:* ME 311 or 305 and enrollment in ME 312 or 306.

ME 461—ANALYSIS OF THERMODYNAMIC PROBLEMS—3 cr. (3 and 0)

Engineering problems involving the use of differential and integral calculus including ordinary differential equations, partial differentiation, multiple integrals, partial differential equations, line integrals, and series. *Prerequisite:* ME 311, 312.

ME 464—HEAT TRANSMISSION—3 cr. (3 and 0)

A comprehensive study of the principles of Heat Transmission with applications to engineering problems. Special emphasis is given to the following topics; heat conduction in the steady and unsteady states; dimensional analysis of convection; free and forced convection; the combined effects of conduction and convection; heat transfer in condensing and boiling; radiation; and the combined effects of conduction, convection, and radiation. *Prerequisite:* ME 311, 312.

ME 501—ADVANCED AIR CONDITIONING—3 cr. (3 and 0)

ME 510—ADVANCED THERMODYNAMICS—3 cr. (3 and 0)

ME 521—INTERNAL COMBUSTION ENGINES—3 cr. (3 and 0)

ME 522—INTERNAL COMBUSTION ENGINES—3 cr. (3 and 0)

ME 523—INTERNAL COMBUSTION ENGINE LABORATORY—1 cr. (0 and 3)

ME 524—GAS TURBINES—3 cr. (3 and 0)

ME 526—ADVANCED STEAM TURBINES—2 cr. (2 and 0)

ME 528—ADVANCED STEAM TURBINES DESIGN—1 cr. (0 and 3)

ME 532—APPLIED HEAT TRANSFER—3 cr. (3 and 0)

ME 591—RESEARCH—3 cr.

ME 592—RESEARCH—3 cr.

MECHANICS AND HYDRAULICS

Mr. Curtis

Mr. Moorman, Mr. Byars, Mr. Humphreys, Mr. Nowack, Mr. Elrod

Mech 302—Mechanics (Statics)—3 cr. (3 and 0)

An elementary technical study of force systems and their action on rigid bodies at rest, devoted to development of facility in free body analysis. Topics also considered are center of gravity, moment of inertia of areas, and friction. *Prerequisite:* Math 204, Phys 211.

Mech 303—Mechanics (Kinetics)—3 cr. (3 and 0)

A continuation of Mech 302. Analytical kinematics and the effects of forces in producing motion of rigid bodies are major considerations. Among the principal topics, whose engineering applications are developed, are: Second Law of Motion for translation and rotation; work, energy, and power; impulse and momentum. *Prerequisite:* Mech 302.

Mech 304—Mechanics of Materials—3 cr. (3 and 0)

This course is designed to acquaint students with certain physical constants and stresses in structural members and machine parts, and to illustrate rational derivation of formulas for internal stresses. Among topics covered are: Deformation and stress; torsion; riveted joints; flexure and deformation of beams; combined stresses in short blocks; columns. *Prerequisite:* Mech 302.

Mech 305—Mechanics of Materials Laboratory—1 cr. (0 and 3)

Designed to illustrate points and principles considered in Mech 304. Students are also acquainted with the different types of testing machines, instruments, and testing methods. *Prerequisite:* Must be accompanied, or preceded by Mech 304.

Mech 306—Graphic Statics—1 cr. (0 and 3)

Graphical analysis of force systems and of stresses in statically determinate frames. Given for students in certain branches. *Prerequisite:* Must be accompanied, or preceded by Mech 302.

Mech 401—Fluid Mechanics—3 cr. (3 and 0)

A study of the forces on fluids at rest and in motion, together with consideration of various flow measurement devices and of power developing and using units. Among the items considered are: Hydrostatic pressure and devices for measuring it; hydraulic similitude; measurements of flow by orifices, weirs, and various meters; flow in pipes; open channels; turbines and pumps. *Prerequisite:* Mech 303 (for certain curriculums Mech 302).

Mech 403—Fluid Mechanics Laboratory—1 cr. (0 and 3)

A laboratory course for students in certain branches to illustrate the principles of Mech 401. Also special exercises are given in stream gaging, drainage area study, runoff, and rainfall. *Prerequisite:* Must be accompanied, or preceded by Mech 401.

Mech 460—Hydrology—2 or 3 cr. (2 or 3 and 0)

A study of the principles concerning the occurrence of water in nature and the practice of engineering in dealing with it in connection with design

of water supplies and structures. *Prerequisite:* Mech 401 and 403; approval by instructor.

MECH 462—WATER POWER ENGINEERING—2 or 3 cr. (2 or 3 and 0)

Principles and practices involved in the investigating and planning of hydraulic power developments and the selection of hydraulic machinery. *Prerequisite:* Mech 460, or special approval of instructor.

MECH 464—FLOW IN OPEN CHANNELS—2 or 3 cr. (2 or 3 and 0)

Consideration of open channel flow, including study of the hydraulic jump, backwater curves, bends, transitions and obstructions, and analysis of special methods of flood routing. *Prerequisite:* Mech 401 and approval of instructor.

MECH 502—SPECIAL TOPICS IN MECHANICS OF MATERIALS—3 cr. (3 and 0)

MECH 504—DYNAMICS—3 cr. (3 and 0)

MECH 506—FLUID MECHANICS II—3 cr. (3 and 0)

MECH 508—FLOOD CONTROL—3 cr. (3 and 0)

MECH 510—ADVANCED HYDROLOGY—2 cr. (2 and 0)

MECH 512—HYDRAULIC PROJECTS—3 cr. (3 and 0)

MECH 591—RESEARCH—3 cr.

MECH 592—RESEARCH—3 cr.

MILITARY SCIENCE

COLONEL WERNER

LT. COL. CAVNESS, LT. COL. HICKS, LT. COL. READ, MAJ. MOTES, MAJ. NYGARD, CAPT. DAVIS, CAPT. DELOACH, CAPT. KENNEDY, CAPT. MCCURLEY, CAPT. O'HANLON, CAPT. SANDERS, CAPT. TAYLOR, CWO. IRVING, M/SGT. GIBSON, M/SGT. GILLAND, M/SGT. INGRAM, M/SGT. LANGDON, M/SGT. OLIVER, M/SGT. POOLE, M/SGT. WAGES, SFC. ANDERSON, SFC. BARRETTA, SFC. CLEAMONS, SFC. FORD, SFC. SCOVIL, SFC. WILSON, SGT. GODWIN, SGT. TABB

MS 103—MILITARY SCIENCE AND TACTICS (BASIC)—1 cr. (2 and 1)

This course is an introduction to military science. Generally basic in nature, the course deals with topics relating to the Army as a whole, without attempting specialization into various branches of the service. Principal topics are military policy of the U. S.; The National Defense Act and the ROTC; evolution of warfare; Hygiene and first aid; individual weapons; principles of discipline; customs of the Army; wearing of the uniform; purpose of drill; drill of the soldier with and without arms; squad and platoon drill; parades, reviews, inspections and other ceremonies; and map reading.

MS 104—MILITARY SCIENCE AND TACTICS (BASIC)—1 cr. (2 and 1)

A continuation of MS 103. Principal topics are maps and aerial photographs; military psychology; personnel management; principles of discipline and pur-

pose of drill, drill of the soldier with and without arms; squad and platoon drill; parades, reviews, inspections and other ceremonies.

MS 203—Military Science and Tactics (Infantry)—1 cr. (2 and 1)

Theoretical and practical instruction on a basic level in subjects pertaining to the Infantry and designed to develop the initiative, responsibility and technical knowledge required for qualification as a junior officer of the Infantry arm. Principal topics are: leadership, weapons, technique of fire of the rifle squad and practical training in actual command for duty as officers in the armed services by supervised training in actual command during military drills, parades, reviews, inspections and ceremonies. Capt. Kennedy

MS 204—Military Science and Tactics (Infantry)—1 cr. (2 and 1)

A continuation of MS 203. Principal topics are: scouting and patrolling, tactics of weapons, squads and sections, organization and maps and aerial photographs. Practical training in actual command for duty as officers in the armed services by supervised training in actual command during military drills, parades, reviews, inspections and ceremonies. Capt. Kennedy

MS 205—Military Science and Tactics (Quartermaster Corps)—1 cr. (2 and 1)

An introduction to Quartermaster Corps activities with theory instruction and practical application thereof. Principal topics are: organization for supply in the Army; Quartermaster units; property accountability and responsibility; organization and functions of the combat arms; supply economy; leadership and command. Practical training in actual command for duty as officers in the armed services by supervised training in actual command during military drills, parades, reviews, inspections and ceremonies. Capt. DeLoach

MS 206—Military Science and Tactics (Quartermaster Corps)—1 cr. (2 and 1)

A continuation of MS 205. Principal topics include organization and functions of technical services; unit and organization supply; practical training in actual command for duty as officers in the armed services by supervised training in actual command during drills, parades, reviews, inspections and ceremonies. Capt. DeLoach

MS 207—Military Science and Tactics (Signal Corps)—1 cr. (2 and 1)

An introduction to signal communications, evolution of communications, and communications equipment; history of the Signal Corps; practices and equipment employed by lower echelons of Army units; practical exercises to include installation and operation of basic signal communications equipment. Practical training in actual command for duty as officers in the armed services by supervised training in actual command during military drills, parades, reviews, inspections and ceremonies. M/Sgt. Wages

MS 208—Military Science and Tactics (Signal Corps)—1 cr. (2 and 1)

A continuation of MS 207. A study of the fundamentals of Army organization, missions and functions of the Signal Corps, organization, missions and signal communication practices of the Infantry, Armored and Airborne Divi-

sions. Practical training in actual command for duty as officers in the armed services by supervised training in actual command during military drills, parades, reviews, inspections and ceremonies. M/SGT. WAGES

MS 215—MILITARY SCIENCE AND TACTICS (ARMOR)—1 cr. (2 and 1)

Training in basic subjects in preparation for advanced level Armor. Principal subjects are: branch weapons and materiel; practical training in actual command for duty as officers in the armed services by supervised training in actual command during military drills, parades, reviews, inspections and ceremonies. CAPT. SANDERS

MS 216—MILITARY SCIENCE AND TACTICS (ARMOR)—1 cr. (2 and 1)

A continuation of MS 215. Principal subjects are: basic communications, basic motors, history and mission of Armor, scouting and patrolling and mechanical training with tank weapons and practical training in actual command for duty as officers in the armed services by supervised training in actual command during military drills, parades, reviews, inspections and ceremonies. CAPT. SANDERS

MS 217—MILITARY SCIENCE AND TACTICS (CORPS OF ENGINEERS)—1 cr. (2 and 1)

Theoretical and practical training in subjects pertaining to the tactics and techniques employed by the Corps of Engineers, including history of military engineering, weapons, tactics, field fortifications and organization of ground and leadership and command; practical training in actual command for duty as officers in the armed services by supervised training in actual command during military drills, parades, reviews, inspections and ceremonies. CAPT. O'HANLON

MS 218—MILITARY SCIENCE AND TACTICS (CORPS OF ENGINEERS)—1 cr. (2 and 1)

A continuation of MS 217. Including supply economy, principles of camouflage, explosives, demolitions and mine warfare, engineer tools and equipment, rigging, leadership and command; practical training in actual command for duty as officers in the armed services by supervised training in actual command during military drills, parades, reviews, inspections and ceremonies. CAPT. O'HANLON

MS 219—MILITARY SCIENCE AND TACTICS (ORDNANCE CORPS)—1 cr. (2 and 1)

Theoretical and practical instruction in the relation of the Ordnance Corps to the Army as a whole, together with instruction in tactics and techniques of the Ordnance Corps. Ordnance materiel topics include basic small arms, ammunition and artillery. Practical training in actual command for duty as officers in the armed services by supervised training in actual command during military drills, parades, reviews, inspections and ceremonies. SFC. WILSON

MS 220—MILITARY SCIENCE AND TACTICS (ORDNANCE CORPS)—1 cr. (2 and 1)

A continuation of MS 219. Ordnance materiel topics include fire control instruments and automotive equipment. Practical training in actual command

for duty as officers in the armed services by supervised training in actual command during military drills, parades, reviews, inspections and ceremonies.
SFC. Wilson

MS 303—Military Science and Tactics (Infantry)—3 cr. (4 and 1)

Advanced theoretical and practical training in subjects applicable to the Army as a whole, together with tactics and techniques employed by the Infantry. Principal subjects are: weapons of the infantry regiment and rifle marksmanship, organization, gunnery, leadership and supply economy. Training for duty as officers by application of principles of leadership in actual command during drills, parades, reviews, inspections and ceremonies.
Capt. Kennedy

MS 304—Military Science and Tactics (Infantry)—3 cr. (4 and 1)

A continuation of MS 303. Principal subjects are: combat intelligence, estimate of the situation and combat orders, communications, maps and aerial photographs, field fortifications, tactics of rifle and heavy weapons platoons and companies. Training for duty as officers by application of principles of leadership in actual command during drills, parades, reviews, inspections and ceremonies.
Capt. Kennedy

MS 305—Military Science and Tactics (Quartermaster Corps)—3 cr. (4 and 1)

Theoretical and practical training in subjects applicable to the Army as a whole together with tactics and techniques utilized by the Quartermaster Corps. Principal topics include station supply, depot supply procedures, and storage warehousing, and materials handling equipment. Training for duty as officers by application of principles of leadership in actual command during drills, parades, reviews, inspections and ceremonies.
Capt. DeLoach

MS 306—Military Science and Tactics (Quartermaster Corps)—3 cr. (4 and 1)

A continuation of MS 305 with specific emphasis on the following topics: Procurement of petroleum products, Quartermaster activities at posts, camps, and stations, field service activities, supply economy, leadership and command, and individual weapons and marksmanship. Training for duty as officers by application of principles of leadership in actual command during drills, parades, reviews, inspections and ceremonies.
Capt. DeLoach

MS 307—Military Science and Tactics (Signal Corps)—3 cr. (4 and 1)

Theoretical and practical training on tactics and techniques utilized by the Signal Corps on a division level. Principal topics are communication security, signal orders, signal center procedures, signal supply and repair, and career guidance for Signal Corps officers. Training for duty as officers by application of principles of leadership in actual command during drills, parades, reviews, inspections and ceremonies.
Capt. Davis

MS 308—Military Science and Tactics (Signal Corps)—3 cr. (4 and 1)

A continuation of MS 307. Principal topics are wire communication material, field radio communication, and applied signal communication, and continued

training in tactics and techniques as applies to Signal Corps units. Training for duty as officers by application of principles of leadership in actual command during drills, parades, reviews, inspections and ceremonies. CAPT. DAVIS

MS 315—MILITARY SCIENCE AND TACTICS (ARMOR)—3 cr. (4 and 1)

Theoretical and practical training on an advanced level in subjects applicable to the Army as a whole, together with tactics and techniques employed by Armored units. Principal subjects are tank driving, maintenance, tank gunnery, and military organization. Training for duty as officers by application of principles of leadership in actual command during drills, parades, reviews, inspections and ceremonies. CAPT. MCCURLEY

MS 316—MILITARY SCIENCE AND TACTICS (ARMOR)—3 cr. (4 and 1)

A continuation of MS 315. Principal subjects are troop leading techniques, tactics of small armored units, maintenance and communications. Training for duty as officers by application of principles of leadership in actual command during drills, parades, reviews, inspections and ceremonies.

CAPT. MCCURLEY

MS 317—MILITARY SCIENCE AND TACTICS (CORPS OF ENGINEERS)—3 cr. (4 and 1)

Theoretical and practical training in subjects pertaining to tactics and techniques employed by the Corps of Engineers, including organization and missions of engineer units, principles and application of staff procedures, supply procedures and supply economy, maintenance and operation of vehicles and equipment, communication, military teaching methods, map reading, leadership and command. Training for duty as officers by application of principles of leadership in actual command during drills, parades, reviews, inspections and ceremonies. CAPT. TAYLOR

MS 318—MILITARY SCIENCE AND TACTICS (CORPS OF ENGINEERS)—3 cr. (4 and 1)

A continuation of MS 317 including military bridging, tactics, weapons and marksmanship, leadership and command and continued training for duty as officers by application of principles of leadership in actual command during drills, parades, reviews, inspections and ceremonies. CAPT. TAYLOR

MS 319—MILITARY SCIENCE AND TACTICS (ORDNANCE CORPS)—3 cr. (4 and 1)

Theoretical and practical instruction in organization of the Ordnance Corps and artillery, automotive and ammunition materiel. Training for duty as officers by application of principles of leadership in actual command during drills, parades, reviews, inspections and ceremonies. LT. COL. HICKS

MS 320—MILITARY SCIENCE AND TACTICS (ORDNANCE CORPS)—3 cr. (4 and 1)

A continuation of MS 319. Topics include rifle squad tactics, ammunition supply, fire control and small arms materiel, and individual weapons and marksmanship. Training for duty as officers by application of principles o

leadership in actual command during drills, parades, reviews, inspections and ceremonies. Lt. Col. Hicks

MS 403—Military Science and Tactics (Infantry)—3 cr. (4 and 1)

Theoretical and practical training on an advanced level in command, leadership, combat principles, and development of initiative and responsibility for qualification as junior officers of the Infantry arm. Principal topics are administration, military law and boards, military teaching methods, psychological warfare, geographical foundations of national power, command and staff, organization. Continued training of officers by application of instruction, methods and principles of leadership in positions of command during drills, parades, reviews, inspections and ceremonies. Lt. Col. Cavness

MS 404—Military Science and Tactics (Infantry)—3 cr. (4 and 1)

A continuation of MS 403. Principal topics are supply and evacuation, troop movement, new developments, the military team, the Infantry Battalion in attack and defense, maps and aerial photographs, tactics of rifle and heavy weapons, platoons and companies, and supply economy. Continued training of officers by application of instruction, methods and principles of leadership in positions of command during drills, parades, reviews, inspections and ceremonies. Lt. Col. Cavness

MS 405—Military Science and Tactics (Quartermaster Corps)—3 cr. (4 and 1)

Theoretical and practical training in leadership and command, command and staff organization, combat intelligence, psychological warfare, military administration and personnel management, military teaching methods, and supply economy. Continued training of officers by application of instruction, methods, and principles of leadership in positions of command during drills, parades, reviews, inspections and ceremonies. Maj. Motes

MS 406—Military Science and Tactics (Quartermaster Corps)—3 cr. (4 and 1)

A continuation of MS 405 with the principal topics covered being Quartermaster operations in the zone of interior and in the theater of operations, fiscal and procurement procedures, technical intelligence, and research and development trends. Continued training of officers by application of instruction, methods, and principles of leadership in positions of command during drills, parades, reviews, inspections and ceremonies. Maj. Motes

MS 407—Military Science and Tactics (Signal Corps)—3 cr. (4 and 1)

Theoretical and practical training on an advanced level in subjects applicable to the Army as a whole, and the development of initiative and responsibility for qualification as junior officers of the Signal Corps. Principal topics are: command and staff, combat intelligence, military teaching methods, and military administration. Continued training of officers by application of instruction methods and principles of leadership in positions of command during drills, parades, reviews, inspections and ceremonies. Maj. Nygard

MS 408—MILITARY SCIENCE AND TACTICS (SIGNAL CORPS)—3 cr. (4 and 1)

A continuation of MS 407. Principal topics are radio communication material, wire communication material, higher echelon signal communication and equipment and continued training in tactics and techniques employed by the Signal Corps. Continued training of officers by application of instruction, methods, and principles of leadership in positions of command during drills, parades, reviews, inspections and ceremonies. MAJ. NYGARD

MS 415—MILITARY SCIENCE AND TACTICS (ARMOR)—3 cr. (4 and 1)

Theoretical and practical instruction in command and leadership, combat principles, and development of initiative and responsibility for qualification as junior officers of Armor. Principal topics are combat intelligence, automotive maintenance, tank gunnery, military teaching methods, psychological warfare, geographical foundations, military law and boards, and military administration. Continued training of officers by application of instruction, methods and principles of leadership in positions of command during drills, parades, reviews, inspections and ceremonies. LT. COL. READ

MS 416—MILITARY SCIENCE AND TACTICS (ARMOR)—3 cr. (4 and 1)

A continuation of MS 415. Principal subjects are tactics, supply and evacuation, communications and tank driving. Continued training of officers by application of instruction, methods, and principles of leadership in positions of command during drills, parades, reviews, inspections and ceremonies.
LT. COL. READ

MS 417—MILITARY SCIENCE AND TACTICS (CORPS OF ENGINEERS)—3 cr. (4 and 1)

Theoretical and practical training in subjects pertaining to administration, tactics and techniques employed by the Corps of Engineers, including employment and missions of engineer units in combat operations, supply economy, reconnaissance and intelligence, military administration, military law and boards, geographical foundations of national power, leadership and command. Continued training of officers by application of instruction, methods, and principles of leadership in positions of command during drills, parades, reviews, inspections and ceremonies. CAPT. O'HANLON

MS 418—MILITARY SCIENCE AND TACTICS (CORPS OF ENGINEERS)—3 cr. (4 and 1)

A continuation of MS 417. Principal subjects include construction, utilities and job management, service orientation, roads and airfields design and construction, barrier tactics, river crossing operations and leadership and command. Continued training of officers by application of instruction, methods, and principles of leadership in positions of command during drills, parades, reviews, inspections and ceremonies. CAPT. O'HANLON

MS 419—MILITARY SCIENCE AND TACTICS (ORDNANCE CORPS)—3 cr. (4 and 1)

Theoretical and practical instruction in subjects pertaining to the Army as a whole, together with tactics and techniques of the Ordnance Corps. Topics included are military administration, military teaching methods, psychological

warfare, maintenance and supply (Ordnance) and combat intelligence. Continued training of officers by application of instruction, methods, and principles of leadership in positions of command during drills, parades, reviews, inspections and ceremonies. Lt. Col. Hicks

MS 420—Military Science and Tactics (Ordnance Corps)—3 cr. (4 and 1)

A continuation of MS 419. Topics are: command and staff and a materiel specialty thesis. Continued training of officers by application of instruction, methods, and principles of leadership in positions of command during drills, parades, reviews, inspections and ceremonies. Lt. Col. Hicks

MUSIC

Mr. Lovett Mr. McGarity

Music 103—Class Basic Piano—1 cr. (0 and 3)

A course designed for beginning piano students meeting in groups as large as eight for three one-hour periods each week. The emphasis is on basic technic and rudiments essential for a successful initial keyboard experience. No previous training in music is required. Mr. McGarity

Music 104—Class Basic Piano—1 cr. (0 and 3)

A sequel of Music 103 in which piano students meet in groups as large as eight for three one-hour periods each week. The emphasis is on basic technic and rudiments essential for successful experience in the performance at the piano of music suitable for community sings and similar functions. Students may enroll in Music 104 without having taken Music 103 only by permission of the instructor. Mr. McGarity

Music 400—Music in the Elementary School Classroom—3 cr. (3 and 0)

This course is designed to give the teacher in the elementary school a familiarity with music suitable for use with children at the elementary level. Recordings of appropriate music, pre-band instruments, unison and part singing will be included. No previous training in music is required. Mr. McGarity

Music 402—Music Appreciation—3 cr. (3 and 0)

This course is a comprehensive study of the development of music and factors leading toward the understanding of better music. Records and piano renditions of representative literature of outstanding composers are offered. This course is required for all students in Education, Vocational Agricultural Education and Industrial Education. Mr. McGarity

Music 405—Music Theory—3 cr. (3 and 0)

The principles of notation, its symbols and abbreviations, major and minor scales, intervals and chords; measure, rhythm and tempo, and the terminology of music are the principal topics covered in this course. Mr. McGarity

Music 410—From Bach to the Twentieth Century—2 cr. (2 and 0)

A study of stylistic trends in music from 1700 to 1950. From the listener's point of view certain compositions of various composers will be analyzed. *Prerequisite:* Music 402. Mr. McGarity

PHYSICS

MR. HUFF

MR. LINDSEY, MR. C. A. REED, MR. CRAWFORD, MR. MILLER, MR. A. R. REED, MR. KENDRICK, MR. MARTIN, MR. SHACKELFORD, MR. SLOOPE, MR. VOGEL, MR. WOOD

PHYS 101—INTRODUCTION TO METHODS IN PHYSICS—2 cr. (2 and 0)

A study of the nature of physical laws, their experimental verification, and their use in solving problems. A few topics will be covered fully with no attempt to treat all branches of physics. This course is not designed as one in General Physics and may not be substituted for Physics 201, 211 or 212.

MR. HUFF

PHYS 102—INTRODUCTION TO METHODS IN PHYSICS—2 cr. (2 and 0)

A continuation of Physics 101 with the emphasis on more recent discoveries.

MR. HUFF

PHYS 201—GENERAL PHYSICS—3 cr. (3 and 0)

A study of mechanics and heat including the laws of motion, equilibrium, machines, mechanical and thermal properties of solids, liquids, and gases, thermometry and heat transfer. *Prerequisite:* Registration in Phys 203.

PHYS 202—GENERAL PHYSICS—3 cr. (3 and 0)

A continuation of the previous course covering wave motion, sound, geometrical optics, light waves and spectra, magnetism, static and current electricity, circuits, and electrical machines. *Prerequisite:* Phys 201; registration in Phys 204.

PHYS 203—GENERAL PHYSICS LABORATORY—1 cr. (0 and 3)

Experiments testing the laws studied in Phys 201, giving experience in measuring the physical properties of matter and practice in the use of precision instrument and the treatment of observed data. *Prerequisite:* Registration in Phys 201.

PHYS 204—GENERAL PHYSICS LABORATORY—1 cr. (0 and 3)

Experiments with sound waves, lenses, refraction and diffraction of light, magnetic fields, electrical circuits, measurements with electrical instruments. *Prerequisite:* Registration in Phys 202.

PHYS 205—LABORATORY TECHNIQUES—1 cr. (0 and 3)

The student is given training in skills commonly used in experimental physics, including the use of measuring devices, tools, electrical connection, glass working and vacuum techniques.

MR. A. R. REED

PHYS 211—GENERAL PHYSICS FOR ENGINEERS—4 cr. (4 and 0)

A study of mechanics, sound and heat including the laws of motion; rotation; equilibrium; vibratory and wave motion; mechanical and thermal properties of solids, liquids and gases; with emphasis on the solution of problems. *Prerequisite:* Math 103 and 104; registration in Phys 213.

Phys 212—General Physics for Engineers—4 cr. (4 and 0)

A continuation of Phys 211 covering the laws of electric and magnetic fields; electric currents and circuits; geometrical and physical optics; spectra; atomic physics. *Prerequisite:* Phys 211; registration in Phys 214.

Phys 213—General Physics Laboratory—1 cr. (0 and 3)

Experiments based on the laws studied in Phys 211, the theory and use of precise measuring apparatus, the treatment of observed data and significant figures. *Prerequisite:* Registration in Phys 211.

Phys 214—General Physics Laboratory—1 cr. (0 and 3)

A continuation of Phys 213 with emphasis on the accurate measurement of electrical quantities and the properties of light. *Prerequisite:* Registration in Phys 212 or 216.

Phys 216—General Physics for Electrical Engineers—4 cr. (4 and 0)

A continuation of Phys 211 covering essentially the same topics as Phys 212 with added emphasis on electric and magnetic fields, electric and magnetic potentials, magnetic circuits, behavior of charges in electric and magnetic fields, and an introduction to atomic and nuclear theory. *Prerequisite:* Phys 211 and registration in Phys 214 and EE 214. Mr. Martin, Mr. Sloope

Phys 301—Introduction to Modern Physics for Non-Technical Students—3 cr. (3 and 0)

A continuation of the General Physics course to cover the important concepts and experiments of the current century with particular emphasis on demonstrations and non-mathematical explanations and developments. *Prerequisite:* Phys 201 and 202; Math 103 and 104. Mr. Crawford

Phys 304—Descriptive Astronomy—3 cr. (2 and 3)

A survey of the properties of the planets and their satellites, their actual and apparent motions, the properties of stars and nebulae, and introduction of the determination of latitude and longitude. *Prerequisite:* Phys 201 and 202 or 211 and 212 or 216. Mr. Huff

Phys 305—Photography—3 cr. (2 and 3)

A survey of various phases of photography including photographic optics, sensitivity of negative materials, making prints and enlargements, composition of pictures. *Prerequisite:* Phys 201 and 202 or 211 and 212; permission of the instructor. Mr. Vogel

Phys 308—Sound and Acoustics—3 cr. (3 and 0)

A study of the production, propagation, properties and measurement of sound waves with emphasis on the acoustics of buildings. *Prerequisite:* Phys 201 and 202 or 211 and 212 or 216; registration in Math 203. Mr. C. A. Reed

Phys 312—Heat and Kinetic Theory—3 cr. (3 and 0)

Instruction in thermometry, calorimetry, change of state, kinetic theory of gases and elements of thermodynamics with emphasis on chemical applications. *Prerequisite:* Phys 201 and 202 or 211 and 212 or 216; Math 203 and 204. Mr. Lindsey

PHYS 314—EXPERIMENTAL HEAT—1 cr. (0 and 3)

Practical instruction in the measurement of high and low temperatures, thermal properties of solids, liquids, and gases; heats of combustion, heat conduction and radiation. *Prerequisite:* Registration in Phys 312.

MR. LINDSEY, MR. VOGEL

PHYS 321—MECHANICS AND PROPERTIES OF MATTER—4 cr. (4 and 0)

A study of the motions of particles and of rigid bodies, gyroscopes, elasticity, surface tension, the flow of fluids, gravitation. *Prerequisite:* Phys 201 and 202 or 211 and 212 or 216; Math 203 and 204. MR. HUFF

PHYS 323—EXPERIMENTAL MECHANICS—1 cr. (0 and 3)

Practice in the precise measurements of length, mass, and time; experiments with pendulums, gyroscopes, and other mechanical apparatus. *Prerequisite:* Registration in Phys 321. MR. HUFF

PHYS 341—ELECTRICITY AND MAGNETISM—3 cr. (3 and 0)

A study of the laws of electrostatics, of electric circuits and the properties of dielectric and of magnetic materials. *Prerequisite:* Phys 201 and 202 or 211 and 212 or 216; Math 203 and 204. MR. MILLER

PHYS 343—ELECTRICITY LABORATORY—1 cr. (0 and 3)

Measurements with precision electrical instruments including bridges and potentiometers; low and high frequency circuits; standing waves on wires. *Prerequisite:* Registration in Phys 341. MR. MILLER

PHYS 401—SENIOR THESIS AND SEMINAR—3 cr. (1 and 6)

This course is intended to give the student a general knowledge of current trends in physics as well as a more detailed review of the historical papers in the field. The Senior Thesis is a semi-original piece of work under the direction of the physics staff. The work in general is done in one of the following fields: *X*-ray, electron microscopy, ultra-violet spectroscopy, and electronics. *Prerequisite:* At least three physics courses beyond General Physics.

PHYS 432—LIGHT—4 cr. (4 and 0)

Introduction in the formation of images by lenses and mirrors and the design of optical instruments; theory of interference and diffraction of light waves, polarization; applications to spectroscopy and precision measurement. *Prerequisite:* Phys 201 and 202 or 211 and 212 or 216; Math 203 and 204.

MR. CRAWFORD

PHYS 434—EXPERIMENTAL LIGHT—1 cr. (0 and 3)

Measurements of the properties of lens systems and the defects of the images produced, the effects of slits on light waves, measurements with a spectrograph, use of the interferometer, polarimetry. *Prerequisite:* Registration in Phys 432. MR. CRAWFORD

PHYS 441—ELECTROMAGNETISM—3 cr. (3 and 0)

A study of the electric and magnetic field produced by stationary and moving charges. Maxwell's Field Equations are developed and applied. Vector analysis is used throughout. *Prerequisite:* Phys 341; registration in Math 306.

MR. C. A. REED

PHYS. 451—MODERN PHYSICS—3 cr. (3 and 0)

A study of the properties of electrons, protons, and other atomic particles, special theory of relativity, elementary quantum theory and its application to photoelectric effect, X-rays and the Bohr theory of atomic structure. *Prerequisite:* Phys 201 and 202 or 211 and 212 or 216; completion of at least one of the courses 312, 321, 331, 432 or permission; registration in Math 306.

MR. C. A. REED

PHYS 452—ATOMIC AND NUCLEAR PHYSICS—3 cr. (3 and 0)

An introduction to various phases of the physics of atomic nuclei including radioactivity; structure and properties of the nucleus; interaction of radiation with matter; particle accelerators; fission, fusion and atomic energy. *Prerequisite:* Phys 451 or permission. MR. SLOOPE

PHYS 453—EXPERIMENTS IN MODERN PHYSICS—1 cr. (0 and 3)

Measurements of the charge and mass of the electron, studies of thermo- and photo-electric effects, measurements with radioactive materials and with X-rays. *Prerequisite:* Registration in Phys 451. MR. C. A. REED

PHYS 471—ELECTRON MICROSCOPY—3 cr. (2 and 3)

A study of the theory and operation of the electron microscope. The technique of specimen mounting and interpretation of the pictures are stressed. The course consists of two hours lecture per week with considerable library work and one three hour laboratory period. Each student is given specimens chosen from his major field. *Prerequisite:* Eight hours physics and the permission of the instructor. MR. LINDSEY, MR. CRAWFORD

PHYS 511—THERMODYNAMICS—3 cr. (3 and 0)

PHYS 512—KINETIC THEORY AND STATISTICAL MECHANICS—3 cr. (3 and 0)

PHYS 521—DYNAMICS—3 cr. (3 and 0)

PHYS 541—ELECTRODYNAMICS—3 cr. (3 and 0)

PHYS 542—RADIATION THEORY—3 cr. (3 and 0)

PHYS 551—INTRODUCTION TO QUANTUM MECHANICS—3 cr. (3 and 0)

PHYS 552—THEORY OF ATOMIC SPECTRA—3 cr. (3 and 0)

PHYS 553—NUCLEONICS—3 cr. (3 and 0)

PHYS 566—RELATIVITY—3 cr. (3 and 0)

PHYS 575—SEMINAR IN CONTEMPORARY PHYSICS—1 or 2 cr. (1 or 2 and 0)

PHYS 591—RESEARCH—3 cr.

PHYS 592—RESEARCH—3 cr.

POULTRY HUSBANDRY

MR. MORGAN MR. COOPER

PH 301, 303—FARM AND COMMERCIAL POULTRY PRODUCTION—4 cr. (3 and 3)

A study of the nature and uses of poultry products, scope of the industry and agencies involved, classification of poultry, structure of the fowl, fundamentals of flock improvement, incubation, brooding, feeding, housing, disease control and sanitation, and the economic aspects of poultry production as a farm enterprise and a commercial business. MR. COOPER

PH 451—POULTRY BREEDING—3 cr. (2 and 3)

A study of poultry improvement through culling and selection for meat and egg production and standard breed and variety characteristics, and the application of genetics to the problems of poultry breeding. *Prerequisite:* PH 301, 303 and Agron 302. MR. MORGAN

PH 452—POULTRY FEEDING AND FLOCK MANAGEMENT—3 cr. (2 and 3)

A study of the nutritive requirements of poultry, dietary deficiencies and curative factors, the compounding of rations for growing, laying and breeding flocks of chickens and turkeys, the value of various feedstuffs and management practices with chickens and turkeys for maximum economic returns. *Prerequisite:* AH 301, PH 301 and 303. MR. MORGAN

PH 455—POULTRY GRADING AND PROCESSING—3 cr. (2 and 3)

A study of the classes, grades and judging of market poultry and poultry products, and the preparation, packaging, processing, storage and freezing preservation of eggs and poultry for market. *Prerequisite:* PH 301 and 303. MR. COOPER

PH 456—INCUBATION AND BROODING—3 cr. (2 and 3)

A study of the principles and practices of incubation and brooding of the various species of poultry, hatchery management and commercial broiler production. *Prerequisite:* PH 301 and 303. MR. COOPER

PH 459—POULTRY DISEASES AND PARASITES—3 cr. (2 and 3)

A study of the causes, occurrence, symptoms, treatment and prevention of poultry diseases and the identification, life history, symptoms, treatment and prevention of poultry parasites. Sanitary practices on poultry farms and in hatcheries and market establishments, and eradication and control measures for specific diseases and parasites are considered. *Prerequisite:* PH 301, 303, Bact 301, 303 and VS 401, 403. MR. MORGAN

PH 460—SEMINAR—2 cr. (2 and 0)

A study and discussion of current research and commercial problems in poultry production and marketing and selected special topics not fully covered in subject matter courses. *Prerequisite:* PH 301, 303 and pursuing major study in Poultry Husbandry. MR. MORGAN, MR. COOPER

PSYCHOLOGY

Mr. Waite

Psych 301—General Psychology—3 cr. (3 and 0)

A survey of the field of psychology: development and adjustment, motivation, emotions, intelligence, personality, the sensory experiences, perception, learning, thinking, imagination, and mental hygiene. *Prerequisite:* Junior standing.

Psych 302—Social Psychology—3 cr. (3 and 0)

A study of the interaction between the individual and the forces of society: the classical theories, the psychobiological bases of human behavior, the sociocultural bases of behavior, types of human behavior, overt and covert experiences, symbolism, personality, and social interaction. *Prerequisite:* Psych 301.

Psych 401—Applied Psychology—3 cr. (3 and 0)

An advanced course based upon the concepts of general psychology. The material includes causation in behavior, the psychology of attitudes, morale, the basic principles of motivation and work, individual differences, psychological testing in industry, interview techniques, motion and time analysis, industrial fatigue, psychological fatigue and related phenomena, accidents and their prevention, the working environment, psychological factors in labor turnover, advertising and consumer psychology and psychology in professional life. *Prerequisite:* Psych 301.

Psych 402—Abnormal Psychology—3 cr. (3 and 0)

A study of mental and emotional disorders: theories of causation and problems of treatment; special phenomena of consciousness and unconsciousness, *e.g.*, dreams, dissociation, hypnosis; analysis of pathological behavior: alcoholism, drug addiction, suicide, criminality, neurosis, and psychoneurosis. *Prerequisite:* Psych 301.

RELIGION

Mr. Crouch Mr. Stockman

Rel 201—The Old Testament Prophets—3 cr. (3 and 0)

An introduction to the lives and literature of the prophets, including consideration of the historical, political, social and religious background under which the books were written.

Rel 205—Introduction to the New Testament Lit.—3 cr. (3 and 0)

A survey of the books of the New Testament, studies as to content, literary form, and purpose. Some consideration is given to the life and teachings of Jesus and the letters of Paul.

Rel 305—New Testament Outline—3 cr. (3 and 0)

A study of the background and beginnings of the Christian Movement.

Mr. Crouch

REL 307—INTRODUCTION TO CHRISTIAN ETHICS—3 cr. (3 and 0)

A study of the basic Christian teachings on which ethical or moral action is founded and of the application of these principles. MR. STOCKMAN

REL 401—INTRODUCTION TO PHILOSOPHY—3 cr. (3 and 0)

A historical survey of philosophy with emphasis on its connection with political and social circumstances from the earliest times to the present day. Particular attention is given to those subjects which have always been the concern of both philosophy and religion. *Prerequisite:* Senior standing.

RURAL SOCIOLOGY

MR. BOYD

RS 301—RURAL SOCIOLOGY—3 cr. (3 and 0)

A study of human social relationships as modified by life in the country including a consideration of the farm family, its housing, health, schooling, recreational opportunities, relation to land, and other similar topics.

RS 454—FARMERS' MOVEMENTS—3 cr. (3 and 0)

An examination of the efforts of farmers to organize for the improvement of agriculture. Beginning with the first local agricultural society, the development of this movement is followed through the period of the Civil War. The Grange, Farmers' Alliance, and like movements, are then studied in their chronological order of development.

RS 459—THE RURAL COMMUNITY—3 cr. (3 and 0)

A study of the growth and development of the rural community with emphasis on organization of the community for its effective functioning in a changing society.

RS 461—RURAL LEADERSHIP—3 cr. (3 and 0)

A study of the social and psychological factors involved in rural leadership including an examination and analysis of characteristics of the successful leader, and the role of the leader in the rural community.

RS 501—RURAL SOCIAL SYSTEMS—3 cr. (3 and 0)

SOCIOLOGY

MR. BURTNER MR. WAITE

SOC 301—INTRODUCTORY SOCIOLOGY—3 cr. (3 and 0)

A study of the basic principles of sociology: culture, biological factors, the influence of geographical environment, human nature, group life, crowds, publics, social classes, cooperation, competition, conflict, accommodation, assimilation, human ecology, communities, social institutions, and social change. *Prerequisite:* Junior standing.

SOC 401—SOCIAL PROBLEMS—3 cr. (3 and 0)

A survey of the major social problems: Their background, group conflict, race conflict, war, the nature of population problems, social problems of industry, education, religion, disease and public health, poverty, dependency, and factors affecting social adjustment. *Prerequisite:* Soc 301. MR. BURTNER

SOC 402—THE FAMILY—3 cr. (3 and 0)

An inquiry into the problems of marriage and family life: the history of the family, the sociology of family life, mate selection, and courtship, husband-wife relationships, parent-child interaction, divorce, and conservation of family values. *Prerequisite:* Senior standing. MR. WAITE

SOC 403—CRIMINOLOGY—3 cr. (3 and 0)

A consideration of the major problems of crime and its treatment: causes of crime, criminal behavior, theories and practices in the treatment of criminals, and prevention of crime. *Prerequisite:* Soc 301. MR. BURTNER

SOC 405—INDUSTRIAL SOCIOLOGY—3 cr. (3 and 0)

A study of industry as a social organization together with the scientific examination of personality industrial relations; the factory as a social system; problems of management; problems of labor; problems of special groups in industry; labor-management relations; and industry and the community. *Prerequisite:* 3 cr. of Sociology and permission of the instructor. MR. BURTNER

SOC 406—REGIONAL SOCIOLOGY—3 cr. (3 and 0)

An analysis and survey of American regions. Emphasis is placed upon facts, factors, and policies pertaining to geography, population, culture, resources and waste, social institutions and planning methods of investigating regions in terms of social science. *Prerequisite:* 3 cr. of Sociology. MR. BURTNER

SPANISH

MR. DEAN

MR. RHYNE * MR. HARDEE

SPAN 101—ELEMENTARY SPANISH—3 cr. (3 and 0)

A course for beginners in which through conversation, composition, and dictation the fundamentals of the language are taught and a foundation provided for further study and the eventual ability to read and speak the language. MR. RHYNE

SPAN 102—ELEMENTARY SPANISH—3 cr. (3 and 0)

A continuation of Span 101, in which a reader is also used. MR. RHYNE

SPAN 201—INTERMEDIATE SPANISH—3 cr. (3 and 0)

A short review of grammar with conversation, composition, and dictation continued from Span 102 and the beginning of more serious reading of Spanish prose in short stories or novels. MR. DEAN

* On leave.

SPAN 202—INTERMEDIATE SPANISH—3 cr. (3 and 0)

While attention is paid to writing and speaking Spanish, more stress is laid on the rapid reading of more difficult Spanish prose than in the earlier courses.

MR. DEAN

SPAN 301—ADVANCED SPANISH—3 cr. (3 and 0)

Rapid reading of difficult literary or scientific Spanish prose. MR. RHYNE

SPAN 302—ADVANCED SPANISH—3 cr. (3 and 0)

A continuation of Span 301, with selections being made to suit the needs of the students. MR. RHYNE

TEXTILE CHEMISTRY AND DYEING

MR. LINDSAY
MR. LANGSTON, MR. RAINEY, MR. BREAZEALE

TC 301—TEXTILE CHEMISTRY—2 cr. (2 and 0)

An introductory course for Textile Manufacturing students covering chiefly the structure and behavior of the less complex organic chemicals employed in the textile industry up to and including the simpler carbohydrates. *Prerequisite:* Chem 102. MR. BREAZEALE

TC 302—TEXTILE CHEMISTRY—2 cr. (2 and 0)

A continuation of TC 301 and 303 covering more complex compounds; starches, cellulose, proteins, dyestuffs, and synthetic fibers and resins. Much of the laboratory work is devoted to the analysis of such materials as sizes, finishes and fabrics composed of various fiber mixtures. *Prerequisite:* Chem 102.

MR. RAINEY, MR. BREAZEALE

TC 303—TEXTILE CHEMISTRY LABORATORY—1 cr. (0 and 3)

This course is to be taken concurrently with TC 301. MR. BREAZEALE

TC 304—TEXTILE CHEMISTRY LABORATORY—1 cr. (0 and 3)

This course is to be taken concurrently with TC 302.

MR. RAINEY, MR. BREAZEALE

TC 305—TEXTILE CHEMISTRY—4 cr. (4 and 0)

A comprehensive course for Textile Chemistry majors covering aliphatic organic compounds with major emphasis on products essential to the textile industry. *Prerequisite:* Chem 104. MR. RAINEY

TC 306—TEXTILE CHEMISTRY—4 cr. (4 and 0)

A continuation of TC 305 and 307 covering the aromatic compounds with particular attention to the chemistry of dyes and dye intermediates. *Prerequisite:* Chem 104. MR. RAINEY

TC 307—TEXTILE CHEMISTRY LABORATORY—1 cr. (0 and 3)

This course is to be taken concurrently with TC 305. MR. RAINEY

TC 308—TEXTILE CHEMISTRY LABORATORY—1 cr. (0 and 3)

This course is to be taken concurrently with TC 306. MR. RAINEY

TC 401—The Chemical Processing of Textile Materials—2 cr. (2 and 0)

A general study of the theory and practice involved in the chemical preparation of all types of fibers for textile use from the raw state through to the finished fabric. Such processes as scouring, bleaching, mercerizing, and the less complex dyeing procedures are covered. *Prerequisite:* TC 302 and 304. Mr. Langston

TC 402—The Chemical Processing of Textile Materials—2 cr. (2 and 0)

A continuation of TC 402 and 404 covering the more advanced dyeing procedures with general coverage of textile printing as well as the many processes involved in textile finishing such as shrink-proofing, flame-proofing, crease resistance, and water repellancy. *Prerequisite:* TC 302 and 304.
Mr. Langston

TC 403—Textile Chemistry Laboratory—1 cr. (0 and 3)

This course is to be scheduled concurrently with TC 401.

TC 404—Textile Chemistry Laboratory—1 cr. (0 and 3)

This course is to be scheduled concurrently with TC 402.

TC 410—Color Matching and Testing—1 cr. (0 and 3)

The principles of color matching and mixing with practice in reproducing shades to standard, and testing color fastness of textiles by approved methods.
Mr. Lindsay

TC 430—Textile Finishing—3 cr. (1 and 6)

The principles involved in the application of finishes to textiles with emphasis on the newer developments in this rapidly expanding branch of textile chemistry. Modern machinery is available for semi-practical work with a wide range of finishes and fibers. Mr. Lindsay

TC 442—Thesis—2 cr. (0 and 6)

An investigation by each Textile Chemistry senior of an assigned problem related to textile processing. A formal written report is required from each student. *Prerequisite:* Senior standing. Mr. Lindsay

TC 447—The Chemical Processing of Textile Materials—3 cr. (3 and 0)

A course for Textile Chemistry majors similar to TC 401 and 403 except that it is more comprehensive with emphasis on the problems involved in the supervision of a textile finishing plant. *Prerequisite:* TC 306 and 308.
Mr. Lindsay

TC 449—Textile Chemistry Laboratory—1 cr. (0 and 3)

This course is to be scheduled concurrently with TC 447. Mr. Lindsay

TC 452—The Chemical Processing of Textile Materials—4 cr. (4 and 0)

A continuation of TC 447 and 449. *Prerequisite:* TC 306 and 308.
Mr. Lindsay

TC 454—TEXTILE CHEMISTRY LABORATORY—1 cr. (0 and 3)

This course is to be scheduled concurrently with TC 452. MR. LINDSAY

TC 455—CELLULOSE CHEMISTRY—3 cr. (3 and 0)

An introductory course covering the constitution and behavior of cellulose and its derivatives. Particular attention is given to the purification of wood and other raw materials used for the preparation of rayon pulps. *Prerequisite:* TC 306 and 308. MR. LANGSTON

TC 456—CHEMISTRY OF SYNTHETIC FIBERS AND FINISHES—3 cr. (3 and 0)

A study of the chemistry of large molecular substances such as nylon, vinyon, the rayons, and the protein-type synthetics. The varied synthetic resins used for special effects on textiles are covered in detail. *Prerequisite:* TC 306 and 308. MR. LANGSTON

TC 511—THE THEORY AND APPLICATION OF SYNTHETIC RESINOUS MATERIALS—3 cr. (2 and 3)

TC 512—THE THEORY AND APPLICATION OF SYNTHETIC RESINOUS MATERIALS—3 cr. (2 and 3)

TC 521—ADVANCED CELLULOSE CHEMISTRY—3 cr. (3 and 0)

TC 531—CHEMISTRY OF COLORING MATTERS—3 cr. (2 and 3)

TC 591—RESEARCH—3 cr.

TC 592—RESEARCH—3 cr.

TEXTILE MANAGEMENT

MR. BROWN

MR. HEYN, MR. CAMPBELL, MR. CARSON, MR. GRAHAM, MR. LAROCHE, MR. RICHARDSON, MR. WILSON, MR. WRAY

TM 101—INTRODUCTION TO TEXTILES—3 cr. (2 and 3)

An introduction to textile manufacturing. Elementary studies of staple fibers, and machinery involved in converting them into yarns and fabrics.

MR. RICHARDSON

TM 401—TEXTILE COSTING—5 cr. (3 and 6)

A study in the principles of costing as they apply to the manufacture of textiles. Allocating the cost of material, labor and overhead; determining the costs of individual yarns and fabrics; valuing the inventory; making of cost reports and payroll analysis. *Prerequisite:* Seniors majoring in Textiles.

MR. CAMPBELL

TM 403—TEXTILE MANAGEMENT—3 cr. (3 and 0)

Management techniques used in: Mill buildings and equipment lay-out and care; personnel management; relations with external organizations including labor unions; safety promotions; production planning and control; material, machine and labor product sales; purchasing; quality control; textile company organization and control. MR. WRAY

TM 454—MOTION AND TIME STUDY—3 cr. (2 and 3)

Job Analysis; methods study; work place layout; time study and incentives; theory and practical work. MR. CARSON

TM 460—NATURAL FIBERS—3 cr. (3 and 0)

Fundamental properties of textile fibers as studied from the chemical, physical, and botanical side. The microscopic and molecular structure development in the plant, and extraction and preparation from the plant. Survey of plant fibers and fiber plants and more complete discussion of the main natural (plant and animal) fibers. Methods of fiber research. *Prerequisite:* Senior standing. MR. HEYN

TM 462—TEXTILE MICROSCOPY—2 cr. (1 and 3)

This course is especially planned to enable the student to utilize the microscope for examination and identification of textile fibers and materials used in the textile and related industries. *Principal Topics:* The preparation of the various materials used in the textile industry for microscopic examination.

MR. LAROCHE

TM 464—PHYSICAL TEXTILE TESTING—2 cr. (1 and 3)

This course gives the student a comprehensive understanding of all the important machines and techniques used in physical testing of fibers, yarns and fabrics. The applications of testing in modern textile research are stressed. *Prerequisite:* Senior standing. MR. BROWN, MR. WRAY

WEAVING AND DESIGNING

MR. MCKENNA

MR. CARTEE, MR. HUBBARD, MR. TARRANT, MR. WALTERS, MR. WILLIAMS, *MR. EFLAND, MR. JAMESON, MR. WHITTEN, MR. BALLENTINE

WD 201—FABRIC DESIGN—3 cr. (2 and 3)

A study of the basic weaves for cloth fabrication. Plain, twill, sateen weaves, and their derivatives; drawing-in drafts, reed plan, chain drafts, shedding cam design, and analysis of fabrics to obtain weave.

MR. WALTERS, MR. WILLIAMS, MR. JAMESON

WD 202—FABRIC DESIGN—2 cr. (1 and 3)

A study of the more complex and intricate weaves for fabrics. Extra warp and filling for weight and figure, filling reversible, double cloth, double plain and matelasse, Bedford Cord and pique, velveteen and corduroy, and Turkish towel. *Prerequisite:* WD 201. MR. TARRANT

WD 205—CAM LOOM MECHANISMS—1 cr. (0 and 3)

A study of the construction, mechanical operation, and adjustments of the cam loom. Analytical study of the loom, adjustment and timing of the shedding motion, adjustment and timing of the picking motion, the beating-up motion, let-off and take-up motions, gearing speeds, production. MR. WHITTEN

* On leave.

WD 206—CAM LOOM MECHANISMS—2 cr. (1 and 3)

A further study of the cam loom mechanisms to include the automatic filling transfer, filling feelers, filling cutters, filling stop motion, warp stop motions, extra attachments such as tape selvage motions, auxiliary cams for twill and sateen weaves, and the various overhead attachments for shedding motions of more than two harnesses, loom calculations. *Prerequisite:* WD 205.

MR. WILLIAMS

WD 301—FABRIC STRUCTURE AND DESIGN—2 cr. (1 and 3)

A study of the plans, drafts, and specifications required for the production of plain, leno, and figured fabrics. Leno mechanisms and design; warp and filling layouts; weave combinations; fabric construction; ratio of intersections; harness, reed, and chain plans; warping and slashing plans. *Prerequisite:* WD 201.

MR. HUBBARD

WD 302—FABRIC ANALYSIS—2 cr. (1 and 3)

A study of the analysis of fabrics as they come to the mill for reproduction. Methods of determining yards per pound from a small sample and from the yarn counts; overall and ground construction; selection of yarn counts; determining the design, drawing-in-draft, chain draft, and reed plan; warp dressing plan; cotton, wool, silk, and rayon fabrics. *Prerequisite:* WD 201, 202.

MR. CARTEE

WD 305—DOBBY AND BOX MECHANISMS—1 cr. (0 and 3)

A study of the construction, mechanical operation, and adjustment of dobby and box mechanisms. Setting and timing of the cylinder, knives, dobby crank, and shed; study of the box mechanisms and the use of two or more filling yarns in the weaving of fancy fabrics; setting, aligning, and timing of the box motion, and the building of pattern chains. *Prerequisite:* WD 205, 206.

MR. CARTEE, MR. TARRANT

WD 306—JACQUARD MECHANISM—2 cr. (1 and 3)

A study of the theory and mechanisms of the jacquard machine and its complementary equipment. Types of jacquard machines and principles of operation; methods of harness building; card cutting and lacing machines. *Prerequisite:* WD 201, 205.

MR. JAMESON

WD 309—KNITTING—1 cr. (0 and 3)

A study of the principles of knitted fabric construction and hosiery production. Knitting mechanisms, construction of knitted fabrics, and hosiery, rib knitting, hosiery machinery, fancy knitting, and knitting calculations.

MR. BALLENTINE

WD 310—ADVANCED HOSIERY KNITTING—3 cr. (2 and 3)

A course of study of advanced types of circular hosiery machines and of the modern type of ribbers involved in the manufacture of the more complex types of hosiery. Included are a study of mill problems and a study of yarns used in the knitting of hosiery. *Prerequisite:* WD 309.

MR. BALLENTINE

WD 311—FLAT KNITTING MECHANISM—2 cr. (1 and 3)

Elements of flat knitting for those majoring in knitting. The course deals with principles used mainly in tricot warp knitters and the so-called knitting

looms. Also included are studies of suitable yarns and preparation of knitting warps. MR. BALLENTINE

WD 312—KNITTED DESIGN AND ANALYSIS—2 cr. (1 and 3)

A study of the pattern mechanisms of hosiery machines and of the pattern mechanisms of the more complicated ribbers. A study of design for these machines from the designer's standpoint and from the practical standpoint. Analysis of knit fabrics is included along with costing procedures of a knitting mill engaged in half hose manufacture. *Prerequisite:* WD 309.

MR. BALLENTINE

WD 401—WARP PREPARATION—2 cr. (1 and 3)

A study of warping and slashing mechanisms and the plans and requirements for efficient operation. Types of warping equipment; slashing machinery; size mixtures and processing methods for cotton, rayon, and other fibers. *Prerequisite:* WD 301. MR. MCKENNA

WD 402—FABRIC DEVELOPMENT—2 cr. (1 and 3)

Production of woven patterns as studied in fundamental courses in the Weaving and Designing Department. Fabric development, analysis, and cloth order problems. *Prerequisite:* WD 301, 302, 305. MR. WALTERS

WD 404—THROWING—3 cr. (2 and 3)

A study of the general production of a typical "synthetic throwing plant" from the time the yarn is received through its preparation for quilling, warping, etc., to include re-drawing, soaking, drying, twisting, setting and winding. *Prerequisite:* Junior standing. MR. HUBBARD

WD 410—CIRCULAR BODY KNITTING—2 cr. (1 and 3)

A study of the machines used in the underwear and outerwear trade along with the design and analysis of these fabrics. A study of the market and of the knitting trade. MR. BALLENTINE

WD 411—FULL FASHIONED KNITTING—2 cr. (1 and 3)

A study of the mechanics of full fashioned knitting equipment, full fashioned mills and of the trade, and a study of yarn preparation, inspection, finishing, packaging, costing, quality control, and design and analysis. MR. BALLENTINE

WD 412—KNITTED GARMENT MANUFACTURE—2 cr. (1 and 3)

Actual experience in the manufacture of various knitted garments along with a study of the cutting trade, a study of fabricating machines, and finishing of knitted cloth. MR. BALLENTINE

YARN MANUFACTURING

MR. GAGE

MR. THOMSON, MR. MARVIN, MR. THOMPSON, MR. WILSON

YM 201—BLENDING AND CLEANING—3 cr. (2 and 3)

A study of the mechanical equipment used to open, blend and clean the raw materials and to prepare cotton and other staple fibers for succeeding

yarn manufacturing processes. Blending of staple fibers; calculations for drafts, measuring devices, waste, evener motions and production.

MR. MARVIN, MR. THOMPSON

YM 202—CARDING—3 cr. (2 and 3)

A study of the theory and operation of the card as it is used in the processing of staple fibers and the doubling and drafting of sliver on the drawing frame. Card construction, settings, clothing, ratio of speeds and draft, production and waste studies on the card. Drawing frame construction, drafts and doubling. MR. MARVIN, MR. WILSON

YM 301—ROVING FRAMES—3 cr. (2 and 3)

The construction and operation of fly frames. Drafting, twisting and winding on slubbers, intermediates, and Jack frames; production, rolls, spindles, and flyers, differential motions and cones, twist per inch, all calculations for these topics. MR. THOMSON, MR. WILSON

YM 302—SPINNING—3 cr. (2 and 3)

A study of the manufacturing possibilities of the ring spinning frame and ring twister as they are used in the processing of staple fibers. The theory of the spindle, ring and traveler, drafts, twist, builder motions, production, general machine construction, and problems applicable to machines. MR. THOMSON

YM 305—COTTON MARKETING—1 cr. (0 and 3)

Cotton classing according to U. S. Government Standards for grades and staples. Classing and valuing all grades of cotton raised in U. S.; methods of ginning, marketing, and handling cotton; contracts and claims. MR. GAGE

YM 306—COMBING—2 cr. (1 and 3)

A study of settings and adjustment of the comber and its preparatory machines; the value and use of its product. Timing and setting comber for various staples and required waste, production and other calculations; management; and operation of these machines. MR. THOMPSON

ZOOLOGY

MR. COCHRAN

MR. ANDERSON, MR. WARE, MR. WARNHOFF, MR. BOYKIN

ZOOL 101, 103—GENERAL ZOOLOGY—4 cr. (3 and 3)

A study designed to give the student thorough training in fundamental types and zoological principles. The morphology, physiology, behavior, reproduction, ecology, embryology, zoogeography, evolution and palaeontology of each phylum are presented. MR. WARE, MR. WARNHOFF, MR. BOYKIN

ZOOL 301—ADVANCED ZOOLOGY—3 cr. (2 and 3)

A study designed to give the student advanced training in zoological principles, physiology and comparative vertebrate anatomy. *Prerequisite:* Zool 101 and 103. MR. WARE

ZOOL 302—VERTEBRATE EMBRYOLOGY—3 cr. (2 and 3)

A study designed to give the student the fundamentals of developmental anatomy of the organ systems as illustrated by the chick and pig. By actual preparation of histological sections and mounts the student acquires practice in laboratory procedure and a working knowledge of vertebrate microscopic anatomy. Identification of the various tissues is stressed. *Prerequisite:* Zool 101, 103 and 301. MR. WARE

ZOOL 304—ANIMAL ECOLOGY—2 cr. (1 and 3)

An introduction to marine, fresh water and land animal communities as they exist in South Carolina. Students will gain a knowledge of the common animal associations as they are related to land use through lectures, reading, films and field trips. MR. WARE

ZOOL 306—GAME MANAGEMENT—2 cr. (2 and 0)

A study of breeding habits of game animals and birds and type of territory desirable. The ethics of sportsmanship, and the control of predators are among other subjects covered. MR. WARE

ZOOL 402—ANIMAL ANATOMY AND PHYSIOLOGY—3 cr. (2 and 3)

A basic study of the anatomy and physiological processes of ingestion, secretion, excretion, respiration, circulation, reproduction and metabolism of warm-blooded animals. This course is designed to be of value to students majoring in Pre-Medicine, Pre-Veterinary, Animal Husbandry, Dairy and Poultry. *Prerequisite:* Zool 101, 103. MR. ANDERSON

ZOOL 403—PROTOZOOLOGY—3 cr. (2 and 3)

Instruction in the taxonomy of the sub-kingdom protozoa with special reference to the parasitic forms directly affecting man. Representative types of free-living forms are surveyed with emphasis on their morphology, physiology, and distribution. *Prerequisite:* Zool 101, 103. MR. WARE, MR. BOYKIN

ZOOL 404—DISEASES OF ANIMALS—2 cr. (2 and 0)

A course designed to give agricultural students instruction in the recognition, causes, and treatment of the diseases of farm animals. The principles of etiology, pathology, diagnosis, symptoms, and treatment of infectious and non-infectious diseases are considered at length. MR. ANDERSON

ZOOL 405—ANIMAL HISTOLOGY—3 cr. (2 and 3)

The purpose of this course is to acquaint the student with microscopic structures of tissues and organs of the animal body. This course is designed to be of value to students in Pre-Veterinary, Pre-Medicine and the Animal Science courses. *Prerequisite:* Zool 101, 103. MR. ANDERSON

ZOOL 501—ADVANCED ANIMAL HISTOLOGY—3 cr. (2 and 3)

ZOOL 502—HISTOLOGICAL TECHNIQUES—3 cr. (1 and 6)

ZOOL 503—ANIMAL ECOLOGY—4 cr. (2 and 6)

ZOOL 504—ORNITHOLOGY—3 cr. (2 and 3)

ZOOL 505—PATHOGENIC DISEASES OF LIVESTOCK—3 cr. (3 and 0)

ZOOL 556—ECONOMIC ZOOLOGY—3 cr. (2 and 3)

ZOOL 591—RESEARCH—3 cr.

ZOOL 592—RESEARCH—3 cr.

THE CLEMSON AGRICULTURAL COLLEGE RECORD

PART VI

Public Service Activities

SCHOOL OF AGRICULTURE STAFF

TEACHING AND PUBLIC SERVICE ACTIVITIES

Board of Control

J. B. Douthit, Jr., *Chairman* ..... Pendleton
R. M. Cooper, *Ex-Officio* ..... Wisacky
T. B. Young ..... Florence
Paul Sanders ..... Ritter
F. E. Cope ..... Cope
W. A. Barnette ..... Greenwood
J. F. McLaurin ..... Bennettsville

Administration

R. F. Poole, PhD., DSc., LL.D., Litt.D. ..... *President*
M. D. Farrar, Ph.D. ..... *Dean of Agriculture*
R. W. Carter, D.V.M. ..... *Director of Livestock Sanitary Work, Columbia*
O. B. Garrison, Ph.D. ..... *Director of Agricultural Experiment Station*
J. W. Jones, Ph.D. ..... *Director of Agricultural Teaching*
D. W. Watkins, M.A. ..... *Director of Extension*
Juanita H. Neely, M.S.—
State Home Demonstration Agent, Winthrop College, Rock Hill
T. W. Morgan, M.S. ..... *Assistant Director of Extension*
Jane Ketchen, B.A., B.S.—
Assistant State Home Demonstration Agent, Winthrop College, Rock Hill
G. H. Bonnette, B.S. ..... *Chief Clerk and Accountant of Extension*

Extension District Agents

L. B. Massey, B.S. ..... First District, Spartanburg
J. T. Lazar, B.S. ..... Second District, Florence
A. H. Ward, M.S. ..... Third District, Aiken

District Home Demonstration Agents

W. Gertrude Lanham, M.S. ..... First District, Rock Hill
Curtys Ballentine, M.S. ..... Second District, Rock Hill
Sallie A. Pearce, M.A. ..... Third District, Rock Hill

Supervisors Negro Extension Work

E. N. Williams, B.S.A. ..... State Supervisor,
Negro Agricultural Extension Work, State College, Orangeburg
Waymon Johnson, M.S. ..... Assistant State Supervisor,
Negro Agricultural Extension Work, State College, Orangeburg
Marian B. Paul, B.S. ..... State Supervisor,
Negro Home Demonstration Work, State College, Orangeburg
Willie P. Washington ..... Assistant State Supervisor,
Negro Home Demonstration Work, State College, Orangeburg
Sara K. Aiken ..... Assistant State Supervisor,
Negro Home Demonstration Work, State College, Orangeburg

Superintendents Branch Experiment Stations

W. C. Barnes, Ph.D.—
Truck Station, P. O. Box 3158, St. Andrews Branch, Charleston
E. E. Hall, M.S. ..... Pee Dee Station, Florence
E. D. Kyzer, B.S. ..... Coast Station, Summerville
J. A. Riley, M.S. ..... Sandhill Station, P. O. Box 1174, Columbia
W. B. Rogers, B.S. ..... Edisto Station, Blackville

Agricultural Chemistry, Research Division, Fertilizer Inspection and Analysis

B. D. Cloaninger, M.S.† ..... Head of Department
J. T. Foy, B.S.† ..... Chemist

† Research Staff.

E. J. Lease, Ph.D.† ..... Nutritionist
E. E. Leslie, B.S.† ..... Associate Chemist
J. P. Livingston, B.S.† ..... Laboratory Assistant
Mary Lee McCrackan, B.A.† ..... Assistant Chemist
M. M. Phillippe, Ph.D.† ..... Chemist
D. B. Roderick, B.A.† ..... Assistant Chemist
H. J. Webb, Ph.D.† ..... Chief Chemist and Toxicologist

Agricultural Economics and Rural Sociology

G. H. Aull, Ph.D.° † ..... Head of Department, Professor of Agricultural Economics, Agricultural Economist
L. M. Bauknight, M.S.° ..... Associate Professor of Agricultural Economics
F. O. Black, M.A.† ..... Agricultural Statistician, Columbia (USDA)
V. A. Boyd, M.S.A.° ..... Associate Professor of Rural Sociology
E. E. Brown, M.S.† ..... Associate Agricultural Economist
C. P. Butler, M.S.† ..... Agricultural Economist (USDA)
D. E. Crawford, M.S.† ..... Associate Agricultural Economist
C. D. Evans, M.S.† ..... Assistant Agricultural Economist
W. T. Ferrier, Ph.D.° †— Agricultural Economist, Professor of Agricultural Economics
L. D. Malphrus, Ph.D.† ..... Associate Agricultural Economist
J. F. Miles, Ph.D.† ..... Associate Agricultural Economist
J. F. Pittman, B.S.† ..... Assistant Agricultural Economist
M. C. Rochester, Ph.D.‡ .... Leader, Agricultural Economics Extension Work
F. M. Simpson, B.S.° †— Agricultural Economist, Visiting Professor of Agricultural Economics
J. M. Stepp, Ph.D.° ..... Professor of Agricultural Economics
H. L. Streetman, M.S.† ..... Assistant Agricultural Economist
M. H. Sutherland, B.S.‡ ..... Extension Agricultural Economist
C. C. Taylor, M.S.† ..... Agricultural Economist (USDA)
B. J. Todd, M.S.° † ..... Associate Agricultural Economist, Associate Professor of Agricultural Economics
C. H. Whitworth, B.S.A.† ..... Agricultural Statisician, Columbia (USDA)
P. S. Williamon, B.S.‡ ..... Extension Farm Management Specialist

Agricultural Engineering

G. B. Nutt, M.S.° † ..... Head of Department, Professor of Agricultural Engineering, Agricultural Engineer
J. H. Anderson, B.S.† ..... Assistant Agricultural Engineer
W. A. Balk, B.S.† ..... Associate Agricultural Engineer, Edisto Station
E. G. Comer, B.S.‡ ..... Assistant Extension Agricultural Engineer
J. T. Craig, B.S.° ..... Assistant Professor of Agricultural Engineering
G. H. Dunkelberg, M.S.° † ..... Associate Agricultural Engineer, Associate Professor of Agricultural Engineering
J. J. Floyd, B.S.† ..... Assistant Agricultural Engineer, Pee Dee Station
J. W. Hilliard, B.S.† ..... Agent, Junior Agricultural Engineer (USDA)
W. A. Jones, B.S.‡ ..... Assistant Extension Agricultural Engineer
G. P. Kinard, B.S.† ..... Assistant Agricultural Engineer
W. P. Law, B.S.† ..... Associate Agricultural Engineer
C. M. Lund, B.S.† ..... Assistant Agricultural Engineer
H. P. Lynn, B.S.‡ ..... Assistant Extension Agricultural Engineer
W. N. McAdams, M.S.† ..... Associate Agricultural Engineer
M. C. McKenzie, B.S.‡ ..... Extension Agricultural Engineer
H. E. McLeod, B.S.° ..... Instructor in Agricultural Engineering
J. A. Mullins, B.S.† ..... Assistant Agricultural Engineer, Edisto Station (USDA)
J. K. Park, M.S.† ..... Agricultural Engineer (USDA)
E. B. Rogers, M.S.° ..... Associate Professor of Agricultural Engineering
W. E. Seigler, B.S.† ..... Assistant Agricultural Engineer, Edisto Station

° Teaching Staff.
† Research Staff.
‡ Extension Staff.

A. W. Snell, M.S.* .....Associate Professor of Agricultural Engineering
G. H. Stewart, M.S.‡ .....Leader, Agricultural Engineering Extension Work

Agronomy

J. B. Pitner, Ph.D.* †—
Head of Department, Professor of Agronomy, Agronomist
H. C. Allbritten, Ph.D.† .....Agronomist
O. W. Beale, M.S.† .....Soil Scientist (USDA)
W. B. S. Boykin, Ph.D.* †—
Associate Agronomist, Associate Professor of Agronomy
J. F. Bullock, M.S.† .....Agronomist, Pee Dee Station (USDA)
J. F. Chaplin, M.S.† .....Assistant Agronomist, Pee Dee Station
G. H. Collings, Ph.D.* .....Professor of Soils
H. P. Cooper, Ph.D.* † .....Agronomist, Professor of Agronomy
E. B. Eskew, M.S.† .....Associate Agronomist
J. C. Etheridge † .....Field Assistant, Edisto Station
C. A. Fennell, B.S.† .....Assistant Agronomist
Z. T. Ford, B.S.† .....Agent, Pee Dee Station (USDA)
R. H. Garrison, B.S.† .....Associate Plant Breeder
D. C. Harrell, B.S.† .. Agent, (Associate Agronomist) Pee Dee Station (USDA)
F. M. Harrell † .....Research Assistant, Pee Dee Station
R. H. Hawkins, M.S.† .....Associate Agronomist, Sandhill Station
W. H. Jenkins, B.S.† .....Agronomist, Pee Dee Station (USDA)
C. M. Jones, Ph.D.* .....Associate Professor of Agronomy
J. M. Lewis, B.S.‡ .....Extension Tobacco Specialist
Alfred Manwiller, Ph.D.† .....Associate Plant Breeder, Pee Dee Station
W. R. Paden, Ph.D.† .....Agronomist
N. R. Page, M.S.† .....Associate Agronomist
T. C. Peele, Ph.D.† .....Soil Scientist
W. H. Rolfe, B.S.† .....Agent, Pee Dee Station (USDA)
R. C. Shelley, B.S.* .....Associate Professor of Agronomy
E. H. Stewart, M.S.† .....Soil Scientist (USDA)
R. F. Suman, M.S.† .....Assistant Agronomist, Edisto Station
E. C. Turner, B.S.‡ .....Extension Conservationist
W. E. Vaught † .....Agent, Pee Dee Station (USDA)
S. A. Williams, B.S.‡ .....Extension Cotton Ginning Specialist
H. A. Woodle, B.S.‡ .....Leader, Agronomy Extension Work
W. D. Yeargin † .....Agent, Pee Dee Station (USDA)

Animal Husbandry

L. V. Starkey, M.S.* † .....Head of Department,
Professor of Animal Husbandry, Animal Husbandman
L. F. Cato, B.S.‡ .....Extension Livestock Specialist, Spartanburg
J. R. Cook, M.S.* .....Associate Professor of Animal Husbandry
A. L. DuRant, M.S.‡ .....Leader, Livestock Extension Work, Florence
E. G. Godbey, B.S.† .....Animal Husbandman
W. C. Godley, M.S.* † .....Associate Animal Husbandman,
Associate Professor of Animal Husbandry
D. L. Handlin, M.S.* .....Assistant Professor of Animal Husbandry
C. H. Mudge, B.S.† .....Research Fellow, Johnsonville
R. R. Ritchie, M.S.* .....Professor of Animal Husbandry
R. F. Wheeler, Ph.D.* † .....Associate Animal Husbandman,
Associate Professor of Animal Husbandry
S. G. Woods, B.S.† .....Assistant Animal Husbandman, Coast Station

Botany, Bacteriology and Plant Pathology

G. M. Armstrong, Ph.D.* † .....Head of Department,
Professor of Botany and Bacteriology, Botanist and Plant Pathologist
W. B. Albert, Ph.D.† .....Associate Plant Physiologist

* Teaching Staff.
† Research Staff.
‡ Extension Staff.

Joanne K. Armstrong, Ph.D.† ..... Agent, (USDA)
C. H. Arndt, Ph.D.† ..... Plant Pathologist
Robert Aycock, Ph.D.† ..... Plant Pathologist, Edisto Station
C. C. Bennett, B.S.† ..... Assistant in Botany
J. H. Bond, M.S.* ..... Associate Professor of Bacteriology
W. M. Epps, Ph.D.† ..... Associate Plant Pathologist, Truck Station
H. H. Foster, Ph.D.† ..... Associate Plant Pathologist
T. W. Graham, Ph.D.† ..... Agent, Pee Dee Station (USDA)
Q. L. Holdeman, Ph.D.† ..... Associate Plant Pathologist, Pee Dee Station
W. C. Johnson, B.S.‡ ..... Extension Entomologist and Beekeeping Specialist
A. C. Mathews, Ph.D.* ..... Associate Professor of Botany
W. C. Nettles, M.S.‡ .. Leader, Extension Entomology and Plant Disease Work
D. H. Petersen, M.S.† ..... Agent, Pathologist (USDA)
D. B. Rosenkrans, M.A.* ..... Professor of Botany
J. M. Rush, Ph.D.* ..... Associate Professor of Bacteriology
R. W. Rutledge, Ph.D.* ..... Associate Professor of Botany
L. M. Sparks, Jr., B.S.‡ ..... Extension Specialist, Cotton Insects and Diseases
J. B. Whitney, Jr., Ph.D.* ..... Associate Professor of Botany

Dairy

J. P. LaMaster, M.S.* † ..... Head of Department, Professor of Dairying, Dairy Husbandman
G. R. W. Bentley, Jr., B.S.† ..... Associate Dairyman
G. W. Brandt, M.S.* †— Associate Dairy Husbandman (USDA), Associate Professor of Dairying
C. C. Brannon, B.S.* † ... Associate Dairyman, Associate Professor of Dairying
C. G. Cushman, B.S.‡ ..... Leader, Dairy Extension Work
J. P. Ginn, B.S.† ..... Assistant in Dairying
B. E. Goodale, M.S.* ..... Professor of Dairying
D. M. Graham, Ph.D.* †— Associate in Dairying, Assistant Professor of Dairying
Victor Hurst, Ph.D.* †— Associate Dairy Husbandman, Associate Professor of Dairying
J. W. Kelly, B.S.† ..... Assistant in Dairying
W. A. King, Ph.D.* † ..... Dairy Husbandman, Professor of Dairying
J. T. Lazar, Jr., M.S.* ..... Associate Professor of Dairying
C. H. Lomas, M.A.‡ ..... Extension Dairy Specialist
D. C. Price, B.S.* † ..... Assistant in Dairying, Instructor in Dairying

Entomology and Zoology

J. H. Cochran, Ph.D.* † ..... Head of Department, Professor of Entomology and Zoology, State Entomologist
Norman Allen, M.S.† ..... Entomologist, Pee Dee Station (USDA)
G. W. Anderson, D.V.M., M.S.* † ..... Animal Pathologist, Associate Professor of Zoology and Veterinary Medicine
J. D. Boykin, M.S.* ..... Instructor in Zoology
W. F. Chamberlain, Ph.D.† ..... Associate Entomologist
F. P. Cuthbert, Jr., B.S.† ..... Assistant Entomologist, Truck Station (USDA)
O. T. Deen, B.S.† ..... Associate Entomologist, Truck Station (USDA)
David Dunavan, M.S.* †— Associate Entomologist, Associate Professor of Entomology and Zoology
W. J. Goodwin, Ph.D.† ..... Associate Entomologist
C. R. Hodge, B.S.† ..... Assistant Entomologist, Pee Dee Station
A. R. Hopkins, B.S.† ..... Assistant Entomologist, Pee Dee Station (USDA)
W. C. Johnson, B.S.‡ ..... Extension Entomologist and Beekeeping Specialist
V. M. Kirk, Ph.D.† ..... Associate Entomologist, Pee Dee Station
W. C. Nettles, M.S.‡ .. Leader, Extension Entomology and Plant Disease Work
W. H. Purser, M.S.† ..... Assistant Entomologist

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* Teaching Staff.
† Research Staff.
‡ Extension Staff.

W. J. Reid, Jr., B.S.† ..... Entomologist, Truck Station (USDA)
L. M. Sparks, Jr., B.S.‡ .... Extension Specialist in Cotton Insects and Diseases
R. L. Walker, B.S.† ..... Assistant Entomologist, Pee Dee Station (USDA)
R. E. Ware, B.S.* ..... Associate Professor of Entomology and Zoology
E. H. Warnhoff, Jr., M.S.* .... Associate Professor of Entomology and Zoology
J. G. Watts, M.S.† ..... Entomologist, Edisto Station

Farms

C. S. Patrick, B.S.† ..... Head of Department

Forestry

W. J. Barker, B.S.‡ ..... Leader, Forestry Extension Work
N. B. Goebel, M.S.† ..... Associate Forester
C. W. Hall, B.S.‡ ..... Extension Forester, Columbia
Koloman Lehotsky, Ph.D.* ..... Associate Professor of Forestry
S. A. Marbut, B.S.‡ ..... Extension Forester

Four-H Club Work

L. O. Clayton, M.A.‡ ..... State Boys' 4-H Club Agent
G. H. Baker, B.S.‡ ..... District Boys' 4-H Club Agent, Florence
Eloise Johnson, B.S.‡—
State Girls' 4-H Club Agent, Winthrop College, Rock Hill
Georgia M. Taylor, B.S.‡—
Assistant State Girls' 4-H Club Agent, Winthrop College, Rock Hill
J. B. Williams, B.S.‡ ..... District Boys' 4-H Club Agent, Aiken

Home Economics (Winthrop College, Rock Hill)

Elizabeth S. Watson, M.A.† ..... Head of Research Department
Ruby M. Craven, M.S.‡ ..... Extension Home Management Specialist
Phyllis Drake, M.S.† ..... Assistant Home Economist
Ellie Herrick, B.S.‡ ..... Extension Family Life Specialist
Margaret Martin, M.A.‡—
Extension Food Production and Conservation Specialist
Janie McDill, M.S.‡ ..... Extension Nutritionist
Florence E. Roach, B.A.† ..... Assistant in Home Economics
Annie Rogers, B.S.‡ ..... Extension Marketing Specialist
Portia Seabrook, M.S.‡ ..... Extension Clothing Specialist

Horticulture

A. M. Musser, B.S.* † ..... Head of Department, Professor of Horticulture, Horticulturist
H. A. Bowers, M.S.‡ ..... Extension Truck Crops Specialist, Barnwell
J. H. Crawford, B.S.† ..... Assistant Horticulturist
R. J. Ferree, M.S.‡ ..... Leader, Extension Horticulture Work
M. G. Hamilton, Ph.D.* †—
Associate Horticulturist, Associate Professor of Horticulture
M. B. Hughes, Ph.D.† ..... Horticulturist, Edisto Station
J. A. Martin, B.S.† ..... Associate Horticulturist
W. H. Rhodes, B.S.† ..... Associate Horticulturist, Sandhill Station
A. E. Schilletter, B.S.‡ ..... Associate Extension Horticulturist
H. J. Sefick, M.S.* †—
Associate Horticulturist, Associate Professor of Horticulture
T. L. Senn, M.S.* ..... Associate Professor of Horticulture
F. W. Thode, M.S.* ..... Associate Professor of Horticulture
L. O. Van Blaricom, M.S., Ch.E.* †—
Associate Food Technologist, Associate Professor of Food Technology

Marketing (Headquarters, Columbia)

J. E. Youngblood, B.S.‡ ..... Chief, Extension Division Marketing
L. M. Asbill ‡ ..... Extension Marketing Specialist

* Teaching Staff.
† Research Staff.
‡ Extension Staff.

W. R. Flemming, B.S.‡ ..... Extension Marketing Specialist
L. C. Hamilton, B.S.‡ ..... Extension Marketing Specialist
C. H. Langford, B.S.‡ ..... Extension Marketing Specialist
E. W. Siedschlag, B.S.‡ ..... Extension Marketing Specialist
R. D. Steer, B.S.‡ .... Extension Cooperative Marketing Specialist, Greenwood
W. A. Tuten ‡ ..... Extension Marketing Specialist

Poultry

C. L. Morgan, M.S.° † ..... Head of Department, Professor of Poultry Husbandry, Poultryman
M. A. Boone, M.S.† ..... Associate Poultryman
J. B. Cooper, M.S.° ..... Associate Professor of Poultry Husbandry
P. H. Gooding, M.S.‡ ..... Leader, Poultry Extension Work
E. H. Mathis, Jr., B.S.‡ ..... Extension Turkey Specialist, Columbia
E. C. Naber, Ph.D.† ..... Assistant Poultryman
E. A. Peterkin, B.S.‡ ..... Extension Poultryman, Dillon
D. J. Richey, Ph.D.† ..... Associate Poultry Pathologist
C. F. Risher, B.S.‡ ..... Extension Turkey Specialist, York
M. L. Tarpy, B.S.‡ ..... Extension Poultryman

Publications

S. C. Stribling, B.S.† ‡ ..... Agricultural Editor
A. B. Bryan, B.Litt.† ‡ ..... Agricultural Editor Emeritus
J. B. Copeland, B.S.A.† ..... Assistant Agricultural Editor
J. M. Eleazer, B.S.‡ ..... Extension Information Specialist
J. R. Mattison, B.S.‡ ..... Extension Radio Specialist
Doris A. Timmerman, B.A.† ‡ ..... Assistant Agricultural Editor

Visual Instruction

Lewis W. Riley ‡ ..... Extension Specialist Motion Pictures and Photography
G. G. Daniel, B.S.‡ ..... Assistant in Visual Instruction

Crop Pest Commission and Seed Certification

J. H. Cochran, Ph.D.° †— State Entomologist, Professor of Entomology and Zoology
G. M. Armstrong, Ph.D.° †— State Pathologist, Professor of Botany and Bacteriology
G. M. Anderson, B.S.† ..... Assistant State Pathologist
J. A. Berly, B.S.† ..... Entomologist
C. A. Fennell, B.S.† ..... Assistant Agronomist
R. H. Garrison, B.S.† .... Associate Plant Breeder in Charge Seed Certification
W. H. Purser, M.S.† ..... Assistant Entomologist
J. K. Reed, M.S.† ..... Associate Entomologist

COUNTY AGENTS

County	*Name*	*Post Office*
Abbeville	L. H. Bull, B.S.	Abbeville
Aiken	R. R. Mellette, B.S.	Aiken
Allendale	H. V. Rogers, B.S.	Allendale
Anderson	J. H. Hopkins, B.S.	Anderson
Bamberg	R. C. Hubbard, Jr., B.S.	Bamberg
Barnwell	D. A. Shelley, B.S.	Barnwell
Beaufort	W. L. Johnson, B.S.	Beaufort
Berkeley	M. C. Mason, B.S.	Moncks Corner
Calhoun	O. W. Cain, B.S.	St. Matthews
Charleston	C. J. Livingston, B.S.	Charleston
Charleston	C. W. Carraway, B.S. (Associate)	Charleston

° Teaching Staff.
† Research Staff.
‡ Extension Staff.

County	*Name*	*Post Office*
Cherokee	T. B. Lee, B.S.	Gaffney
Chester	D. C. Wylie, Jr., B.S.	Chester
Chesterfield	J. C. Willis, B.S.	Chesterfield
Clarendon	A. D. Grainger, B.S.	Manning
Colleton	L. W. Alford, B.S.	Walterboro
Darlington	W. J. Gray, B.S.	Darlington
Dillon	H. F. Livingston, Jr., B.S.	Dillon
Dorchester	J. L. King, B.S.	St. George
Edgefield	O. W. Lloyd, B.S.	Edgefield
Fairfield	M. H. Lynn, B.S.	Winnsboro
Florence	J. T. Rogers, B.S.	Florence
Georgetown	M. M. McCord, B.S.	Georgetown
Greenville	J. K. Jones, B.S.	Greenville
Greenwood	P. M. Garvin, B.S.	Greenwood
Hampton	C. W. Thompson, B.S.	Hampton
Horry	V. M. Johnston, B.S.	Conway
Jasper	E. G. Tate, Jr., B.S.	Ridgeland
Kershaw	W. C. McCarley, B.S.	Camden
Lancaster	F. W. Cannon, B.S.	Lancaster
Laurens	C. B. Cannon, B.S.	Laurens
Lee	W. L. Bryant, B.S.	Bishopville
Lexington	S. E. Evans, M.S.	Lexington
McCormick	G. W. Bonnette, B.S.	McCormick
Marion	J. C. King, B.S.	Marion
Marlboro	E. C. Abrams, B.S.	Bennettsville
Newberry	P. B. Ezell, B.S.	Newberry
Oconee	J. C. Morgan, B.S.	Walhalla
Orangeburg	J. C. McComb, B.S.	Orangeburg
Pickens	J. R. Wood, B.S.	Pickens
Richland	R. W. Bailey, B.S.	Columbia
Saluda	F. M. Kearse, B.S.	Saluda
Spartanburg	W. J. Martin, B.S.	Spartanburg
Sumter	T. O. Bowen, B.S.	Sumter
Union	J. L. Cochran, B.S.	Union
Williamsburg	R. A. Jackson, B.S.	Kingstree
York	J. D. Miller, B.S.	York

ASSISTANT COUNTY AGENTS

County	*Name*	*Post Office*
Abbeville	J. O. Bethea, B.S.	Abbeville
Aiken	W. A. Beasley, B.S.	Aiken
Anderson	H. D. Marett, B.S.	Anderson
Anderson	Marett Outz, B.S.	Anderson
Barnwell	R. H. Sams, B.S.	Barnwell
Cherokee	G. A. Wolfe, B.S.	Gaffney
Chester	A. F. Busby, B.S.	Chester
Chesterfield	E. C. Wallace, B.S.	Chesterfield
Clarendon	F. M. Johnson, B.S.	Manning
Colleton	J. R. White, Jr., B.S.	Walterboro
Colleton	A. E. Liebenrood, B.S.	Walterboro
Colleton	L. S. Livingston, B.S.	Walterboro
Darlington	C. G. Newton, Jr., B.S.	Darlington
Dillon	J. L. Brown, B.S.	Dillon
Dorchester	G. H. Liebenrood, B.S.	St. George
Edgefield	W. H. Craven, Jr., B.S.	Edgefield
Edgefield	W. H. Funchess, B.S.	Edgefield
Edgefield	C. R. Tuten, B.S.	Edgefield
Fairfield	A. D. Boggs, B.S.	Winnsboro
Florence	F. M. Fleming, B.S.	Florence

County	*Name*	*Post Office*
Florence	J. W. Brunson, B.S.	Florence
Florence	R. C. DuBose, B.S.	Florence
Florence	J. F. Sessions, B.S.	Florence
Florence	D. E. Epps, B.S.	Florence
Greenville	J. W. Gilliam, Jr., B.S.	Greenville
Greenville	G. D. Butler, Special Agent	Greenville
Greenville	T. J. Bryson, B.S.	Greenville
Greenwood	L. R. Allen, B.S.	Greenwood
Hampton	O. F. Huff, B.S.	Hampton
Horry	L. P. Anderson, B.S.	Conway
Horry	D. A. Benton, B.S.	Conway
Jasper	J. L. Hayden, B.S.	Ridgeland
Kershaw	R. R. Montgomery, B.S.	Camden
Lancaster	J. M. Gaston, B.S.	Lancaster
Laurens	J. S. Boozer, B.S.	Laurens
Laurens	J. F. Wise, B.S.	Laurens
Lee	V. F. Linder, B.S.	Bishopville
Lexington	M. A. Bouknight, B.S.	Lexington
Marion	M. J. Carter, B.S.	Marion
Marlboro	C. T. Rogers, B.S.	Bennettsville
Newberry	W. A. Ridgeway, B.S.	Newberry
Oconee	C. W. Wilson, B.S.	Walhalla
Oconee	D. P. Matheson, B.S., Special Assistant	Walhalla
Orangeburg	L. M. Trowell, B.S.	Orangeburg
Orangeburg	J. B. Griffith, B.S.	Orangeburg
Pickens	N. C. Anderson, B.S.	Pickens
Richland	C. M. Shuman, B.S.	Columbia
Richland	R. H. Berly, B.S.	Columbia
Richland	W. S. Snelling, B.S.	Columbia
Richland	W. S. Toy, B.S.	Columbia
Saluda	C. B. Searson, Jr., B.S.	Saluda
Spartanburg	Crayton McCown, B.S.	Spartanburg
Spartanburg	P. M. Smith, B.S.	Spartanburg
Spartanburg	B. W. Sherer, B.S.	Spartanburg
Spartanburg	D. C. Hutchins, B.S.	Spartanburg
Sumter	R. D. McNair, B.S.	Sumter
Sumter	T. B. Tillman, Jr., B.S.	Sumter
Union	H. R. Montgomery, B.S.	Union
Williamsburg	L. B. Harrington, B.S.	Kingstree
York	C. H. Fant, B.S.	York
York	J. D. Williams, B.S.	York
York	J. M. Lawrence, B.S.	York
York	O. F. Lovelace, B.S.	York

NEGRO AGRICULTURAL AGENTS

County	*Name*	*Post Office*
Aiken	T. A. Hammond, B.S.A.	Aiken
Anderson	G. W. Stewart, B.S.A.	Anderson
Bamberg	E. D. Dean, B.S.A.	Bamberg
Beaufort	Benjamin Barnwell	Beaufort
Berkeley	R. C. Bacote, B.S.A.	Moncks Corner
Charleston	J. A. Amaker, B.S.A.	Charleston
Chester	M. M. Sitton, B.S.A.	Chester
Chesterfield	C. N. Wilson, B.S.A.	Chesterfield
Clarendon	William Thompson, B.S.A.	Manning
Colleton	J. J. Mitchell, B.S.A.	Walterboro
Colleton	Quincey Benbow, B.S.— Assistant Negro Agricultural Agent	Walterboro
Darlington	S. C. Disher	Darlington

County	*Name*	*Post Office*
Dorchester	Eugene Frederick, B.S.A.	St. George
Fairfield	D. G. Belton, Jr., B.S.A.	Winnsboro
Florence	H. S. Person, B.S.A.	Florence
Florence	Joseph Hill, B.S.A.— Assistant Negro Agricultural Agent	Florence
Florence	Hugene Gerald— Assistant Negro Agricultural Agent	Florence
Greenville	F. D. Garrett, B.S.A.	Greenville
Greenwood	B. C. Wright, B.S.A.	Greenwood
Hampton	J. W. Young, B.S.A.	Estill
Horry	W. P. Johnson	Conway
Kershaw	J. D. Marshall, B.S.A.	Camden
Lancaster	R. N. Smith, B.S.A.	Lancaster
Laurens	W. M. Holcomb, B.S.A.	Laurens
Marion	C. A. Brown, B.S.A.	Marion
Newberry	B. J. Gill, B.S.A.	Newberry
Orangeburg	G. W. Daniels	Orangeburg
Orangeburg	Q. J. Smith, B.S.A.— Assistant Negro Agricultural Agent, Orangeburg	
Richland	I. E. McGraw, B.S.A.	Columbia
Richland	W. J. Warren, M.S.— Assistant Negro Agricultural Agent	Columbia
Spartanburg	R. C. Smith, Jr., B.S.A.	Spartanburg
Spartanburg	Julius Westbrook, B.S.A.— Assistant Negro Agricultural Agent, Spartanburg	
Sumter	Arthur Sanders, B.S.A.	Sumter
Union	B. T. McIntosh, B.S.A.	Union
Williamsburg	V. B. Thomas, B.S.A.	Kingstree
York	B. T. Miller, B.S.A.	Rock Hill
York	J. G. Bowman, B.S.A.— Assistant Negro Agricultural Agent	Rock Hill
Negro Agricultural Agent-At-Large	G. W. Dean, B.S.A.	Orangeburg

COUNTY HOME DEMONSTRATION AGENTS

County	*Name*	*Post Office*
Abbeville	Betty O. Biggs, B.S.	Abbeville
Aiken	Alpha O. Covar, B.S.	Aiken
Allendale	Mamie Sue Hicks, B.S.	Allendale
Anderson	Teresa W. Caskey, B.S.	Anderson
Bamberg	Novice H. Folk, B.S.	Bamberg
Barnwell	Elizabeth R. McNab, B.A.	Barnwell
Beaufort	Vivian C. Grubb, B.S.	Beaufort
Berkeley	Elizabeth D. Boykin, B.A.	Moncks Corner
Calhoun	Katharine C. Gregg, B.S.	St. Matthews
Charleston	Matilda Bell, B.S.	Charleston
Cherokee	Betty Lee Palmer, B.S.	Gaffney
Chester	M. Eugenia Dudley, B.S.	Chester
Chesterfield	Lillian D. Rivers, B.S.	Chesterfield
Clarendon	Eleanor D. Carson, M.S.	Manning
Colleton	Eva M. McGee, B.S.	Walterboro
Darlington	Sara E. Roper, B.S.	Darlington
Dillon	Etta Sue Sellars, B.A.	Dillon
Dorchester	Ophelia S. Barker, B.S.	St. George
Edgefield	Margaret Forkner, B.S.	Edgefield
Fairfield	Mattie Lee Cooley, B.S.	Winnsboro
Florence	Velma M. Smith, B.S.	Florence
Georgetown	Mildred E. Koger, B.S.	Georgetown
Greenville	M. Myrtle Nesbitt, B.S.	Greenville

County	*Name*	*Post Office*
Greenwood	A. Louise McColl, B.S.	Greenwood
Hampton	Doris W. McClure, B.S.	Hampton
Horry	T. Hunter Owings, B.A.	Conway
Jasper	Elizabeth B. Berry	Ridgeland
Kershaw	Margaret B. Fewell, B.S.	Camden
Lancaster	Lena E. Sturgis	Lancaster
Laurens	Hazle Ann Dean, B.S.	Laurens
Lee	B. Carolyn Meares, B.S.	Bishopville
Lexington	Nelda S. Rowan, B.S.	Lexington
McCormick	Nancy M. Whisenhunt, B.S.	McCormick
Marion	Sallie M. Smith, B.S.	Marion
Marlboro	L. Louise Heriot, B.S.	Bennettsville
Newberry	Margie D. Freeman, B.S.	Newberry
Oconee	Mary C. Haynie, B.A.	Walhalla
Orangeburg	Sara E. Neeley, B.A.	Orangeburg
Pickens	Sarah G. Cureton, B.S.	Pickens
Richland	Marguerite Summer, B.S.	Columbia
Saluda	M. Carolyn Chapman, B.S.	Saluda
Spartanburg	Doris O. Hughey, B.S.	Spartanburg
Sumter	Rosalie C. Rayle, B.A.	Sumter
Union	M. Esther Sturgis, B.S.	Union
Williamsburg	Myrtle H. McFaddin, B.S.	Kingstree
York	Jennie M. McNaull, B.S.	York

ASSISTANT COUNTY HOME DEMONSTRATION AGENTS

County	*Name*	*Post Office*
Aiken	Margaret G. McFadden, B.S.	Aiken
Anderson	Elizabeth K. Nelson, B.S.	Anderson
Anderson	Betty Jean Kelley, B.S.	Anderson
Cherokee	Jessie Ann Wingo, B.S.	Gaffney
Chester	Phyllis H. Herring, B.S.	Chester
Chesterfield	Nancy Hiller, B.S.	Chesterfield
Clarendon	Carrie C. Tomlinson, M.S.	Manning
Colleton	Isobel P. Heaton, B.S.	Walterboro
Colleton	Ruth L. Medley, B.S.	Walterboro
Dillon	Lois P. Watson	Dillon
Florence	Frances H. Parnell, B.S.	Florence
Florence	Jessica V. Dantzler, B.S.	Florence
Greenville	Betty C. Hunt, B.S.	Greenville
Horry	Jeannine Hucks, B.S.	Conway
Kershaw	Jacqueline Sinclair	Camden
Lancaster	Jo Ann McCarty, B.S.	Lancaster
Laurens	S. Myrtice Taylor, B.S.	Laurens
Lexington	Josephine Leaman, B.S.	Lexington
Marion	Bobby H. Page, B.S.	Marion
Newberry	Barbara G. Brown, B.S.	Newberry
Oconee	Margaret W. Head, B.S.	Walhalla
Orangeburg	Huldah P. McKnight, B.S.	Orangeburg
Pickens	Addie M. Forrester, B.S.	Pickens
Richland	Theresa W. Beckham, B.S.	Columbia
Richland	Jeanne C. Robinson, B.S.	Columbia
Spartanburg	Reba B. Hauser, B.S.	Spartanburg
Spartanburg	Nancy E. Hill, B.S.	Spartanburg
Sumter	A. Margaret White, B.S.	Sumter
Williamsburg	Ophelia H. Wilson, B.S.	Kingstree
York	Foy Lou M. Griffin, B.S.	York
York	Frances G. Trammell, B.S.	York

NEGRO HOME DEMONSTRATION AGENTS

County	*Name*	*Post Office*
Aiken	Lonieal L. Harrison, B.S.	Aiken
Allendale	Annie Mae Butler, B.S.	Allendale
Anderson	Cynthia Williford, B.S.	Anderson
Bamberg	Anna D. Hunter, B.S.	Bamberg
Barnwell	Edna K. DuPree, B.S.	Barnwell
Beaufort	Williett B. Mance	Beaufort
Berkeley	Naomi B. Johnson, B.S.	Moncks Corner
Charleston	Albertha V. DeVeaux	Charleston
Cherokee	Martha O. Reid, B.S.	Gaffney
Clarendon	Queenie H. Smith, B.S.	Manning
Colleton	Gussie M. Goudlock, L.I.	Walterboro
Darlington	Hestella V. Broadwater, B.S.	Darlington
Dorchester	Lillie Mae Jamerson, B.S.	St. George
Fairfield	Juanita W. Toatley, B.S.	Winnsboro
Florence	Lillian W. Brown, L.I.	Florence
Georgetown	Rosa G. Gadson	Georgetown
Greenville	Glady L. Stoddard, B.S.	Greenville
Greenwood	Willie V. Thomas, B.S.	Greenwood
Hampton	Leona W. Bing, B.S.	Hampton
Horry	Phinetha S. Wilson, B.S.	Conway
Kershaw	Julia E. Dickson, B.S.	Camden
Lancaster	Madge W. Hardy, B.S.	Lancaster
Marion	Jean C. McKiever, B.S.	Marion
Newberry	Lillian G. Saunders, B.S.	Newberry
Orangeburg	Rosa R. Odom	Orangeburg
Richland	Gertrude H. Sanders, B.S.	Columbia
Spartanburg	Cammie F. Clagett, B.S.	Spartanburg
Sumter	Goldie E. McDuffie, B.S.	Sumter
Union	Laura J. Whitney, B.S.	Union
Williamsburg	Eva G. Lawrence, B.S.	Salters Depot
York	Cornelia C. Walker, B.S.	Rock Hill
Chesterfield	Iola D. Risher, B.S.	Chesterfield
	Assistant Negro Home Demonstration Agent	
Colleton	Hazel P. Scott, B.S.	Walterboro
	Assistant Negro Home Demonstration Agent	
Florence	Hattie P. Lowery, B.S.	Florence
	Assistant Negro Home Demonstration Agent	
Richland	Effie J. Henderson, B.S.	Columbia
	Assistant Negro Home Demonstration Agent	
York	Johnnie G. Sloan, B.S.	Rock Hill
	Assistant Negro Home Demonstration Agent	

LIVESTOCK SANITARY WORK

COLUMBIA, SOUTH CAROLINA

Director and State Veterinarian

R. W. Carter, D.V.M. ..... Columbia

State Assistant to Director

R. A. Mays, B.Sc., D.V.M. ..... Columbia

Assistant State Veterinarians

O. E. Baker, D.V.M. ..... Columbia
Bert W. Bierer, V.M.D. ..... West Columbia
W. R. Chastain, D.V.M. ..... Columbia
I. R. Cooper, Sr., D.V.M. ..... Allendale
J. C. Cornwell, D.V.M. ..... Columbia

E. T. Fisher, D.V.M. ..... Columbia
J. M. Love, D.V.M. ..... Clemson
Jack Scott, D.V.M. ..... Hemingway
Dan Strickland, D.V.M. ..... Columbia
John B. Thomas, D.V.M. ..... Columbia
S. M. Witherspoon, B.Sc., D.V.M. ..... Marion

State Livestock Inspectors

James C. Epps, Jr. ..... Columbia
A. T. Gilpin ..... Columbia
T. A. Warren, Jr. ..... Columbia

Federal Assistant Director

T. W. Boman, D.V.M. ..... Columbia

Federal Veterinary Livestock Inspector

L. S. Baer, D.V.M. ..... Columbia

Federal Livestock Inspectors

T. R. Davis ..... Clinton
D. M. Maxey ..... Piedmont
J. L. Morris ..... Lake City
J. A. Owen ..... Oswego
B. L. Walpole ..... Johns Island
C. A. Wilson ..... Orangeburg

Federal Serologist

Miss Paula Bird ..... Columbia

State Laboratory Assistants

Miss Mary C. Britton ..... Columbia
Mrs. Helen B. Motley ..... Columbia

Deputy State Veterinarians

W. W. Adams, D.V.M. ..... Clinton
R. E. Atkinson, D.V.M. ..... Kingstree
N. J. Ayers, D.V.M. ..... Greer
O. E. Ballenger, D.V.M. ..... Easley
W. A. Barnette, B.Sc., D.V.M. (Retired) ..... Greenwood
W. R. Beasley, D.V.M. ..... Batesburg
R. W. Beaty, Jr., D.V.M. ..... Sumter
M. R. Blackstock, D.V.S. ..... Spartanburg
T. E. Brown, D.V.M. ..... Spartanburg
J. E. Burch, D.V.M. ..... Lake City
Stuart E. Burnett, D.V.M. ..... Sumter
T. L. Burriss, D.V.M. ..... Anderson
W. M. Burriss, D.V.M. ..... Anderson
W. S. Carr, D.V.M. ..... Aiken
F. P. Caughman, Sr., B.S., V.M.D. ..... Columbia
F. P. Caughman, Jr., D.V.M. ..... Columbia
G. W. Cofer, D.V.M. ..... Columbia
Jack R. Cox, D.V.M. ..... Myrtle Beach
M. D. Culpepper, D.V.M. ..... Chester
J. W. Dantzler, D.V.M. ..... Orangeburg
J. T. Dickson, D.V.M. ..... Rock Hill
C. M. Dotson, D.V.M. ..... Lancaster
F. E. Ducey, Jr., D.V.M. ..... Ridgeland
Will T. Dunn, D.V.M. ..... Greenville
H. P. Dyches, D.V.M. ..... Aiken
H. W. Elder, D.V.M. ..... Manning
Wm. S. Fairey, D.V.M. ..... Orangeburg
J. C. Frazier, D.V.M. ..... Greenville
H. L. Frieze, D.V.M. ..... Gaffney
S. P. Galphin, D.V.M. ..... Holly Hill

J. G. Gibson, D.V.M. ..... Florence
W. H. Giddens, D.V.M. ..... Saluda
W. H. Gilmore, D.V.M. ..... Columbia
H. E. Gossett, D.V.M. ..... Spartanburg
L. H. Hardy, D.V.M. ..... Camden
C. C. Harmon, B.Sc., D.V.M. ..... Columbia
C. R. Hinson, D.V.M. ..... Bennettsville
Robert Hirshburg, D.V.M. ..... Bamberg
C. Douglas Hobart, D.V.M. ..... Cheraw
T. P. Hoffmeyer, D.V.M. ..... Florence
L. J. Hogan, D.V.M. ..... Charleston
E. G. Horres, D.V.M. ..... Charleston
E. B. Hubster, D.V.M. ..... Walterboro
T. B. Jacobs, D.V.M. ..... Newberry
C. V. Jameson, D.V.M. ..... Anderson
Preston B. Jones, D.V.M. ..... Anderson
S. J. Kellett, Jr., D.V.M. ..... Seneca
H. B. Kinard, Jr., D.V.M. ..... Greenwood
H. W. Kinard, D.V.M. ..... Bamberg
Frank E. Kitchen, D.V.M. (Retired) ..... Greenville
G. R. Kitchen, D.V.M. ..... Sumter
T. E. Lanham, D.V.M. ..... Edgefield
Worth Lanier, D.V.M. ..... York
W. R. Latta, D.V.M. ..... Orangeburg
G. J. Lawhon, Sr., B.Sc., D.V.M. ..... Hartsville
G. J. Lawhon, Jr., V.M.D. ..... Hartsville
J. S. Lide, D.V.M. ..... Newberry
C. B. Lowman, D.V.M. ..... Newberry
W. K. Magill, B.Sc., D.V.M. ..... Chester
W. H. Matthews, D.V.M. ..... Rock Hill
W. D. Mayfield, D.V.M. ..... Laurens
A. S. Moore, D.V.M. ..... Walterboro
G. E. H. Moore, D.V.M. ..... Walterboro
J. H. Moore, D.V.M. ..... Charleston
B. K. McInnes, M.D., V.M.D. ..... Charleston
B. C. McLean, V.M.D. ..... Aiken
S. Rice McMaster, D.V.M. ..... Rock Hill
E. E. Nissen, D.V.M. ..... Bennettsville
A. B. Pittman, D.V.M. ..... Springfield
Petro Pshyk, D.V.M. ..... Summerville
Bruce G. Pratt, D.V.M. ..... Beaufort
G. D. Radford, D.V.M. ..... Beaufort
M. J. Rattray, Jr., D.V.M. ..... Anderson
W. F. Rawlinson, D.V.M. ..... Manning
T. M. Rhodes, D.V.M. ..... Naval Base
E. A. Richardson, D.V.M. ..... Westminster
H. E. Riddle, D.V.M. ..... Greenville
L. D. Rodgers, D.V.M. ..... Greenwood
R. R. Salley, D.V.M. ..... Orangeburg
L. V. Sanders, D.V.M. ..... Abbeville
F. L. Shuler, D.V.M. ..... St. George
W. H. Shirer, D.V.M. ..... Georgetown
G. K. Smith, D.V.M. ..... Spartanburg
George M. Smith, D.V.M. ..... Greenville
J. Roderick Smith, D.V.M. ..... Marion
J. S. Smith, D.V.M. ..... Conway
J. D. Stith, D.V.M. ..... Hartsville
Otto M. Strock, D.V.M. ..... Charleston
E. D. Stuart, D.V.M. ..... Greenville
Pat Suber, D.V.M. ..... Columbia

H. L. Sutherland, D.V.M. ..... Union
E. R. Van de Grift, Jr., D.V.M. ..... Columbia
C. L. Vickers, D.V.M. ..... Winnsboro
H. A. Webb, D.V.M. ..... Georgetown
U. E. Whatley, D.V.M. ..... Dillon
J. M. Williams, D.V.M. ..... Moncks Corner
R. L. Willis, D.V.M. ..... Charleston

THE SOUTH CAROLINA AGRICULTURAL EXPERIMENT STATION

The Agricultural Experiment Station of South Carolina is a department of Clemson College. The experiment station at present consists of the main station, which is located at Clemson, and five branch stations: one at Summerville, in the coastal plain region; one at Florence, in the Pee Dee section; one at Pontiac, near Columbia, in the sandhill region, one in the trucking section near Charleston; and one in Barnwell county in the melon-growing area. The main offices and laboratories of the station are located on the Clemson College campus, while the station farm, consisting of about 200 acres, is east of and adjoining the College campus. The investigations dealing with the fundamental principles of agricultural science and with the application of such principles to practical agricultural operations are carried on in the laboratories and on the experiment station farm at Clemson. The experiments looking to the adaptation of such scientific data accumulated here and elsewhere to the conditions peculiar to certain sections of the State are carried on at the branch stations or other locations in the State.

It is the aim of the experiment station to conduct research work on problems which have a direct practical bearing on the agriculture of the State. With this end in view extensive experiments relative to the best methods of procedure under various conditions with the principal plants and animals have been undertaken. Economic and social problems are likewise being investigated. As progress is made the results obtained are given out to farmers in the form of bulletins, circulars, and personal letters.

Aside from the research work and the publication of results obtained from such research, the experiment station performs various other duties. Among these might be mentioned the entomological and pathological inspection work (which aims to protect the farms, orchards, and gardens of the State against the introduction of injurious insects and diseases); the biological and soil survey of the State, and the cooperative experimental work carried on with farmers in the State. The technically trained experts of the station

staff are regarded as authorities in their several specialties, and they are constantly giving out information relating to the various lines of agricultural endeavor. The station staff also aids in disseminating agricultural knowledge by cooperating with the Extension Service of the College in holding agricultural meetings and conferences and by meeting with the farm demonstration agents and giving to them technical information which they in turn carry direct to the farmers.

Close cooperation is maintained with the various research bureaus of the United States Department of Agriculture and with the departments of the College. The laboratories are always open to inspection by students and other people of the State. The same is true of the experiment station farm. There is always opportunity for a limited number of students to secure work in the various divisions of the station and to assist in the research work carried on by the members of the station staff.

Home economics research is carried on in cooperation with Winthrop College at Rock Hill. This work is designed to secure additional information on economic, social, and health factors influencing the home and living conditions of rural people.

Close cooperation is maintained between the home economics research department, the teaching and extension workers in this field, and the clubs and societies engaged in the promotion of better rural homes.

A full report of the work and expenditures of the Experiment Station is published annually and this report and all other publications of the station are free and will be sent on request. (Requests for these should be addressed to the Dean of Agriculture, Clemson, S. C.)

FERTILIZER INSPECTION AND ANALYSIS

The work of fertilizer inspection and analysis is under the supervision of the Fertilizer Board of Control consisting of a Committee of the Board of Trustees. The work of inspection and analysis is a department of the Agricultural Experiment Station. District Inspectors are located in different parts of the State. Their duties are to collect official fertilizer samples for analysis and check on the tagging and labeling of all fertilizer material.

The chemical work consists of the analysis of commercial fertilizers as provided for by the Fertilizer Law of the State. This Department also undertakes the analysis of waters, ores, minerals, and other naturally occurring materials, portions of human bodies in cases of suspected poisoning (as provided by law), and the analysis of home-mixed fertilizers. All the work of this Department is done without charge.

THE CLEMSON COLLEGE EXTENSION SERVICE

The Clemson College Extension Service is a branch of the Clemson Agricultural College, and is a cooperative service supported by the counties, the state, and the Federal government. The Extension Service is responsible for conducting with all people of South Carolina the cooperative educational and demonstration programs in agriculture and home economics of Clemson College and the United States Department of Agriculture.

The function of the Extension Service is to make available to farmers, homemakers and rural boys and girls through on-the-farm service, demonstrations, meetings, newspaper articles, publications, radio and television broadcasts, and other suitable methods, the results of research and successful farm and home experience and to assist them through interpretation, practical demonstrations, and otherwise in applying and using this information to improve their farms, farm homes, and communities, to the end that they may build a safe, sound, and progressive agriculture and rural life.

The annual plan of agricultural and home economics extension work is developed and carried out with close cooperation between the Extension Service and the farm and home leadership of the state, the counties, and the rural communities and neighborhoods.

The Staff of Agricultural Extension Workers includes the director, an assistant director, three district supervisory agents, a chief clerk and accountant, 46 county agents—one in each county, 62 assistant county agents, and 48 agricultural specialists in agricultural economics, agricultural engineering, agronomy, beekeeping, boys' 4-H club work, dairying, crop insects and diseases, cotton ginning, forestry, horticulture, livestock, marketing, poultry and turkeys, publications, soil conservation, and visual instruction.

The Extension Home Demonstration Staff has headquarters at Winthrop College by agreement between Clemson and Winthrop, and includes a state home demonstration agent, an assistant state

home demonstration agent, three district supervisory agents, 46 county home demonstration agents—one in each county, 32 assistant home demonstration agents, and nine specialists in clothing, family life, food production and conservation, girls' 4-H club work, health, home management, marketing and nutrition.

Negro Extension Workers include a state leader and an assistant state leader for Negro agricultural extension work, a state leader and two assistant state leaders for Negro home demonstration work, and a Negro agricultural agent at large, who have headquarters at the State College at Orangeburg. Negro county extension workers include 31 Negro agricultural agents, six assistant Negro agricultural agents, 31 Negro home demonstration agents, and six assistant Negro home demonstration agents.

LIVESTOCK SANITARY WORK

Clemson College Livestock Department is consolidated under one Director with the United States Department of Agriculture, Agricultural Research Service, Animal Disease Eradication Branch and is known as the State-Federal Livestock Disease Eradication Program. This department is charged with the control and eradication of contagious, infectious and communicable diseases of livestock and poultry and with the intra-state and inter-state movement of livestock and poultry. When requested, investigations are made, consultations are held and assistance in diagnosis is rendered. Certain disease treatment is offered. This department further organizes, develops and carries on educational programs for the control and eradication of diseases. Quarantine measures are employed to prevent, as far as possible, the introduction or spread of livestock diseases into this state.

The Clemson Livestock Laboratory, a fully equipped modern laboratory, staffed with highly trained personnel, is maintained 14 miles northeast of Columbia on U. S. Highway No. 1, at the site of the Sand Hill Experiment Station. This laboratory is prepared to assist veterinarians and owners of livestock and poultry in making post mortem laboratory examinations and bacteriological and pathological studies to aid in the diagnosis of diseases. If necessary, sufficient equipment can be sent into the field to diagnose and control disease on the spot.

The administrative office is located in the above building. Adequate records and identification of livestock are kept. A staff of

veterinarians work from the Columbia office and field veterinarians are located in various sections of the state. Their services may be obtained upon short notice by request. In addition to the regular field force of veterinarians directly connected with the Columbia office, practicing veterinarians are commissioned as Deputy State Veterinarians and assist in the eradication of infectious diseases of livestock. At present there are 95 veterinarians so commissioned and their locations are such that the Clemson College Livestock Sanitary Department is in a position to promptly and completely control and eradicate diseases in all sections of the state.

This department is required by legislative enactment and supported by legislative appropriation.

CONTROL OF CROP PESTS AND DISEASES

The work of eradicating or preventing the introduction, spread or dissemination of any injurious insects and plant diseases is carried on under the direction of the State Crop Pest Commission. The State Entomologist and the State Pathologist have charge of this work under the commission.

The work of these officers consists in the control of contagious plant diseases and insect pests. Supervision of all nursery stock sold within the State is a duty of the Crop Pest Commission.

A permit tag issued by the State Crop Pest Commission should be attached to every package of nursery stock, seed, or plants offered for sale or shipment for planting purposes.

THE ENGINEERING EXPERIMENT STATION

The Engineering Experiment Station of the Clemson Agricultural College was established by the Board of Trustees in July, 1924. Its purpose is to aid the present industries in the State to do research work on the material resources of the State with a view of leading to the establishment of new industries, to study methods of utilizing waste products, etc.

In addition to serving the industries of the State and helping to solve engineering problems for the agricultural interests, it is hoped, in cooperation with the stations of other states, to add to the store of scientific and engineering knowledge. The staff consists of well-trained men from the various schools and departments of the College. The laboratories of the several departments of engineering,

as well as others, are available for the use of the station in its investigation.

During the war period the Engineering Experiment Station undertook worthwhile projects in cooperation with the War Production Board. Emphasis is now being placed upon special research in ceramics, machine design and heat transfer.

ITINERANT TEACHER TRAINING IN VOCATIONAL EDUCATION

The College in cooperation with the State Department of Education is glad to assist those who teach vocational subjects in day trade schools and evening trade and industrial classes by supplying a trained man to assist in the work of organizing classes, organizing courses of study, making plans for teaching evening classes, and actually teaching vocational subjects. Requests for information regarding this service should be addressed to Mr. L. R. Booker, State Teacher Trainer in Industrial Education, Clemson, South Carolina.

The members of the staff of Agricultural Education visit all beginning teachers for the purpose of assisting them on the job and also for the purpose of collecting information which may prove helpful in improving the work of teacher training at the College. In addition, conferences of teachers are held and consulting services made available in the interest of the professional growth of agricultural teachers, the rendering of service to agricultural communities, and the development of leadership among agricultural youth through the program of the Future Farmers of America. Professor J. B. Monroe, Head, Department of Vocational Agricultural Education has general charge of this work. Information on any phase may be secured by contacting him.

SHORT COURSES AND CONFERENCES

The facilities of the College are made available for special meetings, such as farm groups, rural ministers, religious organizations, and scientific societies; and arrangements are made for special short courses in poultry, beekeeping, food preservation, cotton classing, water supply and sanitation, etc. Such activities, undertaken in the interest of the general welfare, are encouraged by the College.

THE CLEMSON AGRICULTURAL COLLEGE RECORD

PART VII

Student Register

1954-1955

GRADUATES OF 1954

BACHELORS' DEGREES CONFERRED JANUARY 31, 1954

SCHOOL OF AGRICULTURE

Bachelor of Science Degree

Agriculture—Agronomy Major

James Parkerson Bailes, Jr.....Union
Lynwood Rowland Duke.....Kingstree
John Lewis Heyer.....Butler, Pa.
Edward Monts Rast.....Cameron

Agriculture—Animal Husbandry Major

Carl Stanley Bates.....Moncks Corner
Sandiford Stiles Bee, Jr.....Charleston
Edwin Campbell.....Dillon
Thomas Harry Coker.....Greenville
Harold Jackson Grainger..Tabor City, N. C.
Jackson Edward Greene.....Greenville
James Earl Jordan.....Florence
Otis Bright Kempson, Jr.....Kingstree
Edward Davis McDowell.....Elliott
John Paul McMillan.....Mullins
Walter Hugo O'Brien.....Norway
Ralph Leonard Tuten.....Ridgeland
John Robert Wigington, Piedmont

Agriculture—Dairy Major

William Earl Ligon.....Easley
Jack Lafay Moore.....Calhoun, Ga.

Agriculture—Horticulture Major

Feildin Henry Culbreth, Jr....Campobello
J. C. Hicks.....Apopka, Fla.
Henry Burton Senn, Inman

SCHOOL OF ARTS AND SCIENCES

Bachelor of Science Degree

Arts and Sciences

William DeLorme Anderson...Summerville
John Seagle Garrett, Sr.....Six Mile
Leath Columbus Johnson, Jr....Charleston
Fred Granville Scott, Jr.....Mt. Pleasant

Industrial Physics

Warren Bryson Rogers, Jr., Greenville

Pre-Medicine

Owen Watson Barker.....Allendale
Nicholas George Forlidas, Jr.**...Clemson

SCHOOL OF EDUCATION

Bachelor of Science Degree

Education

William Jackson Cothran.....Inman
Dan Mickle DiMucci.....McKeesport, Pa.
Charles Marvin Hagan, Jr...Longport, N. J.
John F. McGraw, Jr...Hendersonville, N. C.
William Meda Mays.....Walhalla
Eugene Simpson Todd....Charlotte, N. C.

Industrial Education

Otis David Brunson.....Ridgeland
Wallis Shufeldt Goodman.....Clemson
William Charles Hall.....Ridgeland
Norris Ashley Randall.....Decatur, Ga.
Roland Albert Scott.....Biddeford, Maine
Donald Arthur Wade.....Spartanburg

Vocational Agricultural Education

Ralph Eugene Avin.....Manning
Robert Donald Burns.....McCormick
Herman Dupree Coker.....Kingstree
Robert Ervin Faulkenberry.....York
Fred Hubert Garner.....Union
Joharie LaRue Godwin.....Summerton
Robert Lee Holland.....McClellanville
Norman Edward McGlohon.....Laurens
Charles Duncan McLaurin.....Blenheim
Louis Abbott Odom....Daytona Beach, Fla.
Clarence Kenneth Palmer.....Seneca
Roscoe Nelson Rivers.....Hampton
Robert Irvin Spake, Shelby, N. C.

** With high honor.

SCHOOL OF ENGINEERING

BACHELOR OF SCIENCE DEGREE

Agricultural Engineering

(Agricultural Engineering is jointly administered by the School of Agriculture and the School of Engineering)

Carlos Franklin Abercrombie ..... Taylors
George Burnett Brockenbrough * ... Kinards
Robert Winston Dozier ..... Marion
William Dendy England ..... Westminster
Billy Herbert Flanders ..... Kite, Ga.
Robert Alvin Frick, Jr. ..... Rock Hill
Ted Calvin Hall ..... Matthews, N. C.
Joe Ben McGill ..... Anderson
John Robert Patton ..... Brevard, N. C.
Jamie Luther Worley ..... Windsor

Architectural Engineering

Jimmie Clark Curry ..... Greenwood
Hazen Douglas Harvell ..... Greenville
Vernon Dantzler Moorer, Washington, D. C.
Robert Joe Queen ..... Canton, N. C.
William Phillips Reinhardt ... Newton, N. C.
William Robert Trstensky .... Carteret, N. J.

Architecture

James Rudy Abney ..... Greenville
Jack Crawford Clapp ... St. Petersburg, Fla.
Thomas Harrison Elledge ... Asheville, N. C.
Robert Marshall Lowery ..... Greenville
William Butler Ryan ..... Ridgeland
Earl Halsall von Glahn ..... Charleston

BACHELOR OF CHEMICAL ENGINEERING DEGREE

George Joseph Simpson ..... Easley
Vascoe Whatley, Jr. ..... Allendale

BACHELOR OF CIVIL ENGINEERING DEGREE

James Marvin Allison, Jr. ..... Albany, Ga.
Robert Kenneth Austin ... Washington, D. C.
Kenneth Stuart Cunningham— South Arlington, Va.
Charles Reid Douglass ..... Reidsville, N. C.
Edwin Flay Isenhour ..... Newton, N. C.
Raleigh Ward Powers, Jr. ..... Pamplico
Harry Odom Rhodes ..... Walhalla
David Grier Sherer ..... Columbia
Cecil Donald Strait ..... Greenwood

BACHELOR OF ELECTRICAL ENGINEERING DEGREE

Daniel Hentz Brock ..... Anderson
Olin Livingston Darby ..... Honea Path
James Allen Hattaway ..... Greenville
Roy William Smith ..... Cowpens
Max Jean Turner, Gaffney

BACHELOR OF MECHANICAL ENGINEERING DEGREE

John Henry Bailey ..... Charleston
Daniel Mac Carmichael, Jr.* ..... Florence
Wade Hampton Harbin ..... Seneca
Charles Dusenbury McCown ..... Effingham
George Vernon McGaha ..... Spartanburg
Alexander Crawford McGill, Charlotte, N. C.
Smith McMillan ..... Mullins
Henry Goldsborough Murphy— Cambridge, Md.
William Stelljes Schwartz ..... Charleston
Charles A. Strait, Jr. ..... Rock Hill
William Baker Timmerman, Jr. .. Clearwater
Lynn Charles Tollison ..... Union
Clinton Dawson Wheeler .... North Augusta

SCHOOL OF TEXTILES

BACHELOR OF SCIENCE DEGREE

Textile Chemistry

Bobby Gene Barnhill, Gaffney

Textile Engineering

Marshall Bruce Bridgman ..... Belton
Frank Edward Condon, Jr. ..... Charleston
Harold LeRoy Dantzler, Jr. .. Moncks Corner
Jack Harold Gregg ..... Effingham
Henry Jefferson Kinard, Jr. ..... Greenwood
Jack Carroll Spillers ..... Clinton
Dawson Neil White ..... Clover
Bennette Earle Wilson ** ..... Spartanburg

Textile Manufacturing

John Westley Broome ..... Honea Path
John Robert Carlisle ..... Calhoun Falls
Thomas Sproles Castles ..... Winnsboro
George William Haynie ..... Belton
Hampton Perry Johnson ..... Lancaster
Bobby Bernard Jolley ..... Fitzgerald, Ga.
Donald Oscar Kay ..... Chesnee
Thomas Fillmore Kennette ..... Wellford
Joseph Laurier LaMontagne .... Leesville
William Henry McCauley ..... Greenville
Henry Clyde McTeer ..... Columbia
Norman Edward Muehsam, New York, N. Y.
Ralph Bradley Parker ..... Savannah, Ga.
Herbert William Reutershan, Jr.— Springfield, N. J.
John Adams Sell ..... Monroe, N. C.
Willoughby Burley Shedd ..... Monticello
John Oliver Sholar, Jr. ..... Columbia
Thomas Marion Vassy ..... Gaffney
John Thomas Wilbanks ..... Clemson
George Wesley Withers ..... Spencer, N. C.
Fletcher King Wood ..... Alexandria, Va.
Jerome Turner Wylie, Blacksburg

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* With honor.
** With high honor.

MASTERS' DEGREES CONFERRED JANUARY 31, 1954

SCHOOL OF AGRICULTURE

MASTER OF SCIENCE DEGREE

Animal Husbandry

William Thomas Clayton, Central

SCHOOL OF CHEMISTRY

MASTER OF SCIENCE DEGREE

Chemistry

Josiah Edward Smith, Jr., Clemson

SCHOOL OF EDUCATION

MASTER OF SCIENCE DEGREE

Education

Grace Craig Kinard, Walhalla

Industrial Education

James Houston Couch, Clemson

Vocational Agricultural Education

Clyde Corneilus Lucas, Gaston

BACHELORS' DEGREES CONFERRED JUNE 6, 1954

SCHOOL OF AGRICULTURE

BACHELOR OF SCIENCE DEGREE

Agriculture—Agricultural Economics Major

William Lloyd Adams *.....Cottageville
William Edgar Byrd.....Society Hill
Charles Newton Erwin, Jr....Brevard, N.C.
Wilson Kibler Kaiser *.....Lexington

Agriculture—Agronomy Major

Clarence Benjamin Elmore, Jr...Bishopville
Joseph Albert Galloway.....Hartsville
George Ralph Griffin.....Leesville
Wiley Cleo Mangrum.....Franklin, Tenn.
Theodore Lawrence Maxwell, Jr...Hartsville
William Irvin Molony.....Charleston
Archie Douglas Owens.....Greer
Robert Lee Squires.....Aynor

Agriculture—Animal Husbandry Major

Theodore Roosevelt Adams, Jr.—
Timmonsville
Bennie Crosson Amick, Jr.....Chapin
James Wylie Anderson.....Timmonsville
Larry Gene Berner.....Miami, Fla.
William Luther Bowman, Jr...Lowndesville
Joe Augustus Brown.....Olar
Major David Coleman, Jr.....Latta
Maxie Carlton Collins, III.....Ridgeway
Meek Miller Cone.....Millbrook, Ala.
Walter Carlisle Cottingham.....Trio
Benjamin Francis Dobson.....Duncan
Corol Nelson Dobson.....Brunson
Henry Brooks Erwin, Jr.....Abbeville
Joe Thurmond Garvin.....Greenwood
William Nathan Gressette, Jr., St. Matthews
Richard Caldwell Hall...Mount Ulla, N. C.
Charles Jarred Hammett *.....Kingstree
Joe Patrick Herlong.....Saluda
James Warren Wynn, Varnville
Ross Arden Jameson.....Liberty
Jaan Kurgvel.....Tallinn, Estonia
Paul Samuel LeRoy.....Troy
Carl Francis Martin.....Elloree
Derrel Chester Martin, Jr.*...Travelers Rest
Horace Leslie Miller.....Campobello
John Snowden Wilson Parham *....Sumter
George (Dimitreel) Pontisakos—
Long Island City, N. Y.
Jimmie W. Pridmore.....Gaffney
James Dantzler Rast, Jr.....Cameron
John Alexander Salters, Jr.....Trio
John Wendell Shealy.....Leesville
Ellsworth Bernard Stuckey, Jr...Bishopville
Robert Warren Tinsley.....Laurens
Lloyd Gignilliat Trimmier, Jr...Bedford, Pa.
John McNair Turner.....Winnsboro
Clifton Edward Watkins.....Westminster
Earl Gene Wrightenberry...Burlington, N. C.

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* With honor.

Agriculture—Dairy Major

Fleetwood Jennings Bass, III ..... Mullins
Jerol Kenneth Coleman ..... Columbia
Malcolm Campbell Johnson ..... Blackville
Joseph Lee, III ..... Landrum
Theodore Heyward McCarty ..... Sumter
Alva Laverne McCaskill, Jr. .... Bishopville
Adam Eldridge Muckenfuss ..... Meggett
Bernard McIntyre Sanders, Jr.°° ... Cordova

Agriculture—Entomology Major

Henry Derrick Blocker ..... Walterboro
Furman Reeves Gressette, Jr. .. St. Matthews
Jesse Franklin Sessions, Myrtle Beach

Agriculture—Horticulture Major

Charles Eco Atkins ..... Gramling
William Dantzler Barton ..... Aiken
William Fennell Craig ..... Rock Hill
William Joseph Cunningham ..... Lancaster
Donald Busby Dunlap ..... Rock Hill
Robert Vance Frierson ..... Denmark
Arthur Bonnell Schirmer, Jr. .... Charleston
Arthur Thompson Wilson, III .... Batesburg

Agriculture—Poultry Major

Heber Nathaniel Padget ° ..... Saluda
John Robert Trout ..... Clemson

SCHOOL OF ARTS AND SCIENCES

BACHELOR OF SCIENCE DEGREE

Arts and Sciences

Thomas William Arnold ..... Seneca
Edward Thomas Bracken .... Pittsburgh, Pa.
John Tobey Clemons ..... Kershaw
David Arthur Clyburn, Jr. ..... Charleston
William Robert Craig ..... Pickens
Luther Webb Daniel ..... Oxford, N. C.
William Howard Faver, Jr. ..... Eastover
Lawrence Marion Gressette, Jr.°— St. Matthews
Steve Campbell Griffith, Jr. ..... Newberry
Robert Floyd Mixon ° ..... Clemson
Lamar Fleming Neville ..... Newberry
Philip Gendron Porcher, Jr. .... Mt. Pleasant
James Edward Walker ..... Charleston

Pre-Medicine

Robert Preston Clark ..... St. George
Joseph Lindsay, III °°° ..... Clemson
Wyman Lee Morris ° ..... Olanta
Rhett Barnwell Myers ..... Moncks Corner
Samuel McBride Witherspoon, Jr.,° Nichols

SCHOOL OF CHEMISTRY

BACHELOR OF SCIENCE DEGREE

Chemistry

Carl Barnes Bishop ° ..... Bamberg
Charles Elliott White °° ..... Wagener
Harold McCoy White ..... Camden
Raymond Howard Willingham .... Newberry

SCHOOL OF EDUCATION

BACHELOR OF SCIENCE DEGREE

Education

Carl Arthur Bishop ..... Union
Lawrence Wayne Brock, Jr. ..... Greenville
Roy Poole Byars ..... Gaffney
William Lucas Collins ..... Georgetown
Frank Hardy Denton °° ..... Dallas, Ga.
Ellerbe Orin Dukes, Jr. ..... North Augusta
Marion Dreher Gaskin, Jr. ..... Orangeburg
Marion Syrimba Rivers ..... Cheraw
James Glenn Shirley ..... Piedmont
David Kenneth Townsend ..... Bennettsville

Industrial Education

Edward Auther Hoover ... North Charleston
Everett Francis James ..... Hingham, Mass.
Charles Linder Murphy ..... Anderson
Kinard Kelly Nations ..... Six Mile
Jack Byron Nixon ..... Conway
Carroll Watson Smith ..... Travelers Rest

Vocational Agricultural Education

William Wadsworth Bellamy ..... Bamberg
Fred Garrison Best ..... Galivants Ferry
Edwin Horace Brown ..... Woodruff
Joseph Elmo Coggins ..... Inman
Herbert Rucker Corbitt ..... St. Matthews
James Grover Flanagan ° ..... Clover
Edgar Walton Jones ..... Murrells Inlet
Frank Richardson Meech ..... Columbia
Thomas Max Mintz °° ..... Blacksburg
Claude Lee Mullwee ..... Spartanburg
Edwin Franklin Nolley ... Mocksville, N. C.
Gene Austin Norris ..... Conway
Ronald Morris North ° ..... Stockton, Ga.
Lucian Norwood Norton, Jr. ..... Nichols
Ollen Eugene Rose, Jr. ..... Sardinia
Euel Hudson Shelley ..... Nichols
Donald Dickert Smith ..... Columbia
James Hattley Suggs ..... Loris

° With honor.
°° With high honor.
°°° With highest honor.

SCHOOL OF ENGINEERING

BACHELOR OF SCIENCE DEGREE

Agricultural Engineering

(Agricultural Engineering is jointly administered by the School of Agriculture and the School of Engineering)

Wendell Oliver Adams.....Cottageville
George Howard Byars.....Lowrys
Nesbit Harper Caughman, Jr.—
High Point, N. C.
Hugh Rogers Chamblee.....Anderson
Olin Lemuel Craig, Jr.....Cateechee
Julian McKinnis Currie.....Harleyville
Buell Milbern Ferguson.....Brevard, N. C.
Jesse Johnce Floyd.....Nichols
Quillon Curtis Lee, Jr.....Alcolu
Wilbur Eugene Seigler °.....Wagener
John Hemphill Sherer.....Columbia
Broadus Marion Smith, Jr.....Trenton
Cecil Jerome Walters °°°.....St. George

Architectural Engineering

Olin Hubert Pate.....Bishopville
Pete J. Polizos.....Spartanburg
Wallace Stone Watts, Sumter

Architecture

Edward Stewart Blume, Jr.....Columbia
Richard Ernest Campbell.....Anderson
James Huey Cassell.....Pickens
Hilliard Galbraith Haynes, II..Orangeburg
Tracy Howard Jackson °.....Clemson
James Ross Johnson, Jr.....Anderson
William Reaves McCall.....Hartsville
Michael McMillan.....Greenville
Jerry Donald Stacy, Gaffney

BACHELOR OF ARCHITECTURE DEGREE

Edward Stewart Blume, Jr.....Columbia
William Reaves McCall.....Hartsville

BACHELOR OF CERAMIC ENGINEERING DEGREE

Clifton Moody McClure, III °....Anderson
John Barr Polson °.....Hartsville
Ames Haltiwanger Wells, Columbia

BACHELOR OF CHEMICAL ENGINEERING DEGREE

Arthur Lamar Coogler.....Chester
Claude Bernard Goodlett, Jr., Travelers Rest
Eugene Clark Morrison, Jr., Charleston

BACHELOR OF CIVIL ENGINEERING DEGREE

Charles Franklin Davenport, Jr...Greenville
Lonnie Harper Littlejohn.....Spartanburg
Hugh Eugene McCoy, Jr.°.....Bishopville
Sam Barrow Murphree, Jr.°.....Troy, Ala.
William Royce Robertson.....Gray Court
James Hagood Sams, III °.....Clemson
Orlando Flye Smith—
Balboa Heights, Canal Zone
Diedrich Willis Stehmeyer.....Charleston
Wiles Franklin Webb.....Brunson

BACHELOR OF ELECTRICAL ENGINEERING DEGREE

Emerson Edwards Andrishok.....Mullins
Herbert Duane Bickley.....Newberry
William Louis McKinney Bross, III—
Greenwood
Paul Edwin Eleazer.....Pelion
Jones Arnold Gaillard.....Florence
Charles Fred Garrett.....Easley
John Coryell Leysath.....North
Leo Lindell.....Brooklyn, N. Y.
John Neely Lindsay, Jr.....Anderson
Elias Alford McCormac °.....Dillon
John Williams McIntyre °—
Rockingham, N. C.
Alpha Metts Neely.....Rock Hill
Philip Raymond Nickles °°.....Hodges
Marvin Reu Reese, Jr.°°.....Greer
Grady Elmer Thornton.....Anderson
Martin James Wase.....Hartsville

BACHELOR OF MECHANICAL ENGINEERING DEGREE

Ward Scott Bryson.....Spartanburg
Earl Sebastian Chrisawn, Jr.....Sumter
Vernon Lester Coward.....Calhoun Falls
Jerry Edward Dempsey °°.....Anderson
Robert Bertram Dupree, Jr.°°....Wellford
George Boardman Edwards.....Florence
James Harold Erskine.....Anderson
Price C. Faw, Jr.....Piedmont
James Edward Gause °.....Piedmont
John Thomas Gibbs, Jr.....North Augusta
Charles Wilbur Hipp, Jr.....Greenwood
Hugh Chapman Humphries, Jr.°°...Sumter
Edward Ernest Jones.....Savannah, Ga.
William Henry Kinard.....Ninety Six
Robert Samuel Lawhon.....Hartsville
James Thomas McCarter °°.....Taylors
Frederick Anthony Nimmer, Jr...Ridgeland
Charles David Parker.....Asheville, N. C.
Fred Vernon Phipps, Jr.....Columbia
Nelson Crawford Poe.....Greenville
Hulic Boney Ratterree °.....Rock Hill
Roland E. Raxter.....Brevard, N. C.
Edwin Jesse Thornhill, Jr.....Charleston
John Clifford Von Kaenel °°.....Seneca
Emory Bolt Washington, Clemson

° With honor.
°° With high honor.
°°° With highest honor.

SCHOOL OF TEXTILES

BACHELOR OF SCIENCE DEGREE

Textile Chemistry

Zeddie Lerle Collins . . . . . Campobello
Louis Gourdin Darby . . . . . Charleston
Heyward Carter Hurt * . . . . . Greenwood
William Furman Moore, Jr.** . . . . . Taylors
Charles Betts Simpson, Jr., Richburg

Textile Engineering

Harold Earl Bradberry * . . . . . Greenwood
Thomas Bernard Bradley . . . . . Newberry
John Stanley Carlisle, Jr. . . . . Spartanburg
William James Chagaris . . . Charlotte, N. C.
Max Ulmer Gainor * . . . . . Lancaster
James Gary Gray * . . . . . Ware Shoals
Adolph Putnam Hearon . . . . . Darlington
Edward Meynardie Hefley . . . . . Rock Hill
Clyde O'Neil Howie . . . . . Mooresville, N. C.
William Derrick Knight . . . . . Aiken
Herbert Hoover Pearson . . . . . Woodruff
Jackson McCarter Quinn . . . . . Clover
Thomas Pinckney Sims . . . . . Florence
Harry Spencer Thomas, Jr. . . . . Greenville
Henry Ray Williams * . . . . . Pendleton
George Spence Wise, Jr. . . . . Columbia

Textile Manufacturing

Jimmie Philip Anderson . . . . . Piedmont
Thomas Richard Anderson . . . . . Newberry
Thomas Franklin Ballentine . . . . Blythewood
Theodore Allen Banz . . . . . Ridgewood, N. J.
Bruce Jonas Bishop . . . . . Greenville
Carl Boykin Brabham . . . . . Dalzell
Robert Stephen Calabro—
Franklin Square, N. Y.
Forrest Gary Calvert . . . . . Sullivans Island
Benjamin Kilgore Chreitzberg, Jr.*—
Anderson
Jack Dale Cox . . . . . Loris
James Evan Duffy . . . . . White Plains, N. Y.
Herbert Walker Elrod . . . . . Piedmont
Leon Eugene Fersner, Jr. . . . . Orangeburg
Anthony Lalon Fousek . . . . . Anderson
Ralph Anthony Gallucci—
West New York, N. J.
Charles Claude Grady, Jr. . . . . Spartanburg
Joseph Maurice Granade . . . . . Aiken
Newell Franklin Gravely . . . . . Greenville
Joseph Eben Hanna . . . . . Woodruff
James Edward Harris . . . . . Greenwood
James Austin King, Jr. . . . . Florence
Lewie Cecil King . . . . . West Columbia
Allen Crosby Livingston . . . . . Greenwood
Joe Simpson Long . . . . . Piedmont
Thomas Anthony McCullough—
Hendersonville, N. C.
John Thomas Messer . . . . . Inman
Roger Winslow Miller . . . . . North Augusta
Joseph Thacker Mitchell . . . . Caroleen, N. C.
Robert Thomas Mitchell . . . . . Greenville
Davis Tatum Moorhead . . . . . Myrtle Beach
George Rose Morgan, Jr.** . . . . . Greenville
Emmette Sherman Murray . . . . . Cleveland
James Gayden Parnell . . . . . West Columbia
Joe Edward Ramsey . . . . . Gaffney
Claude Douglas Sawyer . . . . . Donalds
James Leagan Shaw . . . . . Winnsboro
Harry Lee Smith . . . . . Greenville
Jefferson Daniel Snead . . . . . Seneca
Bobby Leo Spearman . . . . . Ninety Six
(Diploma awarded posthumously)
Dick Moorhead Vaughan . . . . . Kinards
Robert Parks Whitener . . . . . Union
Robert Reese Willis, Gaffney

MASTERS' DEGREES CONFERRED JUNE 6, 1954

SCHOOL OF AGRICULTURE

MASTER OF SCIENCE DEGREE

Entomology

Jack Dent Early . . . . . Florence
Harold Eugene Walker . . . . . Anderson

Zoology and Entomology

James Decatur Boykin, Georgetown

SCHOOL OF ARTS AND SCIENCES

MASTER OF SCIENCE DEGREE

Physics

Jimmie Alan Suddeth, Bethesda, Md.

SCHOOL OF CHEMISTRY

MASTER OF SCIENCE DEGREE

Chemistry

William Donald Jacobs, Charleston

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* With honor.
** With high honor.

SCHOOL OF EDUCATION

MASTER OF SCIENCE DEGREE

Vocational Agricultural Education

Jacob Frederick Wyse, Johnston

SCHOOL OF TEXTILES

MASTER OF SCIENCE DEGREE

Textile Chemistry

Peter August Cook.....Spartanburg William Luther Mathias.....Lexington

HONORARY DEGREES CONFERRED JUNE 6, 1954

DOCTOR OF AGRICULTURE

Joseph Benjamin Douthit, Jr., Pendleton

DOCTOR OF EDUCATION

Ralph Henry Cain.....Tamassee Erwin Finley Gettys.....McCormick

DOCTOR OF ENGINEERING SCIENCE

Louis Shepherd LeTellier, Charleston

DOCTOR OF MILITARY SCIENCE

Floyd Lavinius Parks, Fort George C. Meade, Md.

DOCTOR OF SCIENCE

Kenneth Merrill Lynch.....Charleston Elias Hardin Pressley.....Tucson, Ariz.

BACHELORS' DEGREES CONFERRED AUGUST 14, 1954

SCHOOL OF AGRICULTURE

BACHELOR OF SCIENCE DEGREE

Agriculture—Agricultural Economics Major

Richard Herbert Long.....Union Jerry Hill Padgett.....Hayesville, N. C.
Edwin Earl Sompayrac, Society Hill

Agriculture—Agronomy Major

Jack Lafon Allen.....Latta Henslee Clifford McLellan, Jr.....Dillon
John Montgomery Little, III.....Union Robert Ellis Poston.....Hyman

Agriculture—Animal Husbandry Major

Leland McKelvy Bradshaw....Greeleyville Leroy Carver Parker.....Edgefield
Frank Lovett James....Miami Springs, Fla. Francis Marion Thompson...North Augusta
Henry Clay Morris, Jr.....Olar Robert Johnson Weekley.....Ulmers

Agriculture—Dairy Major

Howard Benjamin Rowe, West Palm Beach, Fla.

Agriculture—Entomology Major

Michael Anthony Fischetti, Brooklyn, N. Y.

Agriculture—Horticulture Major

Harry McClure Burnett....Spartanburg John Thompson Green.....Sumter

SCHOOL OF ARTS AND SCIENCES

BACHELOR OF SCIENCE DEGREE

Arts and Sciences

Archibald Earle Baker....Charleston Fred Dan Wallace, Jr.....Norfolk, Va.
Spencer L. Woodard, Summit, N. J.

Industrial Physics

Lewis Jolly, Union

Pre-Medicine

Arthur Gaillard Gower, III....Vienna, Va. McKeith Olis Parsons.....Andrews

SCHOOL OF CHEMISTRY

BACHELOR OF SCIENCE DEGREE

Chemistry

Howard Lee Setzer, Jr., Candler, N. C.

SCHOOL OF EDUCATION

BACHELOR OF SCIENCE DEGREE

Education

Dillard Elwood Medford.....Walhalla Charles Lake Morris.....Olar
Eugene Foy Moxley, Jr., Dublin, Ga.

Industrial Education

Lawrence Harry Fry.....Bradenton, Fla. William Deer Rentz.....Williamston
William Baskin Lawrence, Jr....Greenville Kenneth Paul Winchester.....Six Mile

Vocational Agricultural Education

Olin Durham Blackwell.....Inman Charles Edison Lancaster..Tabor City, N. C.
Melvin Henry Hann.....Easley Newell Aubrey Myers.....Olanta

SCHOOL OF ENGINEERING

BACHELOR OF SCIENCE DEGREE

Agricultural Engineering

(Agricultural Engineering is jointly administered by the School of Agriculture and the School of Engineering)

Luther Howard Carroll.....Westminster Jack Brunson Godwin.....Lake City
David Eskew Craig.....Pendleton Earl Denon Jordan.....Olanta

Architecture

Theodore Alexander Butts, Port Norris, N. J. Samuel Joseph Player.....Columbia
Robert Brown Cunningham, III...Columbia Marcus Francis Snoddy..Rockingham, N. C.
James Duncan Wells, Jr., Columbia

BACHELOR OF CERAMIC ENGINEERING DEGREE

Martin Ansel Alewine, Jr.....Taylors Charles Clifford Fain.....Spartanburg

BACHELOR OF CHEMICAL ENGINEERING DEGREE

Richard Ostrander Hull, Jr., Rocky River, Ohio

BACHELOR OF CIVIL ENGINEERING DEGREE

Nicholas Peter Anagnost....Greenwood Thomas Ralph Rosamond.....Greenville
Grantland Paul Wagner, Woodruff

BACHELOR OF ELECTRICAL ENGINEERING DEGREE

Stephen Francis Peszka, Norristown, Pa.

BACHELOR OF MECHANICAL ENGINEERING DEGREE

Samuel Paul Anderson, Jr.....Laurens Henry William Ingram..Rockingham, N. C.
Walter Dickson Banks, Jr....Bristol, Tenn. Harold Buddy Mills.....Hapeville, Ga.
Charles William Campbell, Jr., Hartwell, Ga. Wayne Alexander Reid.....Abbeville
James Richard Hedden....Charlotte, N. C. Robert Ball Varn.....Charleston

SCHOOL OF TEXTILES

BACHELOR OF SCIENCE DEGREE

Textile Chemistry

Arthur Louis Watson, Spartanburg

Textile Engineering

Robert Billups Plowden, Jr. . . . . Sumter
Arthur Bythewood Swett . . . . . Greenville

Textile Manufacturing

Robert Lee Blackwell . . . . . Inman
James Donald Bradley . . . . . Fort Mill
Henry Grady Brady, Jr. . . . . Columbia
Joseph Franklin Byrd . . . . . Clemson
William James Carnell . . . . . Ware Shoals
Thomas Milton Griffin, IV . . . North Augusta
Howard Simpson Hawkins . . . . . Rock Hill
Thomas Walter Jenkins . . . . Avondale, N. C.
James Thomas Liakos . . . . . Florence
Connie M. Mabry, Jr. . . . . Fort Mill
Irvin Edgar Madden, Jr. . . . . Greenwood
Joseph Agusta Murray . . Staten Island, N. Y.
Robert Wicks Shane, Jr. . . . . Florence
Roy Cecil Southerlin . . . . . Marietta
James Hoyt Thompson . . . . . La Grange, Ga.
James Allen Ward . . . . . Jackson, Tenn.

PROFESSIONAL DEGREE CONFERRED AUGUST 14, 1954

SCHOOL OF ENGINEERING

PROFESSIONAL DEGREE OF ELECTRICAL ENGINEER

Olar Thompson Hinton, Jr., Pickens

MASTERS' DEGREES CONFERRED AUGUST 14, 1954

SCHOOL OF AGRICULTURE

MASTER OF SCIENCE DEGREE

Agricultural Economics

Ralph Crenshaw Lathem, Atlanta, Ga.

Entomology

John William Gillespie, Clemson

Zoology

Charles Archer Dodson, Clemson

SCHOOL OF ARTS AND SCIENCES

MASTER OF SCIENCE DEGREE

Physics

Malcolm Finn Steuer, Marion

SCHOOL OF CHEMISTRY

MASTER OF SCIENCE DEGREE

Chemistry

Edgar Lowell Steele, Clemson

SCHOOL OF EDUCATION

MASTER OF SCIENCE DEGREE

Education

Zora Butte Barnett . . . . . Westminster
Ethel Estelle Hembree . . . . . Anderson
Thomas Rivers Johnson, Jr., Central

Industrial Education

Edgar Miles Berry ..... North Charleston Leroy Aldin Sands ..... Brunswick, Ga.

Vocational Agricultural Education

Lewis Jennings Carter ..... Wampee William Furman Moore, Sr. ..... Taylors
Steve Rochester, Harleyville

GRADUATES OF 1954 BY MAJOR COURSES

SCHOOL OF AGRICULTURE		109
Agricultural Economics	7	
Agronomy	16	
Animal Husbandry	56	
Dairy	11	
Entomology	4	
Horticulture	13	
Poultry	2	
SCHOOL OF ARTS AND SCIENCES		31
Arts and Sciences	20	
Industrial Physics	2	
Pre-Medicine	9	
SCHOOL OF CHEMISTRY		5
Chemistry	5	
SCHOOL OF EDUCATION		70
Education	19	
Industrial Education	16	
Vocational Agricultural Education	35	
SCHOOL OF ENGINEERING (INCLUDING DOUBLE MAJORS)		158***
Agricultural Engineering	27	
Architectural Engineering	9	
Architecture (4-Year)	20*	
Architecture (5-Year)	2*	
Ceramic Engineering	5	
Chemical Engineering	6	
Civil Engineering	21**	
Electrical Engineering	22	
Mechanical Engineering	46	
SCHOOL OF TEXTILES		113
Textile Chemistry	7	
Textile Engineering	26	
Textile Manufacturing	80	
TOTAL GRADUATES OF 1954 (EXCLUDING DUPLICATES)		483

* Includes two students who were graduated both in Architecture (4-year) and in Architecture (5-year).

** Includes one student who was graduated both in Architecture and in Civil Engineering.

*** Includes two students who were graduated both in Architecture (4-year) and in Architecture (5-year); also, one student who was graduated both in Architecture and in Civil Engineering.

TOTAL GRADUATES BY MAJOR COURSES, 1896-1954

Major Course	*Total*	*Major Course*	*Total*
Agriculture	244	Electrical Engineering	993
Agriculture and Animal Industry	80	Engineering Industrial Education	70
Agriculture and Chemistry	69	Entomology	135
Agricultural Chemistry	99	Forestry	8
Agricultural Economics	188	General Science	360
Agricultural Education	197	Horticulture	358
Agricultural Engineering	308	Industrial Education	208
Agronomy	639	Industrial Physics	38
Animal Husbandry	546	Mechanical Engineering	845
Architectural Engineering	84	Mechanical and Electrical Engineering	489
Architecture	352	Poultry	18
Arts and Sciences	384	Pre-Medicine	170
Bachelor of Science	3	Soils	9
Botany	12	Textile Chemistry	220
Ceramic Engineering	14	Textile Engineering	974
Chemical Engineering	99	Textile Industrial Education	85
Chemistry	266	Textile Manufacturing	713
Chemistry and Geology	11	Veterinary Science	16
Chemistry-Engineering	43	Vocational Agricultural Education	687
Civil Engineering	890	Weaving and Designing	42
Dairy	288		
Education	86		

Double Majors

Agricultural Chemistry and Arts and Sciences	1
Agricultural Chemistry and General Science	1
Agricultural Economics and Animal Husbandry	1
Agricultural Economics and Vocational Agricultural Education	1
Agricultural Engineering and Civil Engineering	1
Agricultural Engineering and Mechanical Engineering	1
Agronomy and Vocational Agricultural Education	4
Animal Husbandry and Vocational Agricultural Education	5
Animal Husbandry and Agricultural Education	3
Animal Husbandry and Dairy	2
Architecture and Architectural Engineering	11
Architecture and Civil Engineering	1
Architecture, four-year, and Architecture, five-year	3
Architecture, four-year, and Mechanical Engineering	1
Arts and Sciences and Agricultural Economics	1
Chemical Engineering and Chemistry and Chemistry-Engineering	3
Chemical Engineering and Chemistry-Engineering	1
Chemistry and Chemical Engineering	1
Chemistry and Chemistry-Engineering	1
Chemistry and General Science	1
Chemistry and Industrial Physics	1
Chemistry and Agricultural Chemistry	1
Civil Engineering and Chemistry and Geology	2
Civil Engineering and Industrial Physics	1
Electrical Engineering and Industrial Physics	1
Electrical Engineering and Mechanical Engineering	16
Electrical Engineering and Textile Engineering	1
Entomology and Pre-Medicine	1
General Science and Education	1
General Science and Electrical Engineering	1
Horticulture and Agronomy	1
Horticulture and Architectural Engineering	1
Mechanical Engineering and Textile Engineering	1
Poultry and Vocational Agricultural Education	1

Pre-Medicine and Textile Chemistry	2
Textile Engineering and Mechanical and Electrical Engineering	1
Textile Engineering and Textile Industrial Education	1
Textile Engineering and Textile Manufacturing	1
Textile Engineering and Weaving and Designing	1
Total Graduates from 1896 through 1954	11,420

LIST OF STUDENTS IN NINE-WEEKS SUMMER TERM AND IN SPECIAL PROGRAMS, 1954 SUMMER SCHOOL

The names are arranged in alphabetical order and following the names are symbols indicating three types of students. The symbol (CS) indicates a Clemson undergraduate student; (G), a student pursuing graduate work; (Unc), unclassified student. This classification includes students of other colleges, school teachers, and certain other students pursuing undergraduate work in one or more of the summer school programs.

New students admitted in June, 1954, are indicated by an asterisk (*).

Name and Course	*Address*
Abbott, G. E. (CS)	Monroe, Mich.
Abbott, J. R. (CS)	Walhalla
Addis, M. B. (Unc)	Walhalla
Addison, H. F. (CS)	Martin, Ga.
Addison, R. L. (CS)	Cottageville
Aiken, N. M. P. (Unc)	Pickens
Aiken, R. C. (Unc)	Pickens
Alewine, M. A. (CS)	Taylors
Alexander, E. L. (CS)	Clemson
Alexander, M. D. (Unc)	Six Mile
Alexander, R. C. (G)	Six Mile
Allaire, D. R. (CS)	Belleville, N. J.
Allen, A. C. (CS)	Wadesboro, N. C.
Allen, J. L. (CS)	Latta
Allen, W. P. (CS)*	Aynor
Allgood, J. W. (CS)*	Liberty
Allgood, N. R. (Unc)	Pendleton
Anagnost, N. P. (CS)	Greenwood
Anderson, C. L. (CS)	Timmonsville
Anderson, E. T. (CS)	Lowrys
Anderson, F. C. (CS)	Clemson
Anderson, H. M. (CS)*	Timmonsville
Anderson, H. S. (CS)	Timmonsville
Anderson, James M. (CS)	Seneca
Anderson, Mason H. (CS)	Wampee
Anderson, S. P. (CS)	Laurens
Anthony, W. L. (CS)*	Easley
Areheart, H. W. (CS)	West Columbia
Arms, T. O. (CS)	Greer
Ashley, E. W. (CS)	Honea Path
Ashmore, R. C. (CS)	Greenville
Atkins, B. R. (CS)	Easley
Atkinson, C. N. (CS)	St. Petersburg, Fla.
Atkisson, R. D. (CS)—	West Palm Beach, Fla.
Austin, N. E. (G)	Seneca
Avery, P. W. (CS)	Newnan, Ga.
Aye, M. M. (CS)	Maubin P. O., Burma
Babb, J. P. (CS)*	Fountain Inn
Babb, R. H. (CS)	Fountain Inn
Babb, W. H. (CS)*	Fountain Inn
Bailes, S. H. (G)	Anderson
Bailey, J. L. (CS)	Woodruff
Baker, A. E. (CS)	Charleston
Baker, R. R. (CS)	Brevard, N. C.
Baker, S. A. (Unc)	Pickens
Ballard, A. W. (Unc)	Pickens
Banister, R. H. (Unc)	Clemson
Banks, W. D. (CS)	Bristol, Tenn.
Barker, G. L. (Unc)	Westminster
Barker, L. F. (CS)	Nauvoo, Ala.
Barker, R. E. (CS)	Conway
Barmore, R. E. (CS)	Greenwood
Barnes, L. S. (CS)	Greenville
Barnett, Z. B. (G)	Westminster
Barton, E. S. (CS)	Greenville
Batson, C. L. (CS)	Pickens
Bauknight, C. W. (Unc)	Walhalla
Bauknight, I. M. (CS)	Florence
Baumann, D. M. (CS)	Asheville, N. C.
Beach, F. A. (CS)	Walterboro
Bearrow, L. W. (CS)	Walterboro
Beaty, D. T. (Unc)	Mountain Rest
Beeren, F. W. (CS)	Clover
Bell, H. B. (Unc)	Seneca
Bennett, G. U. (CS)	Columbia
Bennett, J. E. (CS)	Greer
Bennett, R. M. (CS)	Greer
Bentley, B. A. (CS)	New Rochelle, N. Y.
Bergman, D. W. (CS)	Savannah, Ga.
Berry, E. M. (G)	North Charleston
Berry, T. C. (CS)	Charlotte, N. C.
Best, R. L. (CS)	Ulmers
Bishop, C. E. (G)	Honea Path
Bishop, J. E. (CS)	Spartanburg
Black, L. E. (CS)	Concord, N. C.
Black, R. S. (CS)	Concord, N. C.
Black, T. O. (CS)	Moore
Blackmon, R. B. (CS)	Franklin, Ind.
Blackwell, J. B. (CS)	Inman
Blackwell, O. D. (CS)	Inman
Blackwell, R. L. (CS)	Inman
Blair, B. J. (Unc)	Clemson
Blair, E. W. (CS)	Spartanburg
Blakely, R. M. (CS)	Greenville
Blanton, J. B. (CS)	Gaffney
Bloodworth, G. R. (CS)	Charleston Heights
Boatwright, W. H. (CS)	Darlington
Bobo, W. S. (CS)	Williamston
Boiter, J. W. (CS)	Duncan
Bolton, R. S. (CS)	Greenwood
Bond, A. M. (G)	Clemson
Booker, F. R. (Unc)	Clemson
Borchert, D. F. (CS)	Greenville
Bordeaux, E. D. (CS)	Sumter
Bourne, J. C. (CS)*	Greenwood
Bowen, D. A. (CS)	Piedmont
Bowen, W. T. (CS)	Clemson
Bowman, G. S. (CS)	Lowndesville
Box, J. D. (CS)	Naval Base
Boyles, S. N. (CS)	Ridgeland
Bradberry, R. C. (CS)	Athens, Ga.
Bradley, J. D. (CS)	Fort Mill
Bradley, J. E. (CS)*	Williston
Bradshaw, L. M. (CS)	Greeleyville
Brady, H. G. (CS)	Columbia
Bramlette, J. M. (CS)*	Greenville
Brantley, J. L. (CS)	Ridgeland
Breazeale, L. P. (Unc)	Westminster
Bregger, J. E. (CS)	Clemson
Breland, K. M. (CS)	Frogmore

Name and Course	Address
Bridges, W. M. (CS)	Chester
Briel, E. M. (CS)	Miami, Fla.
Britt, W. A. (CS)*	Orrum, N. C.
Brittain, C. G. (CS)	Hickory, N. C.
Brittain, J. E. (CS)	Horse Shoe, N. C.
Brock, C. E. (Unc)	Seneca
Brock, N. A. (Unc)	Clemson
Brock, Z. O. (CS)	Iva
Brown, A. L. (Unc)	Mountain Rest
Brown, C. R. (CS)	Spartanburg
Brown, G. A. (G)	Anderson
Brown, J. H. (CS)	St. Stephen
Brown, James L. (CS)	Augusta, Ga.
Bruorton, H. B. (CS)	Georgetown
Bryant, C. H. (CS)	Greenville
Bryant, E. E. (G)	Beaufort
Bryant, E. M. (CS)	Greenville
Bryant, F. E. B. (Unc)	Seneca
Bryant, M. B. (Unc)	Townville
Bryson, R. E. (CS)	Woodruff
Buck, G. R. (CS)	Columbia
Bullman, R. E. (CS)	Spartanburg
Burden, M. E. (G)	Anderson
Burden, W. S. (CS)	Piedmont
Burdette, E. T. (Unc)	Westminster
Burnett, H. M. (CS)	Spartanburg
Burnside, D. P. (Unc)	Salem
Burr, J. A. (CS)	Cheraw
Burriss, W. M. (CS)	Anderson
Butler, C. B. (CS)	Tuxedo, N. C.
Butler, C. E. (G)	Iva
Buttes, A. B. (G)	Westminster
Buttes, C. E. (Unc)	Westminster
Byars, R. P. (G)	Gaffney
Bybee, R. T. (CS)	Greenville
Byrd, J. F. (CS)	New Orleans, La.
Calcutt, S. E. (CS)	Pamplico
Campbell, C. K. (CS)	Greenville
Campbell, C. W. (CS)	Hartwell, Ga.
Campbell, G. W. (CS)	Anderson
Cannon, A. Y. (CS)	Anderson
Cannon, B. C. (CS)	Clemson
Cannon, H. F. (G)	Anderson
Cantley, M. P. (CS)	Kingstree
Cantrell, G. W. (CS)	Liberty
Cantrell, J. N. (G)	Central
Carey, P. A. (Unc)	Spartanburg
Carlile, J. J. (CS)	Princeton, N. J.
Carnell, W. J. (CS)	Ware Shoals
Carothers, T. S. (CS)	Rock Hill
Carroll, A. B. (CS)*	Westminster
Carroll, H. (CS)	Anderson
Carroll, J. A. (G)	Pendleton
Carroll, L. H. (CS)	Westminster
Carter, A. B. (CS)*	Brevard, N. C.
Carter, L. J. (G)	Wampee
Carter, R. L. (CS)	Gaffney
Carter, W. R. (G)	Walterboro
Cate, N. H. (CS)	Brunswick, Ga.
Cates, F. B. (CS)	Wadmalaw Island
Cely, L. M. (Unc)	Easley
Chamberlain, W. F. (Unc)	Clemson
Chamblee, A. D. (CS)	Anderson
Chance, C. S. (CS)	Winston-Salem, N. C.
Chapman, D. M. (CS)	Cheraw
Chapman, L. B. (CS)	Easley
Chapman, L. J. (CS)	Greenville
Charles, G. H. (CS)	Daytona Beach, Fla.
Chastain, W. H. (G)	Mauldin
Childs, E. N. (G)	Central
Childs, J. B. (G)	Central
Christian, G. W. (CS)	McCormick
Christopher, R. W. (CS)	Lincolnton, N. C.
Clarke, G. H. (CS)	Bloomsburg, Pa.
Cleland, J. M. (G)	Seneca
Clement, J. M. (Unc)	Pickens
Cleveland, M. B. (Unc)	Seneca
Cleveland, R. H. (CS)	Seneca
Clifford, G. D. (CS)	Leesburg, Ga.

Name and Course	Address
Coates, E. A. (CS)	Campobello
Cochran, C. D. (CS)	Greenville
Cochran, C. S. (Unc)	Seneca
Cockfield, D. (CS)	Lake City
Cockrell, W. F. (CS)	Grover, N. C.
Coker, R. O. (CS)	Taylors
Cole, G. W. (CS)	Pensacola, Fla.
Coleman, K. K. (CS)	Orlando, Fla.
Collins, E. S. (Unc)	Seneca
Collins, J. E. (Unc)	Pickens
Cominetti, L. A. (Unc)	Central
Cone, W. F. (CS)	Lodge
Connor, W. K. (CS)	McCormick
Cook, B. L. (CS)	Denmark
Cook, J. M. (CS)	Norris
Cook, S. A. (Unc)	Clemson
Cooper, B. V. (CS)	Naval Base
Cooper, G. B. (CS)	Lancaster
Copeland, A. F. (CS)	Greer
Corder, W. O. (G)	Honea Path
Cory, A. H. (CS)	Beaufort
Cousar, R. E. (CS)	Sardinia
Covington, J. C. (CS)	Clio
Covington, J. L. (CS)	Clio
Cox, A. J. (CS)	Loris
Cox, G. H. (CS)	Spartanburg
Craddock, J. M. (CS)	Fairfax
Crafton, C. G. (CS)	Camden
Craig, D. E. (CS)	Pendleton
Crawford, J. P. (CS)	Pineville
Crawley, J. E. (CS)*	Kinston, N. C.
Crawley, W. H. (CS)*	Forest City, N. C.
Crenshaw, E. C. (G)	Westminster
Crews, J. F. (CS)	Hampton
Cribb, R. E. (CS)	Florence
Crigler, H. T. (G)	Greenville
Crocker, B. E. (CS)*	Gaffney
Cromer, M. G. (Unc)	Anderson
Crowther, W. F. (G)	Pickens
Cunningham, R. B. (CS)	Columbia
Dalton, E. N. (CS)	Asheville, N. C.
Dalton, J. S. (CS)	Pickens
Daniel, B. J. (CS)	Oxford, N. C.
Davenport, J. A. (CS)	Piedmont
Davis, C. W. (Unc)	Anderson
Davis, E. N. (Unc)	Walhalla
Davis, L. A. (CS)	Cope
Davis, W. H. (CS)	Charleston Heights
Day, J. T. (CS)	Summerville
Day, W. J. (G)	North Charleston
Deadwyler, J. C. (CS)*	Six Mile
Deason, H. J. (Unc)	Clemson
Dellastatious, P. S. (CS),	Silver Spring, Md.
Dendy, E. C. (Unc)	Richland
Dennis, M. B. (Unc)	Pickens
Derrick, W. F. (Unc)	Greenville
DeSimone, R. L. (CS)	Avonmore, Pa.
Dodson, C. A. (G)	Greenville
Doyle, C. B. (CS)	Anderson
Drake, J. R. (Unc)	Anderson
Dudley, T. A. (CS)	Galivants Ferry
Duffies, S. B. (CS)	Roselle Park, N. J.
Duncan, B. V. (CS)	Pendleton
Duncan, W. F. (CS)	Greer
Dunkelberg, D. S. (Unc)	Clemson
Dunn, J. H. (CS)	Clemson
Dunn, J. W. (CS)	Columbia
Dunn, R. J. (CS)	Coopersburg, Pa.
DuPre, G. C. (CS)	Columbia
Durham, O. P. (Unc)	Fair Play
Eakin, J. R. (CS)	Norfolk, Va.
Earle, G. C. (CS)	Washington, D. C.
Earle, T. P. (CS)	Central
Edenfield, M. E. (CS)	Augusta, Ga.
Edens, O. V. R. (Unc)	Six Mile
Edens, S. W. (Unc)	Pendleton
Edwards, C. E. (CS)	Charleston
Edwards, R. M. (CS)	Elloree
Edwards, W. B. (CS)	Spartanburg
Eldridge, L. W. (CS)*	Clemson

Name and Course	Address
Elam, W. H. (CS)	Ware Shoals
Elliott, T. A. (G)	Walhalla
Ellis, W. J. (CS)	Greenwood
Elrod, Alice C. (Unc)	Walhalla
Elrod, Alvon C. (G)	Clemson
Elrod, H. T. (G)	Clemson
Elrod, L. C. (Unc)	Williamston
Ennis, W. B. (CS)	Daytona Beach, Fla.
Epps, C. O. (CS)	Latta
Eskew, M. W. (G)	Clemson
Eskridge, R. M. (CS)*	Florence
Evans, H. E. (CS)	Pendleton
Evans, N. H. (Unc)	Central
Evans, T. A. (CS)	Kenmore, N. Y.
Everts, R. C. (CS)	Wilmington, Del.
Evett, E. W. (Unc)	Central
Fain, C. C. (CS)	Clemson
Fant, L. F. (CS)	Clemson
Faris, W. G. (CS)	Ridgeland
Faver, W. H. (G)	Eastover
Fayonsky, J. L. (Unc)	Walhalla
Ferrier, R. B. (Unc)	Clemson
Few, D. L. (Unc)	Pickens
Few, J. C. (Unc)	Pickens
Finley, G. B. (Unc)	Easley
Fischetti, M. A. (CS)	Brooklyn, N. Y.
Fitzgibbons, R. L. (CS)	College Park, Ga.
Fleming, J. D. (CS)	Pacolet
Flowers, G. O. (Unc)	Central
Floyd, J. E. (CS)	Tillman
Ford, R. W. (Unc)	Greenville
Foster, J. C. (CS)	Gramling
Foster, M. H. (CS)	Woodruff
Foster, T. D. (CS)	Spartanburg
Fox, J. G. (CS)	West Orange, N. J.
Fraley, D. K. (CS)	Florence
Franks, H. L. (G)	Pickens
Fraser, C. A. (CS)	Greenville
Freeman, E. L. (CS)	Sumter
Freund, R. M. (CS)	Philadelphia, Pa.
Friar, B. R. (CS)*	Florence
Friddle, W. J. (G)	Greenville
Friel, R. W. (CS)	Lyman
Frierson, J. A. (CS)	Summerton
Fry, L. H. (CS)	Cochran, Ga.
Fuller, R. C. (CS)	Murphy, N. C.
Fulmer, J. H. (G)	Calhoun Falls
Funderburk, C. (Unc)	Lancaster
Gage, C. V. (CS)	Clemson
Gahr, J. F. (CS)	Anderson
Gaillard, W. P. D. (Unc)	Williamston
Gainer, C. E. (G)	Georgetown
Gaines, B. G. (CS)	Goldston, N. C.
Cale, C. L. (CS)	Conway
Gale, T. L. (CS)	Baltimore, Md.
Gambrell, O. W. (Unc)	Piedmont
Gandy, W. C. (CS)	Darlington
Gardner, C. M. (CS)	Florence
Garner, F. H. (G)	Union
Garner, J. D. (CS)	Gaffney
Garrett, J. C. (CS)	Anderson
Garrett, W. A. (CS)	Orangeburg
Garrison, B. F. (CS)	Calhoun Falls
Gause, J. M. (CS)	Coward
Gentry, T. A. (G)	Clemson
George, D. D. (Unc)	Anderson
George, E. M. (CS)	Rock Hill
Gerald, E. L. (CS)	Loris
Gerrald, J. Q. (CS)	Galivants Ferry
Gibson, H. L. (CS)	Brevard, N. C.
Gibson, J. T. (CS)	Greenwood
Gibson, W. W. (CS)	Greenville
Gillespie, J. W. (G)	Clemson
Gilreath, J. A. (CS)	Greenville
Gilreath, J. W. (CS)	Belvedere
Glasscock, E. P. (CS)	Rock Hill
Godwin, G. M. (CS)	Lake City
Godwin, J. B. (CS)	Lake City
Golden, W. M. (CS)	Piedmont

Name and Course	Address
Gooding, P. H. (CS)	Clemson
Gosnell, W. D. (CS)	Greenville
Gower, A. G. (CS)	Vienna, Va.
Graham, E. L. (CS)	Kingstree
Graham, J. B. (Unc)	Kingstree
Green, H. B. (CS)	Columbia
Green, J. T. (CS)	Sumter
Green, R. G. (Unc)	Salem
Gregg, C. G. (CS)	Pineville
Gregory, T. P. (CS)	Chester
Gressette, F. R. (G)	St. Matthews
Griffin, T. M. (CS)	North Augusta
Griffith, E. L. (Unc)	Salem
Griggs, C. D. (CS)	Travelers Rest
Grubbs, L. C. (Unc)	Fair Play
Grubbs, S. P. (Unc)	Fair Play
Gunnell, W. D. (CS)	Spartanburg
Gunter, E. J. (CS)	Anderson
Guy, E. D. (CS)	Abbeville
Guyton, L. E. (Unc)	Williamston
Hagen, P. A. (CS)	Charleston
Hagler, W. D. (CS)	Spartanburg
Hall, C. L. (CS)	Greenville
Hall, H. E. (Unc)	Central
Hall, J. M. (Unc)	Spartanburg
Hall, P. W. (G)	Pendleton
Hall, W. B. (CS)	Spartanburg
Hall, W. R. (CS)	Anderson
Hamilton, F. P. (G)	Seneca
Hammond, A. F. (G)	Clemson
Hammond, E. B. (CS)	Johnsonville
Hammond, J. W. (G)	Clemson
Hanckel, F. S. (CS)	Charleston
Hand, P. D. (CS)	Greenville
Hankinson, J. C. (CS)	McBean, Ga.
Hann, M. H. (CS)	Easley
Harbin, S. K. (Unc)	Westminster
Hardee, J. O. (CS)	Greeleyville
Harden, D. (CS)*	Seneca
Hardy, G. M. (G)	Augusta, Ga.
Harkins, C. S. (CS)	Laurens
Harman, L. M. (CS)	Cedar Grove, N. J.
Harmon, H. H. (CS)	Lexington
Harris, B. B. (CS)	Blackville
Harrison, D. L. (CS)	Brunson
Harrison, H. D. (CS)	Clemson
Hasell, A. H. (CS)	Columbia
Haskell, R. (CS)	Beaufort
Hawkins, G. A. (CS)	Taylors
Hawkins, H. S. (CS)	Rock Hill
Hayden, T. E. (CS)	North
Haywood, M. K. (Unc)	Clemson
Head, J. O. (CS)	Liberty
Heath, W. P. (CS)	Esmont, Va.
Heaton, B. J. (CS)	Reevesville
Hedden, J. R. (CS)	Charlotte, N. C.
Hellams, A. D. (CS)	Laurens
Helms, L. H. (CS)	Darlington
Henderson, B. L. (Unc)	Pickens
Henderson, N. (CS)	Greenville
Henderson, R. P. (CS)	Clemson
Hendrix, D. L. (CS)	Beaumont, Texas
Henson, J. G. (CS)	Forest City, N. C.
Herndon, J. E. (CS)	Fountain Inn
Herring, C. E. (CS)	Anderson
Herring, J. E. (CS)	Easley
Hetrick, J. P. (CS)	Anderson
Hicks, B. L. (CS)	Timmonsville
Hicks, H. R. (CS)	Kershaw
Hicks, J. D. (CS)	Effingham
Hiers, F. (CS)	Ehrhardt
Higginbotham, W. C. (CS)	Rowesville
Hill, A. S. (G)	Anderson
Hill, I. B. (Unc)	Easley
Hill, L. S. (Unc)	Easley
Hill, Rodney G. (CS)	North Charleston
Hinnant, S. E. (CS)	Andrews
Hinson, J. B. (CS)	Tatum
Hinson, T. W. (CS)	Lancaster
Hipp, F. A. (CS)	Saluda

Name and Course	Address
Hipp, J. F. (CS)	Newberry
Hodgin, B. E. (CS)	Columbia
Hogner, R. P. (CS)	Clemson
Holcombe, J. V. (CS)	Greenville
Holladay, W. F. (CS)*	Ft. Deposit, Ala.
Holland, M. G. (Unc)	Pickens
Holley, B. H. (CS)	Graniteville
Holliday, B. C. (Unc)	Central
Hollingsworth, H. G. (G)	Fountain Inn
Holman, R. E. (CS)	Florence
Honea, D. B. (Unc)	Westminster
Hoover, F. J. (CS)	Greenville
Hoover, H. L. (CS)	Wooster, Ohio
Hopper, J. E. (G)	Starr
Howard, H. B. (CS)	Taylors
Hubbard, J. M. (CS)	Big Rock, Ky.
Huchet, C. E. (CS)	Orangeburg
Hudson, J. C. (CS)	North Charleston
Huffman, R. L. (CS)	Newberry
Huggins, N. L. (CS)	Johnsonville
Hughes, O. L. (CS)	Cordova
Hull, P. D. (G)	Conway
Humphrey, S. W. (CS)	Bethune
Hunt, A. D. (Unc)	Westminster
Hunt, P. T. (Unc)	Townville
Hunter, C. P. (CS)	Pickens
Hursey, J. E. (CS)	Anderson
Hutchings, M. L. (CS)	Nashville, Ill.
Hutto, A. J. (CS)	Orangeburg
Hutto, H. R. (CS)	Rock Hill
Hyder, J. D. (CS)	Anderson
Ingram, H. W. (CS)	Rockingham, N. C.
Irvin, R. J. (Unc)	Salem
Jackson, S. L. (CS)	Tabor City, N. C.
James, F. L. (CS)	Miami Springs, Fla.
Jameson, J. E. (Unc)	Honea Path
Jenkins, T. W. (CS)	Avondale, N. C.
Jennings, J. L. (Unc)	West Union
Johnson, C. D. (CS)	Conway
Johnson, D. L. (CS)	Folly Beach
Johnson, E. G. (CS)	Walhalla
Johnson, F. D. (G)	York
Johnson, G. A. (CS)	Asheville, N. C.
Johnson, G. W. (CS)	McColl
Johnson, J. W. (G)	Easley
Johnson, T. R. (G)	Central
Johnson, W. L. (CS)	Charleston
Jones, B. R. (CS)	Greenville
Jones, C. F. (CS)	Woodruff
Jones, E. B. (CS)	Columbia
Jones, E. H. (G)	Nichols
Jones, E. R. (Unc)	Central
Jones, Fay R. (Unc)	Pickens
Jones, Flossie R. (Unc)	Pickens
Jones, G. W. (G)	Pendleton
Jones, I. T. (Unc)	Pickens
Jones, O. V. (Unc)	Pickens
Jones, R. M. (CS)	Sumter
Jones, W. E. (CS)	Durham, N. C.
Jones, W. Houston (CS)	Woodruff
Jordan, E. D. (CS)	Olanta
Kay, J. D. (CS)	Seneca
Kay, W. G. (CS)*	Allendale
Keaton, J. C. (CS)	Anderson
Kelley, L. H. (Unc)	Pickens
Kelly, K. H. (CS)	Philadelphia, Pa.
Kelly, R. E. (CS)*	Sumter
Kemp, J. R. (CS)	Denmark
Kennedy, W. C. (CS)	Spartanburg
Ketner, D. Q. (CS)	Murphy, N. C.
Kinard, G. P. (G)	Clemson
Kinard, G. R. (CS)*	Fairfax
King, H. B. (CS)	Westminster
King, H. L. (CS)	Charleston
King, J. D. (CS)	Anderson
King, John L. (CS)	Central
King, J. T. (CS)	Clemson
King, L. W. (CS)	Cheraw
King, N. D. (CS)	Anderson
King, N. P. (Unc)	Anderson
King, R. C. (Unc)	Seneca
Kinion, N. F. (CS)*	Greer
Kirkland, K. L. (CS)	Anderson
Kirkley, Francis E., Jr. (CS)*	Central
Knight, O. W. (CS)	Kershaw
Kowalski, C. M. (CS)	Anderson
Kowalski, P. R. (CS)	Anderson
Kraft, G. A. (CS)*	Greenville
Lambert, G. F. (CS)	Maryville, Tenn.
Lambert, T. (Unc)	Maryville, Tenn.
Lambeth, E. S. (CS)	Augusta, Ga.
Lancaster, C. E. (CS)	Tabor City, N. C.
Lander, W. T. (G)	Williamston
Lane, G. R. (CS)	Mullins
Lane, R. P. (CS)	Central
Lanford, G. R. (CS)	Spartanburg
Lanford, H. L. (CS)	Woodruff
Latham, M. C. (CS)	North Augusta
Lathem, R. C. (G)	Atlanta, Ga.
Lawrence, W. B. (CS)	Greenville
Leamy, G. H. (CS)	New York, N. Y.
LeCroy, J. R. (CS)	Walhalla
Lee, C. W. (CS)	McColl
Lee, S. D. (G)	Anderson
Leitner, J. A. (CS)	Irmo
Leonard, W. C. (CS)	Johnson City, Tenn.
Lewis, H. D. (CS)	Batesburg
Lewis, S. S. (CS)	Leesville
Lewis, T. B. (CS)	Conway
Liakos, J. T. (CS)	Florence
Lidke, D. E. (CS)	Maplewood, N. J.
Lifrage, H. O. (CS)	Salters
Light, H. H. (Unc)	Walhalla
Lindell, B. S. (CS)	Wilmington, Del.
Little, G. H. (CS)	St. Petersburg, Fla.
Little, J. M. (CS)	Union
Littlejohn, C. T. (CS)	Greenwood
Littleton, B. H. (CS)	Walhalla
Livingston, T. G. (CS)	Columbia
Long, B. D. (Unc)	Clemson
Long, J. E. (CS)	Greenville
Long, J. P. (CS)	Greenwood
Long, R. H. (CS)	Union
Lookabill, C. R. (CS)	Asheville, N. C.
Looper, M. G. (Unc)	Pickens
Lotz, J. E. (CS)	Summerville
Lowery, E. K. (CS)	Pageland
Lowery, R. J. (CS)	Lancaster
Loy, V. A. (G)	Clemson
Lucius, T. L. (CS)*	Columbia
Luetjen, P. G. (CS)	Queens Village, N. Y.
Lundy, G. F. (CS)	Denmark
Lunsford, J. M. (CS)	Spartanburg
Lyda, E. B. (CS)*	Hendersonville, N. C.
Lynch, A. H. (Unc)	Pickens
Lynch, T. C. (Unc)	Seneca
Lynch, W. L. (G)	Seneca
Lynn, J. R. (CS)*	Gaffney
McAlister, R. L. (CS)	Pendleton
McAllister, W. M. (CS)	Rock Hill
McCabe, C. B. (CS)	San Antonio, Fla.
McCachern, J. G. (CS)	Concord, N. C.
McCain, D. T. (CS)	Effingham
McCarter, H. L. (CS)	Tryon, N. C.
McCarter, M. W. (CS)	Clover
McClain, D. M. (CS)	La France
McClelland, R. A. (CS)	Spartanburg
McClure, C. M. (G)	Anderson
McClure, F. A. (G)	Anderson
McCollum, F. (CS)	Easley
McConnell, J. C. (CS)	Sandy Springs
McCown, J. M. (CS)	Richland
McCracken, J. W. (CS)	Columbia
McCraw, L. G. (CS)	Sandy Springs
McCutcheon, R. C. (CS)	Lake City
McDaniel, C. C. (CS)	Leeds
McDaniel, G. W. (CS)*	Greenville
McDavid, B. M. (G)	Westminster
McDonald, W. C. (CS)*	Westminster

Name and Course	Address
McElmurray, J. G. (CS)	Augusta, Ga.
McGarity, M. C. (CS)	Spartanburg
McGraw, W. C. (CS)	Pendleton
McKeown, H. A. (CS)	Chester
McLees, N. C. (G)	Walhalla
McLellan, H. C. (CS)	Dillon
McMahan, L. P. (Unc)	Seneca
McMahan, R. A. (CS)	Columbia
McManus, R. P. (Unc)	Charleston
McMillan, C. (G)	Clemson
McMillan, M. K. (CS)	Mullins
McMillan, T. M. (CS)	Bamberg
McTeer, A. D. (CS)	Edisto Island
McTeer, T. F. (CS)	Hartsville
Mabry, C. M. (CS)	Fort Mill
Mabry, R. S. (CS)	Greenville
Madden, I. E. (CS)	Greenwood
Madden, J. A. (CS)	Laurens
Madden, M. W. (Unc)	Clemson
Madlinger, G. J. (CS)	Memphis, Tenn.
Magill, J. B. (CS)	Concord, N. C.
Mahaffey, J. E. (CS)	Liberty
Major, C. S. (CS)	Anderson
Major, W. R. (CS)	Williamston
Mann, E. S. (Unc)	Pickens
Mann, M. D. (Unc)	Six Mile
Marett, S. C. (Unc)	Fair Play
Marks, G. M. (CS)	Greenville
Marshall, A. H. (CS)	Heath Springs
Marshall, J. C. (CS)	Heath Springs
Martin, R. L. (CS)	West Union
Mason, A. F. (CS)	Greenville
Massey, A. D. (G)	Liberty
Massey, D. R. (CS)	Fort Mill
Maxwell, C. R. (CS)	Greenville
May, D. V. (CS)	Greenville
Mays, K. W. (CS)	Columbia
Medford, D. E. (CS)	Walhalla
Merritt, C. W. (CS)	Piedmont
Merritt, S. O. (Unc)	Greenville
Middleton, R. E. (CS)	Clearwater, Fla.
Mikkelsen, H. D. (CS)	Ludlow, Ky.
Milam, C. L. (CS)	Sandy Springs
Miley, G. F. (G)	Greeleyville
Miller, C. D. (CS)	Charleston
Miller, J. H. (CS)	Honea Path
Miller, M. M. (G)	Anderson
Miller, R. S. (CS)	Westminster
Miller, S. C. (CS)	Greenville
Mills, C. W. (CS)°	Darlington
Mills, H. B. (CS)	Hapeville, Ga.
Mills, J. R. (CS)	Hapeville, Ga.
Mitchell, W. D. (CS)	Spartanburg
Moore, A. C. (CS)	Anderson
Moore, H. C. (CS)	Inman
Moore, Joseph L. (CS)	Chester
Moore, J. W. (CS)	Chester
Moore, R. L. (CS)	Charlotte, N. C.
Moore, W. L. (CS)	Pendleton
Morgan, G. D. (CS)	Greenville
Morgan, L. R. (CS)	Central
Morgan, M. C. (CS)	Great Falls
Morris, B. M. (CS)	Newberry
Morris, C. L. (CS)	Olar
Morris, D. E. (CS)	Timmonsville
Morris, F. W. (CS)	Detroit, Mich.
Morris, M. E. (Unc)	Anderson
Morrison, J. E. (CS)	Iva
Morton, C. W. (CS)°	Beaufort
Moseley, M. C. (CS)	Greenville
Mosteller, C. T. (CS)	Gaffney
Moxley, E. F. (CS)	Dublin, Ga.
Mullinax, D. E. (Unc)	Central
Mullinnix, W. E. (G)	Anderson
Murphree, L. E. (CS)	Tamassee
Murphree, M. K. (Unc)	Sunset
Murphree, N. J. (Unc)	Tamassee
Murphy, C. B. (CS)	Greenwood
Murray, J. A. (CS)	Staten Island, N. Y.
Muzzey, W. M. (CS)	Philadelphia, Pa.
Myers, N. A. (CS)	Olanta
Myrick, W. E. (CS)	Ulmers
Nabors, R. L. (CS)	Talladega, Ala.
Nasworthy, G. A. (CS)	Winter Park, Fla.
Nations, B. K. (Unc)	Central
Neal, W. S. (CS)	Kershaw
Nelson, J. B. (CS)	Spartanburg
Nelson, J. W. (CS)	Piedmont
Newton, A. F. (G)	Clemson
Newton, V. L. (G)	Central
Nicholson, E. M. (Unc)	Salem
Nolan, M. P. (G)	Marion
Norris, G. F. (CS)	Taylors
Nutt, G. H. (CS)	Clemson
Oates, W. M. (CS)	Spartanburg
O'Cain, J. W. (CS)	Orangeburg
O'Dell, D. E. (Unc)	Pickens
Orr, R. J. (CS)	Anderson
Orr, W. L. (CS)	Hendersonville, N. C.
Ott, A. L. (CS)	Columbia
Outen, E. S. (CS)°	Pageland
Outz, F. E. (G)	Fair Play
Owen, M. E. (Unc)	Piedmont
Owens, W. R. (G)	Walhalla
Paden, W. R. (CS)°	Clemson
Padgett, J. H. (CS)	Hayesville, N. C.
Pagliei, J. A. (CS)	Clairton, Pa.
Palles, N. L. (CS)	Florence
Palmer, E. D. (G)	Pickens
Pappas, E. P. (CS)	Jacksonville, Fla.
Parillo, J. A. (CS)°	W. Catasaugua, Pa.
Parker, J. W. (CS)	Savannah, Ga.
Parker, L. C. (CS)	Edgefield
Parker, R. B. (G)	Anderson
Parsons, M. O. (CS)	Andrews
Pate, C. T. (CS)	Bennettsville
Patrick, C. H. (CS)	Greenville
Patrick, J. D. (CS)	Clemson
Pearman, S. N. (CS)	Columbia
Peck, P. E. (CS)	Vero Beach, Fla.
Perez, O. (CS)	New York, N. Y.
Perna, A. J. (CS)	Brooklyn, N. Y.
Perry, D. C. (Unc)	Seneca
Perry, W. J. (CS)	Timmonsville
Pettus, H. E. (CS)	Fort Mill
Phillips, E. T. (Unc)	Mountain Rest
Phillips, J. R. (CS)°	Piedmont
Phillips, R. L. (CS)	Anderson
Piatt, H. R. (CS)	Andrews
Pickens, H. A. (CS)	Anderson
Pinckney, J. E. (CS)	Walterboro
Pittman, C. A. (CS)	Perkasie, Pa.
Pittman, J. F. (G)	Seneca
Pitts, J. D. (CS)	Rock Hill
Platt, B. A. (CS)	Ocean Drive
Player, S. J. (CS)	Columbia
Plowden, R. B. (CS)	Sumter
Ponds, J. J. (CS)	Ashton
Porcher, G. L. (CS)	Charleston
Porcher, J. P. (CS)	Charleston
Porter, J. F. (CS)	Winnsboro
Porter, K. M. (CS)	East Flat Rock, N. C.
Porter, V. C. (G)	Morganton, N. C.
Poston, R. E. (CS)	Hyman
Powell, F. F. (Unc)	Easley
Powell, J. W. (CS)	Clemson
Powers, A. K. (CS)	Columbus, Ga.
Pratt, B. B. (CS)°	Liberty
Prince, G. E. (CS)	Columbia
Prince, R. L. (Unc)	Six Mile
Proctor, C. L. (CS)	Ware Shoals
Proffitt, J. C. (CS)	Greenville
Puckhaber, W. F. (CS)	Charleston
Purser, N. R. (Unc)	Clemson
Purvis, W. J. (CS)	Esmont, Va.
Puryear, E. F. (CS)	Cheraw
Putman, R. W. (CS)	Greenville
Quarles, C. H. (CS)	Abbeville
Quattlebaum, R. S. (CS)	Chester

Name and Course	Address
Ramage, B. V. (Unc)	Townville
Ramsey, R. H. (CS)	Brevard, N. C.
Randall, R. A. (CS)	La France
Randall, R. H. (CS)	Ridge Spring
Rankin, J. M. (CS)	Easley
Ready, G. L. (CS)	Graniteville
Redfearn, J. H. (CS)	Wadesboro, N. C.
Reece, R. W. (CS)	Pickens
Reeves, T. M. (CS)	Ravenel
Reid, C. I. (CS)	Greenville
Reid, W. A. (CS)	Abbeville
Rentz, W. D. (CS)	Williamston
Reynolds, J. M. (CS)	Sumter
Reynolds, P. G. (CS)	Sumter
Reynolds, T. L. (CS)	Waynesboro, Ga.
Richardson, F. A. (CS)	Seneca
Richardson, J. F. (Unc)	Simpsonville
Richardson, J. L. (CS)	Fair Play
Richardson, N. L. (Unc)	Pendleton
Richardson, W. H. (CS)	Greenville
Richey, E. K. (Unc)	Central
Richey, W. B. (CS)	Ware Shoals
Riggins, W. H. (CS)	Greenville
Rimrodt, L. K. (CS)	Walhalla
Rivers, E. D. (CS)	Chesterfield
Rivers, M. E. (CS)	Hampton
Roache, B. E. (G)	Pelzer
Robbins, R. S. (Unc)	Belton
Roberts, B. L. (CS)	Chester
Roberts, J. R. (CS)	Greenville
Roberts, J. W. (CS)	Greenville
Roberts, W. S. (CS)	Gastonia, N. C.
Robinette, O. J. (CS)	Pacolet
Robinson, J. A. (CS)	Easley
Robinson, J. D. (CS)	Enka, N. C.
Rochester, S. (G)	Harleyville
Rogers, C. R. (CS)*	Mullins
Rogers, J. C. (CS)	Pelzer
Rogers, J. D. (CS)	Easley
Rogers, J. T. (CS)	Florence
Rogers, M. R. (Unc)	Easley
Rogers, T. N. (CS)*	Fork
Rogers, V. A. (CS)	Lowndesville
Rogers, W. B. (G)	Greenville
Rogers, W. K. (CS)	Walhalla
Rohdenburg, C. H. (CS)*	Iva
Roper, M. O. P. (Unc)	Six Mile
Roper, O. F. (Unc)	Pickens
Roper, S. A. C. (Unc)	Easley
Rosamond, T. R. (CS)	Greenville
Ross, L. C. (CS)	Charlotte, N. C.
Rowe, H. B. (CS)	West Palm Beach, Fla.
Rubenstein, R. D. (CS)—	Hendersonville, N. C.
Rutledge, T. T. (CS)	Easley
Ryttenberg, H. J. (CS)*	Sumter
Salter, E. L. (CS)	Walterboro
Sanders, E. K. (CS)	Summerville
Sanders, J. C. (CS)	Seneca
Sanders, J. D. (CS)	Chester
Sanders, M. (Unc)	Central
Sanko, G. (CS)	Aiken
Satterfield, D. E. (CS)	Lyman
Satterfield, T. G. (Unc)	Norris
Schlock, A. A. (G)	Seneca
Schofield, M. O. (G)	Walhalla
Seaber, J. A. (CS)	Blythewood
Seabrook, W. B. (CS)	Anderson
Sealy, M. N. (CS)	Rock Hill
Senn, M. G. (Unc)	Pickens
Senn, W. H. (CS)	Laurens
Setzer, H. L. (CS)	Candler, N. C.
Shaffer, J. K. (CS)	Columbia
Shane, D. C. (CS)	Florence
Shane, R. W. (CS)	Florence
Shannon, E. C. (CS)*	Loris
Sharkey, A. M. (CS)	Raleigh, N. C.
Sharp, M. E. (G)	Anderson
Shaw, J. E. (CS)	Florence

Name and Course	Address
Shealy, D. A. (CS)	Chester
Shealy, L. L. (CS)	Summerville
Shealy, T. L. (CS)	Spartanburg
Shearer, S. D. (CS)	Anderson
Shirley, D. A. (CS)*	Langley
Shirley, R. D. (CS)	Langley
Shockley, S. S. (Unc)	Greenville
Shoolbred, R. F. (CS)	Columbia
Shore, P. C. (CS)	Baldwin, Ga.
Shumpert, P. K. (CS)	North
Si, M. K. (CS)	Syriam, Burma
Sifford, D. D. (CS)	Stanley, N. C.
Simmons, C. E. (CS)	Pickens
Simmons, I. M. A. (Unc)	Pickens
Singletary, A. W. (Unc)	Lake City
Singleton, J. J. (G)	Abbeville
Sistare, J. D. (CS)	Lancaster
Small, C. D. (CS)	Kershaw
Smith, C. D. (Unc)	Anderson
Smith, D. W. (CS)	Edgefield
Smith, F. H. (Unc)	Anderson
Smith, J. E. (CS)	Kinards
Smith, J. F. (CS)	Madison
Smith, J. K. (CS)	Taylors
Smith, J. M. (CS)	Anderson
Smith, John R. (CS)	Charleston
Smith, L. F. (Unc)	Salem
Smith, M. L. (CS)	Anderson
Smith, N. B. (Unc)	Anderson
Smith, R. H. (Unc)	Pickens
Smith, W. H. (CS)	Spartanburg
Smoak, H. G. (CS)	Pacolet
Snapp, O. I. (CS)	Fort Valley, Ga.
Snow, J. J. (CS)	Henry
Sompayrac, E. E. (CS)	Society Hill
Southerlin, R. C. (CS)	Marietta
Spearman, C. J. (Unc)	Seneca
Spearman, E. L. (CS)	Ninety Six
Squires, J. D. (CS)	Aynor
Stahl, E. (CS)	Elmhurst, N. Y.
Stansell, H. D. (CS)	Greenville
Starkey, L. V. (CS)	Clemson
Steele, E. L. (G)	Harrisonburg, Va.
Stegall, E. M. S. (Unc)	Anderson
Stephens, J. H. (CS)	Rock Hill
Stevenson, C. P. (Unc)	Seneca
Stevenson, E. A. (CS)	Ulmers
Stevenson, E. P. (Unc)	Clemson
Stewart, D. W. (CS)	Fountain Inn
Stewart, E. P. (G)	Liberty
Stewart, M. C. (Unc)	Seneca
Stewart, M. E. (Unc)	Central
Still, D. B. (CS)	Blackville
Stokes, L. E. (CS)	Darlington
Stoudenmire, W. J. (G)	Orangeburg
Stover, F. R. (G)	Kershaw
Stover, L. M. (G)	Estill
Strange, C. N. (CS)	Taylors
Streetman, R. J. (G)	Clemson
Stribling, H. D. (CS)	Clemson
Stuck, C. G. (CS)	Pomaria
Sutherland, A. C. (CS)	Pendleton
Swetenburg, J. R. (CS)	Anderson
Swett, A. B. (CS)	Greenville
Talbert, J. C. (CS)	Concord, N. C.
Tankersley, L. D. (CS)	Greenville
Tanner, R. C. (CS)	Kingstree
Tarte, P. E. (CS)	Abbeville
Taylor, D. T. (CS)	Florence
Taylor, J. A. (CS)*	Greenville
Thackston, T. A. (CS)	Charlotte, N. C.
Than, M. M. (CS)	Rangoon, Burma
Thode, C. D. (Unc)	Walhalla
Thompson, F. M. (CS)	North Augusta
Thompson, Huston E. (CS)	Gray Court
Thompson, H. F. (CS)	Charleston Heights
Thompson, J. H. (CS)	La Grange, Ga.
Thorne, J. C. (CS)	Chesnee
Thornton, T. W. (CS)	Elberton, Ga.
Timmerman, J. A. (CS)	Pelzer

Name and Course	*Address*
Tinsley, J. F. N. (CS)	Easley
Todd, B. (G)	Loris
Torrence, R. M. (CS)	Rock Hill
Tribble, W. C. (CS)°	Piedmont
Tripp, O. M. P. (Unc)	Easley
Tritapoe, H. G. (CS)	Graniteville
Trively, T. H. (CS)	Clemson
Truluck, D. L. (CS)	Hampton
Truluck, M. M. (CS)	Union
Tucker, C. B. (CS)	Mt. Croghan
Tucker, H. (Unc)	Williamston
Tucker, M. L. (G)	Williamston
Tucker, R. L. (Unc)	Charleston
Tull, D. W. (Unc)	Clemson
Tumbleston, I. W. (CS)	Yonges Island
Turner, A. C. (CS)	Greenville
Turner, B. N. (Unc)	Pickens
Turner, M. H. (Unc)	Piedmont
Turner, P. (CS)	Greenville
Turner, R. P. (CS)	Woodruff
Turner, S. F. (Unc)	Pickens
Tuten, J. M. (CS)	Greenville
Ulmer, J. C. (CS)	Elloree
Underwood, I. O. (Unc)	Walhalla
Underwood, J. R. (CS)	Walhalla
Vance, C. E. (CS)	Greenville
Varn, R. B. (CS)	Charleston
Vaughan, J. E. (CS)	Ridgeland
Verdin, J. W. (CS)	Greenville
Vermillion, M. A. (Unc)	Fair Play
Vermillion, R. J. (G)	Fair Play
Vissage, E. K. (Unc)	Walhalla
Voight, W. B. (CS)	Summerville
Wagner, G. P. (CS)	Woodruff
Walker, W. E. (CS)	Rock Hill
Wallace, F. D. (CS)	Norfolk, Va.
Walters, E. H. (CS)	Lancaster
Ward, D. L. (Unc)	Pickens
Ward, J. A. (CS)	Jackson, Tenn.
Ward, L. R. (Unc)	Pickens
Warner, J. R. (CS)	Charleston Heights
Warriner, L. R. (CS)	Emory, Va.
Washburn, W. H. (CS)	Bostic, N. C.
Washington, M. E. (Unc)	Clemson
Wasson, W. N. (CS)	Laurens
Waters, J. R. (CS)	Beaufort
Watson, A. L. (CS)	Spartanburg
Watson, J. K. (CS)	Batesburg
Weathers, A. A. (Unc)	Walhalla
Weaver, J. R. (CS)	Florence
Webb, B. K. (CS)	Cross Anchor
Weber, T. W. (CS)	Woodbridge, N. J.
Weed, R. O. (CS)	Irmo
Weekley, R. J. (CS)	Ulmers
Weldon, W. W. (CS)	Bennettsville
Welling, J. L. (Unc)	Clinton
Wells, J. D. (CS)	Columbia
West, A. S. (CS)	Cassatt
West, R. L. (CS)	Bowman
West, W. H. (CS)	Simpsonville
Westbrook, B. G. (CS)	Campobello
Westwood, E. E. (Unc)	Newberry
Whetstone, J. F. (CS)	North
White, C. H. (CS)	Greenville
White, J. R. (CS)°	Seneca
White, M. V. (CS)	Anderson
White, S. M. (CS)	Clemson
Whitesides, J. C. (CS)	Clover
Whitlow, D. R. (CS)	Royston, Ga.
Whitt, A. L. (CS)	Williamston
Wickliffe, B. I. (G)	West Union
Wier, J. H. (CS)	Fletcher, N. C.
Wiggins, J. W. (CS)	Charleston
Wigington, M. (CS)°	Salem
Wigington, M. B. (Unc)	Salem
Wilbanks, O. W. (Unc)	Mountain Rest
Wilkerson, J. T. (CS)	Anderson
Wilkes, W. L. (CS)	Columbia
Wilkie, J. E. (CS)	Gastonia, N. C.
Wilkins, D. F. (CS)	Chesnee
Wilkins, J. D. (CS)	Chesnee
Willard, A. Y. (CS)	Charleston
Williams, E. M. (Unc)	Clemson
Williams, F. E. (CS)	Lancaster
Williams, J. A. (CS)	Fairfax
Williams, Smiley B. (G)	Greer
Williams, Sybil B. (G)	Anderson
Williams, T. R. (CS)	Edgefield
Williams, T. W. (CS)	Taylors
Williams, W. G. (CS)	Greenville
Williamson, J. H. (CS)	Charleston Heights
Williford, R. B. (Unc)	Anderson
Wilson, J. (CS)	Shelby, N. C.
Wilson, K. C. (Unc)	Honea Path
Wilson, L. C. (CS)	Anderson
Wilson, L. O. (CS)	Fort Mill
Wilson, W. N. (CS)	Anderson
Winchester, D. B. (CS)	Pickens
Winchester, F. G. (Unc)	Pickens
Winchester, I. B. (Unc)	Pickens
Winchester, J. D. (CS)	Pickens
Winchester, K. P. (CS)	Six Mile
Winchester, S. K. (Unc)	Central
Wingate, E. K. (CS)	Charleston
Witherspoon, D. M. (CS)	Elloree
Woodall, C. E. (CS)	Clemson
Woodard, S. L. (CS)	Summit, N. J.
Woods, G. B. (CS)	Rock Hill
Woods, T. R. (CS)	Jacksonville, Fla.
Woodward, M. G. (CS)	Anderson
Workman, J. P. (CS)	Kinards
Worley, F. C. (CS)	Nichols
Wright, B. R. (CS)°	Belton
Wyatt, B. (Unc)	Easley
Yancey, W. H. (CS)	Atlanta, Ga.
Yarborough, G. L. (CS)	Newport News, Va.
Yarborough, W. T. (CS)	Walhalla
Yarbrough, J. C. (Unc)	Anderson
Yike, R. M. (CS)	Atlanta, Ga.
Young, J. E. (CS)	Orangeburg
Zorn, R. A. (CS)	Denmark

LIST OF STUDENTS, FIRST SEMESTER, 1954-1955

The names are arranged in alphabetical order and following the names are symbols indicating classes and courses. The classification of undergraduates is indicated by numerals as follows: 1—Freshman, 2—Sophomore, 3—Junior, 4—Senior.

The abbreviations following the numerals refer to the student's major course: A—Agriculture (unclassified as to major course). Ag Ec—Agricultural Economics, Agron—Agronomy, AH—Animal Husbandry, Bot—Botany, Dairy—Dairy, Ent—Entomology, Hort—Horticulture, Poul—Poultry, Ag En—Agricultural Engineering, Pre-For—Pre-Forestry, Pre-Vet—Pre-Veterinary, A&S—Arts and Sciences, Ind Phys—Industrial Physics, Pre-Med—Pre-Medicine, Ag Ch—Agricultural Chemistry, Chem—Chemistry, Ed—Education, Ind Ed—Industrial Education, VAE—Vocational Agricultural Education, E—Engineering (unclassified as to major course, but the abbreviation following the "E" indicates a preliminary choice of major course), Arch—Architecture, Ar En—Architectural Engineering, Cr En—Ceramic Engineering, Ch En—Chemical Engineering, CE—Civil Engineering, EE—Electrical Engineering, ME—Mechanical Engineering, TC—Textile Chemistry, TE—Textile Engineering, TM—Textile Manufacturing.

New students admitted in September, 1954, are indicated by an asterisk (*); part-time students by two asterisks (**).

Name and Course — *Address*

Abbott, C. A. (1 Pre-Med) — Seneca
Abbott, G. E. (3 CE) — Monroe, Mich.
Abbott, G. R. (1E-ME)* — Canton, N. C.
Abbott, J. H. (4 ChEn) — Canton, N. C.
Abbott, J. R. (2 ME) — Walhalla
Abercrombie, R. E. (2 EE) — Gray Court
Abercrombie, W. G. (3 AgEn)— Fountain Inn
Able, R. L. (3 AH) — Saluda
Ables, J. R. (1 E-CE) — Liberty
Ackerman, L. M. (1 E-EE)* — Saluda
Ackerman, M. (2 EE) — Cottageville
Adams, L. C. (1 Pre-Med)*— Texarkana, Texas
Addabbo, D. J. (3 ArEn)— Corona, New York, N. Y.
Addis, L. C. (1 TM)* — Easley
Addison, H. F. (2 TM) — Martin, Ga.
Addison, R. L. (3 Dairy) — Cottageville
Agnew, R. L. (2 Pre-Vet) — Hagood
Agro, C. J. (2 ME) — White Plains, N. Y.
Aiken, L. C. (1 E-ME)* — Pickens
Aiken, R. H. (2 Arch) — Greenville
Alewine, I. D. (3 TM) — Anderson
Alexander, E. L. (2 CrEn) — Clemson
Alexander, J. G. (2 A-AH) — Fairforest
Alexander, J. Major (4 ChEn) — Anderson
Alexander, J. McKenzie (G Ent) — Clemson
Alexander, T. C. (2 A&S) — Anderson
Alford, W. E. (2 TC) — Anderson
Alford, W. L. (3 IndPhys) — Walterboro
All, L. D. (2 Chem) — Savannah, Ga.
Allaire, D. R. (3 TM) — Belleville, N. J.
Allen, A. C. (3 TM) — Wadesboro, N. C.
Allen, C. C. (1 Pre-Med)* — Moncks Corner
Allen, N. W. (1 E-TE) — Rock Hill
Allen, W. P. (1 A-AgEc) — Aynor
Alley, H. E. (1 Pre-Vet)* — Spartanburg
Alley, J. H. (1 Chem)* — Spartanburg
Allgood, J. W. (1 Chem) — Liberty
Allison, W. H. (4 EE) — Greenville
Allred, W. J. (1 TM)* — Belton
Alsbrook, G. F. (3 ArEn) — Sumter
Alsup, J. H. (1 IndEd)* — Jackson
Alsup, T. F. (2 A-AH)* — Jackson
Altman, J. R. (1 E-ME)* — Galivants Ferry
Altman, W. H. (1 IndEd)* — Jeanette, Pa.
Altman, W. T. (1 E)* — Newberry
Amick, L. E. (2 ChEn) — Lexington
Ammons, L. S. (1 VAE)* — Marion
Anderson, C. L. (1 A-AH) — Timmonsville
Anderson, E. T. (PG AgEn) — Lowrys
Anderson, F. C. (3 A&S) — Clemson
Anderson, H. M. (1 Pre-Vet) — Timmonsville
Anderson, H. R. (1 E-AgEn)* — Greenwood
Anderson, H. S. (4 AH) — Timmonsville
Anderson, James M. (1 E-CE) — Seneca
Anderson, John M. (3 Chem) — Andrews
Anderson, Marion H. (PG ME) — Greenville
Anderson, Mason H. (2 A) — Wampee
Anderson, P. P. (1 E-TE) — Tamassee
Anderson, P. S. (2 A&S) — Timmonsville
Anderson, R. K. (1 A-AH)* — Timmonsville
Anderson, W. B. (1 E-EE)* — Lowrys
Andrews, E. G. (2 ME) — Greenville
Ankuta, A. E. (2 IndEd) — Brooklyn, N. Y.
Annas, G. J. (4 Arch) — Granite Falls, N. C.
Anthony, D. B. (3 Poul) — Travelers Rest
Apostle, R. T. (3 EE) — New City, N. Y.
Arbery, W. C. (3 Arch) — Garnett
Archie, W. L. (2 TM) — Fort Mill
Areheart, H. W. (4 A&S) — West Columbia
Argo, M. M. (1 E-ME)* — Abbeville
Arms, T. O. (2 ChEn) — Greer
Armstrong, R. P. (G Ed)**-*—Honea Path
Arnold, B. J. (3 EE) — Laurens
Arnot, G. W. (2 EE) — Charleston
Arthur, A. E. (4 Arch) — Orlando, Fla.
Ashcraft, J. W. (1 TM) — Abbeville
Ashcraft, W. D. (4 EE) — Florence
Ashley, B. (2 CE) — Ware Shoals
Ashley, C. L. (1 CrEn)* — Greenwood
Ashley, E. W. (4 TM) — Honea Path
Ashmore, L. C. (2 CE) — Greenville
Ashmore, R. A. (1 E-CE)* — Greenville
Ashmore, R. C. (PG CrEn) — Greenville
Ashmore, R. M. (4 TE) — Greenville
Atkins, B. R. (2 ME) — Easley
Atkins, F. H. (4 Ed) — Chesnee
Atkins, J. E. (1 E-TE)* — Marion, N. C.
Atkinson, C. N. (4 Arch) St. Petersburg, Fla.
Atkinson, J. B. (2 VAE) — Marion
Atkinson, W. D. (2 A-Dairy) — Lowrys
Atkisson, R. D. (2 ME) West Palm Beach, Fla.
Attenberger, J. E. (1 Ed)* — Greensburg, Pa.
Auld, G. D. (4 Arch) — Greenville
Austell, C. C. (1 E-ME)* — Gaffney
Austin, B. C. (1 Pre-Med)* — Greenville

Name and Course	Address
Austin, J. E. (1 TM)°	Greenville
Austin, J. W. (1 ChEn)°	Simpsonville
Austin, W. C. (1 TM)°	Anderson
Avery, P. W. (2 Ed)	Newnan, Ga.
Aye, M. M. (4 TE)	Maubin P. O., Burma
Ayer, G. E. (1 VAE)°	Fairfax
Babb, J. P. (1 E-EE)	Fountain Inn
Babb, R. H. (3 EE)	Fountain Inn
Babb, W. H. (1 E-EE)	Fountain Inn
Baber, F. D. (1 E-ME)°	Caroleen, N. C.
Baber, R. L. (1 TM)°	Howardsville, Va.
Bagwell, C. E. (1 CrEn)°	Easley
Bagwell, C. F. (2 TM)	Easley
Bailes, W. J. (2 A-Dairy)	Union
Bailey, C. C. (4 Chem)	Clemson
Bailey, G. E. (1 E-ME)°	Salley
Bailey, J. L. (2 Pre-Med)	Woodruff
Bailey, J. M. (4 EE)	Seneca
Bailey, J. R. (2 AgEn)	Lancaster
Bair, G. E. (Unc)°°-°	Clemson
Baker, B. L. (2 A-AH)	Aruba, N. W. I.
Baker, R. R. (1 E-ME)	Brevard, N. C.
Baker, W. A. (1 E)°	Timmonsville
Baldwin, C. O. (1 VAE)°	Hendersonville, N. C.
Ball, W. L. (G EE)°°	Clemson
Ballenger, I. E. (2 TC)	Inman
Ballew, J. F. (1 Ed)°	Tryon, N. C.
Banister, R. A. (Unc)°°	Clemson
Banister, R. F. (2 TC)	Anderson
Banks, W. A. (G Ent)°	Preston, Ga.
Bannister, R. J. (1 TM)°	Anderson
Barbary, B. C. (1 TM)°	Taylors
Bare, C. C. (2 EE)	Starr
Barker, L. F. (1 E-CE)	Nauvoo, Ala.
Barksdale, W. H. (3 VAE)	Gray Court
Barnes, G. R. (2 ChEn)	Camden
Barnes, L. S. (2 EE)	Greenville
Barnes, W. C. (1 E-EE)°	Piedmont
Barnett, W. T. (2 TM)	Taylors
Barnette, D. R. (1 E-EE)°	Inman
Barnette, M. E. (4 A&S)	Pendleton
Barrow, R. A. (3 A&S)	North Augusta
Barton, E. S. (2 TM)	Greenville
Barton, J. E. (2 CrEn)	Taylors
Basha, R. T. (1 E-EE)°	Mt. Pleasant
Baskin, W. H. (1 E-CE)°	Spartanburg
Bass, F. J. (PG Pre-Med)	Mullins
Bass, J. C. (4 TM)	Florence
Bass, T. C. (4 Arch)	Greenville
Bastian, B. H. (1 A-Hort)°	Mt. Pleasant
Bates, B. O. (1 A-Agron)°	Williston
Bates, J. J. (2 A-Agron)	Williston
Bates, K. B. (1 E-ME)°	Norway
Bates, M. R. (2 A-AH)	Neeses
Batson, C. L. (2 ME)	Pickens
Batson, H. W. (1 E-ME)°	Travelers Rest
Bauknight, I. M. (2 A-AH)	Florence
Baumann, D. M. (1 Ed)	Asheville, N. C.
Baumgardner, R. A. (2 A)	Taylors
Baynard, W. (1 E-EE)°	Charleston
Bazemore, P. E. (2 Arch)	Winnsboro
Beach, F. A. (2 AgEn)	Walterboro
Beach, R. W. (2 ME)	Charleston
Bearrow, L. W. (2 A&S)	Walterboro
Beason, J. P. (1 A-Dairy)°	Columbia
Beckum, J. T. (1 TM)°	Charleston Heights
Beddoes, W. E. (1 TM)°	Sumter
Becren, F. W. (2 TM)	Clover
Behr, W. E. (1 E-EE)°	Palm Beach, Fla.
Bell, B. H. (4 TC)	Inman
Bell, C. D. (3 ChEn)	Savannah, Ga.
Bell, C. R. (3 Pre-Med)	Lamar
Bell, D. P. (1 E-ME)°	Springfield
Bell, J. L. (1 VAE)°	Conway
Bell, R. E. (1 VAE)°	Wampee
Bennett, G. U. (4 A&S)	Columbia
Bennett, J. Earl (4 TM)	Greer
Bennett, J. Edward (1 Arch)°	Charleston
Bennett, J. H. (2 ArEn)	Cheraw
Benncti, R. J. (G VAE)°°	Westminster
Bennett, R. M. (2 CE)	Greer
Benncti, R. T. (2 AgEn)	Arcadia
Bennett, W. B. (2 TC)	Anderson
Bennett, W. N. (1 A&S)°	Bennettsville
Bentley, B. A. (1 ChEn)	New Rochelle, N. Y.
Bergman, D. W. (2 CE)	Savannah, Ga.
Berry, B. R. (1 E-ME)°	Ninety Six
Berry, E. D. (2 TM)	Spartanburg
Berry, H. M. (1 Ind Ed)	North Charleston
Berry, P. H. (2 A-AH)	Saluda
Berry, T. C. (2 EE)	Charlotte, N. C.
Besson, B. G. (1 E-ME)	North Augusta
Best, R. L. (4 ME)	Ulmers
Bethune, R. M. (4 CrEn)	Cheraw
Betsill, W. L. (1 Pre-Med)°	Arlington, Va.
Biggers, W. F. (1 ChEn)°	Pendleton
Bilton, D. R. (1 E-EE)°	Holly Hill
Binnicker, W. F. (2 A-AH)	Norway
Bishop, B. L. (3 Ed)	Union
Bishop, C. E. (G Ed)°°	Honea Path
Bishop, E. R. (2 EE)	York
Bishop, H. S. (1 A-Hort)°	Beaufort
Bishop, J. E. (3 TM)	Spartanburg
Bishop, O. R. (2 AgCh)	Beaufort
Bishop, R. J. (1 E-EE)°	Savannah, Ga.
Bishop, W. C. (2 TM)	Inman
Black, J. O. (2 VAE)	Easley
Black, L. E. (2 IndEd)	Concord, N. C.
Black, R. C. (1 E-CE)°	Greenville
Black, R. E. (1 TM)°	Hartsville
Black, R. S. (2 A&S)	Concord, N. C.
Black, T. O. (1 E-ME)	Moore
Blackman, V. S. (1 E-AgEn)°	Cross
Blackmon, J. B. (1 E-ME)	Hartsville
Blackmon, J. M. (3 ME)	Rock Hill
Blackmon, R. B. (2 CE)	Franklin, Ind.
Blackston, C. R. (2 EE)	Piedmont
Blackwelder, M. W. (2 TM)	Fort Mill
Blackwell, J. B. (2 TM)	Inman
Blackwell, J. M. (1 E-EE)°	Inman
Blair, R. A. (4 Pre-Med)	Louisville, Ky.
Blakely, D. R. (1 VAE)°	Laurens
Blakely, R. M. (2 TE)	Greenville
Blakeney, B. C. (2 CE)	Pageland
Blanchard, J. E. (1 E-EE)—	Sullivans Island
Blanchard, P. E. (2 ArEn)	Johns Island
Blandford, J. B. (1 ChEn)°	Greenville
Blandford, J. C. (3 TM)	Greenville
Blanke, E. H. (3 ME)	New City, N. Y.
Blanke, R. F. (2 EE)	New City, N. Y.
Blankenship, J. H. (1 A-AgEc)°	Fort Mill
Blanton, A. B. (3 TM)	Forest City, N. C.
Blanton, J. A. (1 E-ME)°	Forest City, N. C.
Blanton, L. C. (2 A-AH)	Tavares, Fla.
Bloodworth, G. R. (1 E-EE)—	Charleston Heights
Blount, J. K. (1 VAE)°	Loris
Boatwright, W. H. (3 EE)	Darlington
Bobo, J. C. (4 TM)	Laurens
Bobo, W. S. (3 Chem)	Williamston
Boger, B. M. (1 E-CE)	Waxhaw, N. C.
Bohlen, G. A. (1 E-EE)°	Charleston
Boiter, J. W. (2 IndEd)	Duncan
Boles, S. J. (2 ME)	Jonesville, N. C.
Bolick, H. E. (1 E-EE)°	Laurens
Bolt, J. A. (1 E-TE)	Ware Shoals
Bolt, J. O. (3 AgEn)	Anderson
Bolt, M. W. (Unc)°°	Anderson
Bolt, W. F. (PG Pre-Med)	Anderson
Bolton, R. S. (2 EE)	Greenwood
Bond, A. M. (G Ed)°°	Clemson
Bond, M. L. (1 A-Dairy)°	Columbia
Bonc, R. E. (1 TM)°	Anderson
Bookhart, T. W. (4 EE)	Kingstree
Boozer, C. H. (1 E-EE)°	Denmark
Borchert, D. F. (1 A)	Greenville
Bordeaux, E. D. (2 IndEd)	Sumter

Name and Course	Address
Bordenkircher, F. E. (1 Arch)°—	Mt. Sterling, Ill.
Borders, W. F. (1 IndEd)	Blacksburg
Bormann, K. C. (1 E-ME)°	Metropolis, Ill.
Boudoucies, A. G. (3 TM)	Greenville
Bouknight, R. W. (1 E-TE)°	Abbeville
Bourne, J. C. (1 A&S)	Greenwood
Bowen, D. A. (2 EE)	Piedmont
Bowen, G. W. (3 AH)	Abbeville
Bowen, J. B. (3 A&S)	Villa Rica, Ga.
Bowen, W. T. (4 TE)	Clemson
Bowick, T. R. (1 TM)	Greenwood
Bowman, G. C. (1 E-CE)	Liberty
Bowman, G. S. (1 A-Agron)	Lowndesville
Bowman, L. R. (2 ME)	Clemson
Box, J. D. (3 EE)	Naval Base
Boyce, T. E. (3 TE)	Joanna
Boykin, J. D. (Unc)°°	Clemson
Boyles, S. N. (3 CE)	Ridgeland
Brackett, N. C. (PG)°°	Pickens
Bradberry, R. C. (2 EE)	Athens, Ga.
Bradbury, D. W. (G)°°	Seneca
Bradford, R. E. (4 A&S)	Roselle, N. J.
Bradley, J. E. (1 E-ME)	Williston
Bradley, T. J. (1 Pre-Med),	Savannah, Ga.
Bragg, L. O. (3 TM)	Enoree
Braid, J. D. (1 E-ME)°	Charleston
Braid, M. T. (2 EE)	North Charleston
Bramlette, J. M. (1 E-CE)	Greenville
Brandon, L. R. (2 IndEd)	York
Brandt, F. N. (1 Arch)°	Spartanburg
Brandt, M. K. (4 Chem)	Spartanburg
Branham, R. A. (G Phys)	Atlanta, Ga.
Brannen, J. W. (3 TM)	Whitmire
Brantley, J. L. (1 A&S)	Ridgeland
Branyon, J. T. (1 E-ME)°	Honea Path
Bratton, R. C. (1 TC)°	Rock Hill
Bray, T. P. (1 TM)	Greenville
Breazeale, H. A. (4 AH)	Pendleton
Breedlove, W. T. (1 E-TE)°	Abbeville
Breland, K. M. (1 E-AgEn)	Frogmore
Brewer, G. F. (4 ME)	Seneca
Brewton, S. A. (3 Arch)	Savannah, Ga.
Bridges, B. K. (1 Pre-Vet)°	Greenville
Bridges, W. M. (1 E-EE)	Chester
Bridgman, D. M. (3 TM)	Belton
Bridwell, J. W. (3 TM)	Woodruff
Briel, E. M. (4 CE)	Miami, Fla.
Bright, J. C. (1 TM)	Swannanoa, N. C.
Brigman, W. M. (4 Agron)	Latta
Britt, D. K. (4 AgEn)	McCormick
Britt, W. A. (2 VAE)	Orrum, N. C.
Brittain, C. G. (4 CrEn)	Hickory, N. C.
Brittain, J. E. (1 E-EE)	Horse Shoe, N. C.
Britton, J. J. (1 E-AgEn)°	Sumter
Broadway, O. A. (1 E-ME)°	Bishopville
Brock, A. E. (1 E-ME)	Bremen, Ga.
Brock, R. L. (4 Chem)	Belton
Brock, Z. O. (2 TE)	Iva
Brockman, J. E. (1 E-CE)°	Greenville
Brodie, G. W. (1 TM)	Hartsville
Brooks, B. E. (4 EE)°°	Pelzer
Brooks, H. C. (3 AgEn)	Fountain Inn
Brooks, L. J. (2 EE)	Pendleton
Brooks, R. D. (1 TM)°	Fort Mill
Brothers, F. V. (1 TM)°	Greenville
Broughton, J. J. (1 A-AH)°—	Castleton, N. Y.
Brown, A. E. (4 CrEn)	Florence
Brown, C. E. (2 A-AH)	Kingstree
Brown, C. M. (2 EE)	Anderson
Brown, C. R. (4 Ed)	Spartanburg
Brown, C. V. (3 EE)	Asheville, N. C.
Brown, E. E. (3 VAE)	Woodruff
Brown, E. L. (1 Arch)	Columbia
Brown, G. A. (G Ed)°°	Anderson
Brown, J. H. (2 ME)	St. Stephen
Brown, James L. (2 CE)	Augusta, Ga.
Brown, John L. (1 Arch)°	Sumter
Brown, J. P. (1 E-ME)°	Sedalia

Name and Course	Address
Brown, J. R. (2 A&S)	Easley
Brown, J. W. (1 Pre-Med)°	Newberry
Brown, R. T. (1 A-Agron)—	Bakersfield, Calif.
Brown, W. E. (3 AgEn)	Gaffney
Brown, W. O. (2 A-AH)	Andrews
Brown, W. S. (1 ArEn)°	Charleston
Browne, C. E. (2 EE)	Troy
Browne, G. H. (1 E-EE)°	Rock Hill
Browne, R. S. D. (1 E-EE)°	Anderson
Browning, V. S. (2 ME)	Spartanburg
Brownlee, W. A. (1 TM)°	Knoxville, Tenn.
Brunson, D. J. (1 E-ME)°	Charleston
Brunson, J. W. (2 EE)°	Rock Hill
Brunson, R. E. (1 TC)	Rock Hill
Bruorton, H. B. (1 A-AH)	Georgetown
Bryan, C. A. (1 Pre-Med)°	Columbia
Bryan, C. C. (4 A&S)	Rains
Bryan, G. T. (1 ChEn)	Greenville
Bryan, P. H. (1 ChEn)°	Brentwood, Mo.
Bryant, C. H. (1 E-EE)	Greenville
Bryant, D. H. (2 A-Agron)	Dillon
Bryant, E. L. (3 AH)	Darlington
Bryant, E. M. (2 EE)	Greenville
Bryant, H. R. (PG Pre-Vet)°—	West Columbia
Bryant, H. W. (2 CE)	Anderson
Bryant, O. F. (1 TM)°	Greenwood
Bryson, R. E. (1 ChEn)	Woodruff
Buchanan, C. A. (2 TM)	Greenwood
Buchanan, H. H. (3 CE)	Anderson
Buck, G. R. (3 Arch)	Columbia
Buck, R. M. (3 AH)	Mt. Pleasant
Buckner, D. A. (1 VAE)°	Johns Island
Buckner, M. R. (2 TE)	Greenville
Buddin, J. R. (1 Ed)°	Scranton
Buffkin, R. M. (1 Pre-Med)°—	Heath Springs
Bullington, A. B. (1 TC)°	Spartanburg
Bullman, R. E. (2 EE)	Spartanburg
Bullock, J. (1 E-ME)°	Greensboro, N. C.
Bullock, J. F. (1 A-Agron)	Florence
Bullock, J. W. (2 TM)	Greenville
Bumgardner, G. H. (1 E-EE)°—	Asheville, N. C.
Bunton, D. L. (2 TM)	Pelzer
Burbage, R. W. (2 EE)	Charleston
Burch, W. R. (1 TM)	Mt. Croghan
Burden, W. S. (3 TE)	Piedmont
Burdette, R. E. (1 A&S)°	Spartanburg
Burgess, J. K. (1 E-ME)	Atlanta, Ga.
Burnett, J. T. (1 E-ME)°	Greenwood
Burnett, R. F. (3 AgEn)	Greenwood
Burns, J. C. (1 TM)	Sumter
Burr, J. A. (1 E-ME)	Cheraw
Burress, W. R. (2 ME)	Ware Shoals
Burris, D. M. (1 E-EE)°	Liberty
Burriss, J. F. (1 E-ME)°	Lancaster
Burriss, W. M. (1 TM)	Anderson
Burton, H. R. (1 A-Dairy)	Iva
Bush, J. L. (1 Ed)°	Atlanta, Ga.
Bussey, C. W. (2 TM)	Henderson, N. C.
Butler, C. B. (1 TM)	Tuxedo, N. C.
Butler, C. M. (2 EE)	Hartsville
Butler, W. V. (2 Ed)	Cheraw
Butt, J. B. (3 ChEn)	Greensboro, N. C.
Butt, J. M. (3 EE)	Columbia
Byars, E. F. (G)°°	Clemson
Byars, R. J. (1 E-ME)	Gaffney
Bybee, R. T. (3 EE)	Greenville
Byers, E. W. (2 CE)	Greenville
Byrd, B. W. (1 A)°	Hartsville
Byrd, E. D. (4 AH)	Kingstree
Byrd, J. L. (3 EE)	Hartsville
Byrd, T. R. (2 Pre-Med)	Kershaw
Caines, W. J. (3 ME)	Greenwood
Calcutt, S. E. (4 Agron)	Pamplico
Calcutt, W. H. (2 Pre-Med)	Pamplico
Calder, E. M. (4 EE)	Savannah, Ga.
Caldwell, M. A. (1 TC)°	Rock Hill

Name and Course	Address
Calhoun, J. N. (4 Ed)	Ninety Six
Califf, J. W. (PG Arch)°°	Clemson
Cameron, J. W. (2 CrEn)	Bradley
Cameron, T. S. (1 TM)°—	Jersey City, N. J.
Campbell, B. F. (1 E-CE)	Dillon
Campbell, C. K. (1 E-EE)	Greenville
Campbell, E. W. (G Ed)°°	Iva
Campbell, G. W. (1 TM)	Anderson
Campbell, J. M. (1 TM)°	Belton
Campbell, J. P. (2 TM)	Anderson
Campbell, M. L. (3 EE)	Belton
Campbell, M. K. (G Ed)°°	Anderson
Campbell, R. B. (1 E-EE)°	Greenville
Campbell, R. N. (4 ArEn)	Greenville
Campbell, S. D. (3 CE)	Orangeburg
Campbell, T. A. (1 E-ME)°	Clemson
Campbell, W. M. (2 TC)	Arlington, Va.
Cannon, A. Y. (4 A&S)	Anderson
Cannon, B. C. (2 CE)	Clemson
Cannon, D. E. (1 E-EE)°	Pickens
Cannon, K. E. (2 TE)°	Marion, N. C.
Cantley, M. P. (2 A-AgEc)	Kingstree
Cantrell, G. W. (3 EE)	Liberty
Capell, L. C. (3 EE)	Greenwood
Capell, W. J. (1 E-EE)°	Greenwood
Caristo, J. C. (2 Arch)	Brooklyn, N. Y.
Carlile, J. J. (4 AgEc)	Princeton, N. J.
Carlisle, R. N. (1 ChEn)°	Duncan
Carlton, V. C. (2 A-AH)	Newberry
Carpenter, W. E. (PG CE)	Graniteville
Carr, J. C. (1 E-EE)°	Laurens
Carroll, A. B. (1 VAE)	Westminster
Carroll, H. (4 IndPhys)	Anderson
Carter, A. B. (1 E-ME)	Brevard, N. C.
Carter, C. F. (1 A&S)°	Charleston
Carter, J. B. (1 VAE)	Loris
Carter, L. D. (1 E-ME)°	Charleston
Carter, L. E. (1 E)°	Hartwell, Ga.
Carter, R. A. (1 IndEd)	Savannah, Ga.
Carter, R. E. (1 Chem)°	Rock Hill
Carter, R. L. (2 ME)	Gaffney
Carter, R. M. (4 CE)	Walterboro
Case, E. G. (1 A-Agron)°—	Glen Rock, N. J.
Casey, J. E. (1 E-EE)	Charleston Heights
Cash, C. S. (3 AH)	Gaffney
Cason, R. L. (3 ME)	Clinton
Cates, F. B. (4 Hort)	Wadmalaw Island
Cathcart, E. R. (2 Pre-Med)°	Anderson
Cathcart, V. E. (1 TM)°	Rock Hill
Caudill, W. J. (4 VAE)	Ronda, N. C.
Cauthen, J. C. (4 ME)	Orangeburg
Cely, M. S. (2 TC)	Easley
Chaddick, L. A. (3 ChEn)	Charleston
Chamberlain, W. F. (Unc)°°	Clemson
Chambers, W. T. (3 EE)	Toccoa, Ga.
Chamblee, A. D. (1 A-AH)	Anderson
Chamblee, L. C. (1 E-CE)°	Anderson
Chance, C. S. (2 TM)—	Winston-Salem, N. C.
Chapman, B. H. (1 A-AH)°	Anderson
Chapman, D. M. (2 TE)	Cheraw
Chapman, E. S. (1 E-AgEn)°	Laurens
Chapman, L. B. (2 EE)	Easley
Chapman, L. J. (2 CE)	Greenville
Chapman, T. J. (1 TM)°	Union
Chapman, W. F. (1 A-AgEc)	Belton
Charles, G. H. (3 CE)	Daytona Beach, Fla.
Chase, M. I. (1 CrEn)	Brooklyn, N. Y.
Chastain, R. N. (2 A-AH)	Taylors
Cheek, J. F. (2 TM)	Anderson
Cheslak, W. M. (1 E-ME)°	Carteret, N. J.
Chewning, R. C. (3 EE)	Manning
Childress, B. R. (2 TM)	Liberty
Childress, R. L. (3 TE)	New Orleans, La.
Childress, T. C. (1 VAE)°	Laurens
Childress, W. C. (1 VAE)°	Pickens
Childs, J. B. (G Ed)°°	Central
Christian, G. W. (2 TM)	McCormick

Name and Course	Address
Christopher, E. W. (1 TM)°	Woodruff
Christopher, R. G. (3 AgEn)	Hodges
Christopher, R. W. (2 EE)—	Lincolnton, N. C.
Chumley, W. H. (2 ME)°	Gaffney
Church, O. E. (1 CrEn)°	Taylors
Clark, J. J. (1 E-TE)°	Barnwell
Clark, N. C. (4 AH)	Waterloo
Clark, W. H. (1 TM)°	Warrenville
Clarke, G. H. (1 A-AgEc)	Bloomsburg, Pa.
Clary, M. R. (4 Arch)	Charleston
Clary, W. T. (1 E-CE)°	Fort Lawn
Cleghorn, O. L. (1 TM)°	Griffin, Ga.
Clelan, J. R. (4 TE)	Lewiston, Pa.
Clement, B. R. (3 TC)	Anderson
Clement, E. D. (Unc)°°	Pickens
Clement, J. P. (1 E-CE)°	Charleston
Clement, W. B. (1 E-ME)°	Spartanburg
Clemons, S. P. (2 A-AH)	Andrews
Cleveland, R. H. (3 A&S)	Seneca
Clifford, G. D. (1 E-ME)	Leesburg, Ga.
Clinton, W. B. (4 ME)	Rock Hill
Coats, B. G. (1 VAE)°	Loris
Coats, W. G. (2 VAE)	Cross Hill
Cobb, H. R. (2 A-Hort)	Hodges
Cobb, J. G. (1 E-EE)°	Walhalla
Cobb, R. K. (2 ME)	Greenville
Cochran, J. D. (2 ME)	Greenville
Cochran, P. C. (1 A)°	Manning
Cochran, W. F. (3 AgEn)	Anderson
Cochran, W. H. (1 IndEd)	Pickens
Cockfield, D. (4 Agron)	Lake City
Cockfield, M. (2 AgEn)	Lake City
Cockrell, W. F. (4 TM)	Grover, N. C.
Coggins, J. M. (3 EE)	Spartanburg
Coker, R. O. (4 TM)	Taylors
Coker, W. R. (4 TM)	Laurens
Cole, G. W. (2 AgEn)	Pensacola, Fla.
Cole, J. H. (1 TM)	La France
Coleman, H. R. (4 CE)	Clarks Hill
Coleman, J. H. (2 TM)	Honea Path
Coleman, K. K. (3 ME)	Orlando, Fla.
Coleman, T. L. (1 A-Dairy)°	Saluda
Coleman, W. L. (3 Pre-Med)	Pamplico
Collard, E. B. (1 Pre-For)°	Rock Hill
Collins, A. P. (2 ChEn)	Chester
Collins, D. J. (1 E-EE)°	Greer
Collins, D. L. (4 AH)	Mullins
Collins, O. L. (2 TM)	Fort Mill
Compton, E. T. (3 ME)	Greenwood
Compton, R. F. (4 TM)	Laurens
Connor, L. N. (1 ChEn)°	Barnwell
Connor, W. B. (1 TM)°	Fort Mill
Connor, W. K. (2 ArEn)	McCormick
Conway, M. J. (PG CrEn)°	Columbia
Cook, B. L. (2 A-Dairy)	Denmark
Cook, H. (3 A&S)	Spartanburg
Cook, W. Capers (2 A-Dairy)	Norris
Cook, W. Carol (4 ME)	Woodruff
Coolbaugh, R. K. (Unc)°°-°	Anderson
Cooper, B. R. (3 TM)	Winnsboro
Cooper, B. V. (3 ME)	Naval Base
Cooper, G. B. (4 TM)	Lancaster
Cooper, H. F. (1 E-ME)°	Augusta, Ga.
Cooper, J. R. (4 A&S)	Clemson
Cooper, L. A. (4 TM)	Columbia
Cooper, S. E. (1 A-AH)°	Andrews
Copeland, A. F. (3 TE)	Greer
Corbin, J. K. (G Phys)°°-°—Franklin, N. C.	
Corder, W. O. (G Ed)°°	Honea Path
Corkern, W. D. (1 Arch)	Georgetown
Corley, E. L. (4 AH)	Lexington
Corley, W. E. (1 E-ME)°	Lexington
Corley, W. L. (1 A-Agron)	Lexington
Cornelius, J. E. (1 E-ME)°	Seagirt, N. J.
Corrigan, M. F. (1 E-AgEn)—	New Rochelle, N. Y.
Corvello, R. F. (1 E-CE)°	Greenville
Corwell, J. R. (1 IndEd)°—	Chambersburg, Pa.

Name and Course	*Address*
Cothran, H. A. (1 TM)°	Easley
Cothran, L. E. (2 CE)	Central
Couch, H. D. (1 ArEn)°	N. Charleston
Courtney, J. F. (1 ChEn)°	Asheville, N. C.
Cousar, R. E. (3 AH)	Sardinia
Cousins, W. B. (2 A-AH)	Newberry
Covington, J. C. (PG TM)	Clio
Covington, J. L. (2 EE)	Clio
Cox, A. G. (3 ME)	Mount Olive, N. C.
Cox, A. J. (1 A)	Loris
Cox, C. D. (1 Pre-Med)°	Spartanburg
Cox, C. O. (1 Arch)°	Andrews
Cox, G. H. (4 VAE)	Spartanburg
Cox, H. M. (4 VAE)	Loris
Cox, J. A. (4 Hort)	Yonges Island
Cox, J. C. (4 ArEn)	Greenville
Cox, J. E. (2 A-AH)	Loris
Cox, M. E. (3 EE)	Greenwood
Cox, S. W. (1 Ed)°	Atlanta, Ga.
Craddock, J. M. (2 A-Poul)	Fairfax
Craft, R. A. (1 TM)°	Anderson
Crafton, C. G. (3 CE)	Camden
Craig, J. T. (Unc)°°	Pickens
Crain, W. W. (4 Dairy)	Chester
Crane, H. E. (3 Hort)	Belleville, N. J.
Crawford, C. R. (3 Arch)	Columbia
Crawford, G. E. (2 TM)	Fountain Inn
Crawford, J. P. (2 AgEn)	Pineville
Crawford, J. T. (1 E-EE)°	Hartsville
Crawley, J. E. (1 E-ME)	Kinston, N. C.
Crawley, W. H. (1 Pre-Med)—	Forest City, N. C.
Crenshaw, B. M. (3 EE)	Piedmont
Crenshaw, E. M. (3 TM)	Lancaster
Crews, J. F. (3 Pre-Med)	Hampton
Cribb, R. E. (4 VAE)	Florence
Crigler, H. T. (G Ed)°°	Greenville
Crisp, W. R. (2 A&S)	Anderson
Crocker, A. L. (1 Ed)	Gaffney
Crocker, B. D. (4 TM)°°	Lockhart
Crocker, B. E. (1 TM)	Gaffney
Cromer, J. L. (2 A&S)	Camden
Cromer, W. L. (1 E)°	Sumter
Cromer, W. W. (2 VAE)	Cross Hill
Crosland, B. G. (3 ArEn)	Greenville
Cross, A. H. (1 VAE)°	Cross
Crosson, W. N. (1 Pre-Med)°	Greenville
Crotwell, W. R. (2 Arch)°	Savannah, Ga.
Crow, F. A. (1 E)°	Moncks Corner
Crowder, B. H. (2 A&S)	Spartanburg
Crowder, W. A. (1 E-AgEn)°—	Lattimore, N. C.
Crowe, B. H. (1 TM)	Liberty
Crump, J. E. (2 EE)	Anderson
Cruz, C. J. (G Chem)°°-°—	Fair Haven, Mass.
Culbertson, T. R. (1 ChEn)°—	Ware Shoals
Culclasure, R. D. (4 Dairy)	St. Matthews
Culpepper, T. D. (1 A&S)	Augusta, Ga.
Cunningham, T. E. (3 Arch)	Greenville
Cureton, R. B. (3 TE)	Columbia
Curry, D. D. (1 TM)°	Honea Path
Dalton, E. N. (4 A&S)	Asheville, N. C.
Dalton, J. S. (2 AgEn)	Pickens
Dalton, W. F. (1 E-ME)	Norris
Daniel, B. J. (4 A&S)	Oxford, N. C.
Danielsen, T. S. (1 ChEn)°	Batesburg
Dantzler, W. D. (1 VAE)°	Holly Hill
Darby, D. O. (1 E-AgEn)°	Lowrys
Darnell, H. C. (4 CrEn)	Denmark
Darragh, T. R. (1 E-Ag-En)°	Greenwood
Davenport, J. A. (1 Arch)	Piedmont
Davis, C. A. (3 TM)	Fairforest
Davis, C. H. (1 E-CE)°	Greenville
Davis, C. W. (4 TE)	Abbeville
Davis, D. C. (3 TM)	Kingsport, Tenn.
Davis, D. R. (1 TM)°	Inman
Davis, F. D. (1 A-AH)	Fountain Inn
Davis, P. M. (1 VAE)°	Aynor

Name and Course	*Address*
Davis, R. E. (1 E-ME)°	Pawleys Island
Davis, R. R. (1 E-ME)°—	Roslyn Heights, N. Y.
Davis, W. A. (1 E-ME)°	Norway
Davis, W. H. (2 ME)	Charleston Heights
Davis, W. R. (4 Ed)	Liberty
Day, J. E. (3 ME)	North Charleston
Day, J. T. (3 CE)	Summerville
Day, W. J. (G Chem)	North Charleston
Deadwyler, J. C. (1 E-EE)	Six Mile
Deal, O. S. (1 E-EE)°	Pelzer
Deas, E. G. (1 E-EE)°	Rock Hill
DeLoach, R. (1 E-ME)°	Furman
DeLucia, A. A. (1 E)°	Cementon, Pa.
Dempsey, G. A. (1 E-ME)°	Lyman
Dennis, M. K. (4 AH)	Hemingway
DeRosa, J. R. (1 Ed)°—	Hicksville, L. I., N. Y.
De Rose, R. E. (1 A&S)°	Washington, Pa.
Derreberry, B. C. (2 ME)	Copperhill, Tenn.
Derrick, B. G. (1 E-TE)°	Westminster
Derrick, L. C. (2 ME)	Little Mountain
DeSimone, R. L. (1 Ed)	Avonmore, Pa.
Dibble, R. B. (1 A-Hort)°	Orangeburg
Dickens, A. W. (2 AgEn)	Marion
Dickert, B. F. (4 ChEn)	Columbia
Dickson, J. F. (2 AgEn)	York
Dill, B. M. (4 AH)	Landrum
Dill, C. (1 Ed)°	Alexandria, Va.
Dillard, R. G. (1 CrEn)°	Charleston
Dillard, S. W. (3 AH)	Pacolet
Dingle, W. D. (1 Pre-For)°	Summerton
Dinkins, R. R. (2 A&S)	Sumter
Dixon, J. S. (2 A-Dairy)	Asheville, N. C.
Doar, J. M. (3 A&S)	Fort Bragg, N. C.
Dobson, K. W. (1 E-AgEn)°	Central
Dodson, J. W. (2 TM)	Ware Shoals
Dominick, V. S. (3 TE)	Rock Hill
Donaldson, R. J. (4 Hort)	Mt. Pleasant
Donelan, C. A. (1 E-EE)°	Columbia
Donnan, J. L. (1 E-ME)	Greenville
Donovan, D. L. (1 E-EE)°	Greenville
Dority, J. W. (2 EE)	Charleston
Dorn, R. B. (4 AH)	Irmo
Dorsey, W. F. (2 ME)	Newry
Dotson, J. J. (4 A&S)	Savannah, Ga.
Dotterer, W. A. (1 Arch)°	Charleston
Dowdle, H. J. (1 CrEn)°	Columbia
Downie, J. J. (1 E-ME)°	Vineland, N. J.
Doyle, C. B. (PG CrEn)	Anderson
Doyle, J. B. (1 A&S)°	Holly Hill
Doyle, R. H. (PG Arch)°°	Clemson
Drake, J. F. (1 E-TE)°	Greenville
Drew, T. C. (4 EE)	Gaffney
Driggers, L. B. (2 AgEn)	Sumter
Driskill, C. E. (4 ME)	Asheville, N. C.
DuBose, J. C. (1 VAE)	Cades
DuBose, W. P. (2 A-Ent)	Darlington
DuCom, P. F. (2 EE)	Sumter
Dudley, T. A. (2 A-Agron)	Galivants Ferry
Duffie, J. B. (2 ChEn)	Sumter
Duffies, D. E. (2 EE)	Roselle Park, N. J.
Duffies, S. B. (4 Arch)	Roselle Park, N. J.
Dugger, P. E. (3 Arch)	Columbia
Dukes, H. L. (2 VAE)	Reevesville
Dukes, W. E. (1 Pre-Med)°	Honea Path
Dulin, W. F. (2 AgEn)	Bowling Green
Dunbar, J. M. (1 IndEd)°	Columbia
Dunbar, J. S. (1 A&S)°	Columbia
Duncan, B. V. (2 TM)	Pendleton
Dunlap, V. W. (1 ChEn)°—	Charleston Heights
Dunn, I. H. (2 ME)	Clemson
Dunn, I. W. (2 EE)	Columbia
Dunn, R. J. (1 Chem)	Coopersburg, Pa.
DuPre, G. C. (3 EE)	Columbia
Durham, E. F. (1 TM)°	Blackstock
Durham, W. F. (1 E-CE)	Greenville
Duvall, G. L. (1 Arch)°	Cheraw
Duvall, G. W. (4 TM)	Cheraw

Name and Course	*Address*
Eakin, J. R. (2 A&S)	Norfolk, Va.
Earle, G. C. (4 ME)	Washington, D. C.
Earle, J. E. (1 Pre-Med)°	Walhalla
Earle, T. P. (2 VAE)	Central
Easley, J. H. (4 AH)	Rock Hill
Easley, J. J. (4 TE)	Greenville
Eason, H. K. (G TC)°°-°	Charleston
Easterby, A. H. (4 TM)	Greenville
Eaton, E. W. (4 Hort)	Baltimore, Md.
Ebner, B. R. (4 Dairy)	Meggett
Edenfield, M. E. (2 A-AH)	Augusta, Ga.
Edgeworth, R. W. (3 ME)	Clinton
Edwards, C. E. (4 EE)	Charleston
Edwards, D. D. (2 Pre-Vet)—	Highlands, N. C.
Edwards, J. F. (3 CrEn)	Saluda
Edwards, R. M. (4 AH)	Elloree
Edwards, W. B. (3 EE)	Spartanburg
Eichelberger, H. L. (2 ME)	Clinton
Eidson, J. A. (1 Pre-Vet)°	Johnston
Elam, W. H. (4 TC)	Ware Shoals
Eldridge, L. W. (Unc)°°	Clemson
Elgin, C. F. (3 EE)	Anderson
Elliott, E. J. (1 ChEn)°	Spartanburg
Elliott, J. D. (2 VAE)	Loris
Elliott, R. F. (3 AH)	Rimini
Elliott, T. A. (G Ed)°°	Walhalla
Ellis, C. J. (1 E-EE)	Mullins
Ellis, W. J. (2 A&S)	Greenwood
Ellison, A. A. (1 TM)°	Anderson
Ellison, T. W. (2 ME)	Williamston
Elmore, D. S. (1 Pre-Vet)°	Gaffney
Elrod, F. L. (1 E)°	Piedmont
Elrod, T. W. (1 E-AgEn)°	Anderson
England, B. H. (G Ed)°°-°	Westminster
Ennis, W. B. (3 TE)	Daytona Beach, Fla.
Enos, W. K. (3 ChEn)	Charleston
Epting, C. L. (Unc)°°-°	Clemson
Erwin, H. S. (2 A&S)	Abbeville
Erwin, L. H. (2 A&S)	Brevard, N.C.
Erwin, O. G. (3 A&S)	Abbeville
Eskridge, R. M. (1 Arch)	Florence
Estridge, B. L. (1 TM)°	Kershaw
Etheredge, W. C. (2 IndEd)	North
Eurey, E. M. (2 ME)	Estill
Evans, J. H. (1 VAE)°	Lake City
Evans, J. M. (1 E-ME)	Atlanta, Ga.
Evans, T. A. (3 Arch)	Kenmore, N. Y.
Evatt, B. F. (1 E-ME)°	Anderson
Everington, J. R. (1 E-ME)°	Hartsville
Everts, R. C. (4 Ent)—	Wilmington, Delaware
Ewing, B. H. (1 E-ME)°—	Washington, D. C.
Fagan, B. C. (1 E-ME)°	Landrum
Fain, C. C. (G)°°	Clemson
Fant, C. E. (1 Pre-Med)°	Seneca
Fant, L. F. (3 CE)	Clemson
Faris, W. G. (2 Arch)	Ridgeland
Farmer, L. H. (3 Pre-Med)	Anderson
Farmer, T. J. (4 Arch)	Burlington, N. J.
Faucette, A. M. (3 A&S)	Columbia
Faulkenberry, A. E. (3 TM)	Lancaster
Faver, W. H. (G AgEc)	Eastover
Feemster, T. R. (2 TM)	Gastonia, N. C.
Felder, J. W. (1 A&S)°	Charleston
Fendley, R. L. (1 E-EE)°	Six Mile
Ferguson, C. H. (4 TM)	Great Falls
Ferguson, G. R. (4 ME)	Bowling Green
Few, W. E. (1 TM)°	Rock Hill
Fidler, P. R. (1 E-AgEn)°	Sumter
Fisher, H. R. (1 E-ME)°	Lowell, N. C.
Fisher, J. D. (1 TM)	Belton
Fisher, R. J. (1 TM)°	Fairmont, N. C.
Fitchett, R. (1 A)°	Greensboro, N. C.
Fitzgerald, J. F. (1 A&S)°	Beacon, N. Y.
Fitzgibbons, R. L. (2 Pre-Med)—	College Park, Ga.
Flathmann, W. E. (1 E-ME)°	Charleston
Fleming, J. D. (2 IndPhys)	Pacolet
Fleming, J. H. (1 Pre-Med)°	Spartanburg
Fleming, M. G. (3 TM)	Anderson
Flowers, A. T. (1 E-ME)	Hartsville
Flowers, J. R. (1 ChEn)°	North Charleston
Floyd, J. E. (1 A-AH)	Tillman
Folger, M. Y. (3 Arch)	Asheville, N. C.
Folk, T. M. (1 E-TE)	Newberry
Font, G. P. (2 Arch)	Santurce, P. R.
Ford, B. A. (1 VAE)°	Allendale
Fortanbary, E. R. (2 EE)	Gaffney
Foster, D. F. (1 Pre-Med)	Columbia
Foster, F. E. (1 E-EE)	Greenville
Foster, J. H. (2 A&S)	Spartanburg
Foster, M. H. (3 ME)	Woodruff
Foster, R. E. (1 TM)	Union
Foster, T. D. (4 Chem)	Spartanburg
Fowler, C. M. (1 TM)°	Liberty
Fowler, J. K. (3 AgEn)	Easley
Fowler, J. S. (1 E-AgEn)°	Simpsonville
Fowler, L. A. (2 TM)	Mauldin
Fowler, R. H. (4 TE)	Spartanburg
Fox, B. R. (4 TM)	Inman
Fox, J. G. (2 A&S)	West Orange, N. J.
Fox, W. R. (1 E-EE)	Liberty
Foxworth, D. M. (2 EE)	Columbia
Foxworth, L. O. (3 Ed)	Townville
Fraley, D. K. (1 E-AgEn)	Florence
Fralick, M. I. (3 Dairy)	Bamberg
Franke, F. R. (4 ChEn)	Spartanburg
Free, H. D. (2 A-AH)	Bamberg
Freeman, E. L. (2 Pre-Vet)	Sumter
Freeman, J. D. (2 IndPhys)	Aiken
Freund, R. M. (4 Dairy)	Philadelphia, Pa.
Frewer, J. R. (3 EE)	Savannah, Ga.
Friar, B. R. (1 VAE)	Florence
Frick, K. D. (3 ChEn)	Newberry
Frick, L. J. (2 Pre-Med)	Columbia
Frierson, J. A. (2 CE)	Summerton
Frydrych, J. J. (1 IndEd)°	Trafford, Pa.
Fulbright, H. R. (1 TM)°	Pendleton
Fuller, E. E. (2 TE)	Charlotte, N. C.
Fuller, G. T. (1 TM)°	Campobello
Fuller, M. G. (3 Arch)	Florence
Fuller, R. C. (4 ME)	Murphy, N. C.
Fuller, W. C. (1 E-EE)	Greenville
Fulmer, J. P. (G Ent)	Clemson
Funderburk, C. E. (1 E-ME)°	Greenwood
Funderburk, C. W. (1 TC)	Lancaster
Funk, C. F. (1 E-CE)°	Rock Hill
Gabrels, F. E. (2 ME)	Savannah, Ga.
Gage, C. V. (4 TE)	Clemson
Gagnon, J. E. (1 ChEn)°—	Charleston Heights
Gahr, J. F. (3 EE)	Anderson
Gaines, B. G. (1 TM)	Goldston, N. C.
Gaines, R. O. (4 TM)	Greenwood
Galbraith, J. L. (3 TE)	Greenville
Galbreath, H. C. (1 VAE)°	Easley
Gale, T. L. (2 A&S)	Baltimore, Md.
Gallman, J. A. (4 Ent)	Inman
Galloway, J. A. (1 E-TE)°	Georgetown
Galloway, W. R. (1 E-EE)°	Georgetown
Gallup, D. G. (1 ED)°	Sumter
Galway, J. H. (1 E-ME)	Greenville
Gambino, C. D. (1 Ed)°	Clairton, Pa.
Gambrell, S. C. (2 AgEn)	Owings
Gandy, B. F. (1 A-Agron)°	Society Hill
Gandy, W. C. (1 A-Agron)	Darlington
Gantick, N. A. S. (1 E-EE)°—	Takoma Park, Md.
Gantt, G. D. (4 Ed)	West Columbia
Gardner, C. M. (3 EE)	Florence
Garner, F. H. (G AgEc)	Union
Garner, H. G. (2 TM)	Liberty
Garner, J. D. (4 TM)	Gaffney
Garrett, J. C. (2 EE)	Anderson
Garrett, W. A. (3 CE)	Orangeburg
Garrison, B. F. (2 IndEd)	Calhoun Falls
Garrison, D. E. (1 E-CE)°	Liberty
Garrison, J. C. (1 E-CE)°	Greenville

Name and Course	*Address*
Garrison, J. E. (3 Poul)	Rock Hill
Gasque, E. R. (1 TM)°	Edgefield
Gasque, J. M. (4 EE)	Columbia
Gasque, W. A. (4 EE)	Marion
Gasque, W. D. (2 CrEn)	Columbia
Gatch, C. T. (1 E-AgEn)°	Yemassee
Gause, J. M. (3 Agron)	Coward
Gause, J. R. (2 EE)	Myrtle Beach
Geddings, M. J. (1 A&S)°	Wedgefield
Geddings, M. T. (1 E-EE)	Spartanburg
Geer, W. P. (1 TM)	Rutherfordton, N. C.
Geiger, W. N. (2 ArEn)	Columbia
Gentile, J. B. (4 AH)°°—	Brooklyn, N. Y.
Gentile, R. M. (2 ME)	Brooklyn, N. Y.
Gentry, D. R. (4 TM)	Easley
George, E. M. (2 TM)	Rock Hill
George, J. S. (1 E-ME)	Laurens
George, L. R. (2 EE)	Hazleton, Pa.
George, M. M. (1 E-ME)°	Laurens
George, S. B. (4 ME)	Lexington
Gerald, E. L. (2 VAE)	Loris
Gerald, T. R. (2 A-AH)	Loris
Gerrald, J. Q. (3 VAE)	Galivants Ferry
Gibson, B. R. (1 E-CE)°	Newberry
Gibson, F. A. (3 TE)	Easley
Gibson, H. L. (2 ME)	Brevard, N. C.
Gibson, J. G. (2 A&S)	Taylors
Gibson, J. T. (1 Pre-Med)	Greenwood
Gibson, W. W. (1 E-ME)	Greenville
Giles, J. R. (1 E-TE)°	Charleston
Gilfillin, E. A. (1 E-EE)°	Greenville
Gillespie, C. D. (3 Ar En)	Anderson
Gillespie, G. D. (1 Ar En)°	Anderson
Gilmer, W. H. (4 A&S)	Anderson
Gilmore, W. D. (2 Pre-Med)	Walhalla
Gilreath, J. A. (1 Ar En)	Greenville
Gilreath, J. W. (3 CE)	Belvedere
Gilreath, S. N. (3 TE)	Piedmont
Gilstrap, L. G. (1 TM)°	Belton
Gisewhite, F. V. (2 EE)	Dillon
Glanton, G. F. (1 A-Dairy)°	Ninety Six
Glasgow, J. C. (1 E-TE)°	Conway
Glasscock, E. P. (2 Ag En)	Rock Hill
Gleaton, H. J. (4 TM)	Greenville
Gleaton, M. B. (1 E-TE)°	Columbia
Glenn, C. A. (4 Ar En)	Anderson
Glenn, D. L. (1 E-EE)°	Jenkinsville
Glennon, W. L. (1 E-ME)°—	Long Beach, N. Y.
Gober, R. W. (1 E-ME)°	Allendale
Godfrey, J. B. (1 Pre-Med)°	Woodruff
Godshall, R. A. (4 AH)	Columbia
Godwin, G. M. (2 Ag En)	Lake City
Goff, H. B. (2 EE)	Columbia
Goff, S. D. (1 E-Ag En)°	Batesburg
Golden, W. M. (4 TM)	Piedmont
Gooch, W. C. (1 A-Poul)°	Camden, N. J.
Good, F. D. (3 AH)	Landrum
Gooding, P. H. (3 CE)	Clemson
Goodman, C. K. (2 Ag En)—	Silver Spring, Md.
Goodman, D. E. (2 Pre-Vet)	Olanta
Goodwin, B. W. (1 A&S)	Spartanburg
Gore, F. C. (1 A-AH)°	Myrtle Beach
Gosa, J. W. (2 TM)	Enoree
Gosnell, W. D. (1 E-ME)	Greenville
Gossett, J. L. (1 TC)°	Woodruff
Gowan, D. R. (1 A)°	Inman
Graddick, C. E. (PG Pre-Vet)°	Greenville
Graham, E. L. (2 Ch En)	Kingstree
Graham, H. A. (1 E-ME)°	Toccoa, Ga.
Graham, J. W. (3 CE)	Woodruff
Grant, C. E. (2 A-AH)	Whitmire
Grant, R. C. (4 TE)	Abbeville
Grant, T. A. (1 TC)°	Laurens
Grant, T. D. (2 TC)	Clemson
Gravely, J. W. (1 E-CE)°	Walhalla
Graves, C. A. (4 TE)	Due West
Gravlee, R. W. (4 A&S)	De Land, Fla.
Gray, C. E. (4 Ind Ed)	Spartanburg
Gray, J. W. (2 Pre-Med)	Greenville
Gray, M. H. (1 Ch En)°	Ware Shoals
Grdijan, J. (1 Ind Ed)°	Rillton, Pa.
Green, H. B. (3 CE)	Columbia
Greene, E. H. (2 EE)	St. Stephen
Greene, H. L. (1 Ind Ed)°—	Forest City, N. C.
Greene, J. C. (4 AH)	Jackson
Greene, J. M. (1 E-CE)	Greenville
Greene, J. T. (4 A&S)	Augusta, Ga.
Greene, J. W. (2 Ed)	Union
Greene, N. A. (1 Ed)°	Inman
Greenway, T. C. (1 E-CE)°	Greenville
Greer, J. B. (1 E-TE)	Swansea, Mass.
Greer, J. E. (1 E-CE)°	Greenville
Greer, L. R. (2 Cr En)	Anderson
Gregory, T. P. (4 Ind Ed)	Chester
Gressette, F. R. (G Ent)	St. Matthews
Griffin, J. L. (2 TE)	Fort Mill
Griffin, M. O. (3 TM)	Fort Mill
Griffith, P. F. (2 TM)	Elberton, Ga.
Griggs, C. D. (4 TM)	Travelers Rest
Griggs, L. A. (1 E-EE)°	Hartsville
Gross, R. C. (1 E-ME)	Richburg
Gruber, R. D. (1 A)°—	St. Clair Shores, Mich.
Gryder, R. W. (3 ME)	Rock Hill
Guerry, F. D. (3 ME)	North Charleston
Guillocheau, R. A. (1 TM)—	Jackson Heights, L. I., N. Y.
Gunnell, W. D. (4 TM)	Spartanburg
Gunter, E. J. (4 TM)	Anderson
Gunther, G. W. (Unc)°°	Clemson
Guy, E. D. (3 EE)	Abbeville
Gwinn, W. K. (1 TM)°	Woodruff
Hagen, P. A. (2 EE)	Charleston
Hagler, W. D. (2 EE)	Spartanburg
Hair, R. L. (2 EE)	Wedgefield
Hair, S. M. (2 VAE)	White Pond
Hall, C. F. (1 Arch)°	Columbia
Hall, C. L. (4 TE)	Greenwood
Hall, L. A. (1 TM)	Greenville
Hall, R. K. (1 TM)°	Greenwood
Hall, R. L. (1 E-CE)°	Ninety Six
Hall, W. B. (3 ME)	Spartanburg
Hallford, J. S. (Unc)°°-°	Clemson
Ham, R. F. (1 E-EE)°	Darlington
Ham, W. F. (3 AH)	Darlington
Hambright, W. A. (1 E-EE)°	Blacksburg
Hamby, J. M. (2 TM)	Simpsonville
Hamilton, F. P. (G Ed)°°	Seneca
Hammond, A. F. (G CE)°°	Clemson
Hammond, B. L. (2 A-AH)	Modoc
Hammond, E. B. (4 TM)	Johnsonville
Hammond, J. R. (2 Ind Ed)	Newnan, Ga.
Hammond, J. W. (G ME)	Clemson
Hammond, R. Hill (2 A-AH)	Greenwood
Hammond, R. Holland (1 E-ME)	Camden
Hampton, J. W. (1 E-ME)°	Belton
Hampton, W. L. (1 A&S)°	Columbia
Hamrick, T. C. (3 TM)	Cliffside, N. C.
Hanckel, F. S. (4 Dairy)	Charleston
Hand, P. D. (2 EE)	Greenville
Hane, J. K. (1 Ch En)°	North Charleston
Hankinson, J. C. (4 Ed)	McBean, Ga.
Hannah, L. V. (1 E-EE)°	Pelzer
Harakas, N. K. (1 Chem)°	Greenville
Harbin, H. P. (1 E-CE)°	Anderson
Hardee, J. H. (4 Ag En)	Loris
Hardee, J. O. (4 Agron)	Greeleyville
Harden, D. (1 E-ME)	Seneca
Harden, J. C. (3 A&S)	Columbia
Hardin, R. L. (2 CE)	Anderson
Harley, W. S. (2 A&S)	Ellenton
Harman, L. M. (2 Arch)—	Cedar Grove, N. J.
Harmon, H. H. (2 ME)	Lexington
Harper, H. C. (1 A&S)°	Greenville
Harper, K. H. (1 E-EE)°	Williamston

Name and Course	Address
Harper, W. F. (4 TM)	York
Harrell, A. L. (1 E-ME)°	Florence
Harris, B. B. (2 Ind Ed)	Blackville
Harris, G. N. (4 TC)	Rock Hill
Harris, J. C. (4 EE)	Florence
Harris, R. A. (1 Cr En)°	Walhalla
Harris, W. G. (1 E-EE)°	Chester
Harrison, C. L. (1 TM)°	Greenwood
Harrison, D. L. (4 TM)	Brunson
Harrison, H. D. (2 Ind Ed)	Clemson
Harrison, J. D. (2 TM)	Greenwood
Harrison, J. R. (1 Cr En)°	Abbeville
Harrison, J. W. (4 Arch)	Sumter
Harrison, P. P. (1 E-TE)	Decatur, Ga.
Harrison, R. M. (4 TM)	Greenwood
Hart, J. W. (1 E-EE)°	Chester
Hart, K. R. (4 TM)	Rock Hill
Hartney, E. C. (1 E-ME)—	Daytona Beach, Fla.
Harvey, G. S. (4 EE)	Columbia
Harvin, S. A. (2 Ag En)	Sumter
Haskell, R. (1 Ind Ed)	Beaufort
Havens, I. F. (G Cr En)°	Belfast, N. Y.
Hawes, R. L. (3 TM)	New Hartford, N. Y.
Hawkins, A. E. (4 Ind Phys)	Greenville
Hawkins, G. A. (1 E-CE)	Taylors
Hawkins, M. D. (4 Agron)	Hartsville
Hayden, T. E. (3 AH)	North
Hayes, B. M. (1 Arch)°—	Kings Mountain, N. C.
Hayes, J. A. (4 A&S)	Greenville
Hayes, J. D. (4 ME)	Latta
Hayes, L. E. (1 VAE)°	Lake View
Head, J. O. (2 TM)	Liberty
Heath, C. E. (2 EE)	Easley
Heath, G. A. (1 TM)°	Chester
Heath, W. P. (3 TM)	Esmont, Va.
Heaton, B. J. (2 A&S)	Reevesville
Heaton, J. A. (2 ME)	Summerville
Hedden, F. F. (4 Pre-Med)	Walhalla
Hefner, J. R. (2 TE)	Hickory, N. C.
Heidtman, E. P. (2 EE)	Charleston
Hellams, A. D. (3 TM)	Laurens
Heller, W. R. (1 A&S)°	Clemson
Helmick, K. R. (2 TM)	Waynesville, N. C.
Helms, A. K. (4 TE)	Waxhaw, N. C.
Hendee, M. H. (3 EE)	Jacksonville, Fla.
Henderson, G. A. (3 EE)	Greenwood
Henderson, J. E. (1 A-AH)°—	Moncks Corner
Henderson, J. K. (4 Dairy)	Clemson
Henderson, N. (2 ME)	Greenville
Henderson, R. L. (1 A-Dairy)°—	Johns Island
Henderson, R. P. (3 ME)	Clemson
Henderson, W. N. (2 TM)	Greenville
Hendricks, D. (PG)	Liberty
Hendricks, L. A. (3 TE)	West Columbia
Hendricks, R. (3 Cr En)°°	Central
Hendricks, R. C. (1 E-EE)°	Belton
Hendricks, T. E. (3 Hort)	Central
Hendrix, C. D. (4 Ch En)	Greenville
Hendrix, C. N. (2 ME)	Spartanburg
Hendrix, D. L. (1 A&S)	Beaumont, Texas
Hendrix, F. H. (1 A)°	Leesville
Hendrix, W. B. (1 TM)°	Prosperity
Hendrix, Walter H. (4 ME)	Heath Springs
Hendrix, William H. (1 E-EE)°	Greenville
Henley, J. W. (1 A&S)	Charleston
Hennies, W. B. (1 Arch)°	Columbia
Henson, A. T. (2 Ar En)	Columbia
Henson, J. G. (2 A-AH)	Forest City, N. C.
Hentz, J. P. (1 Pre-Med)°	Anderson
Herndon, C. H. (1 E-ME)°	Greenwood
Herndon, J. A. (4 VAE)	Bamberg
Herndon, J. E. (2 CE)	Fountain Inn
Herring, C. E. (2 ME)	Anderson
Herron, R. H. (1 E-Ag En)°	Starr
Hester, C. C. (1 E-ME)°	Rock Hill
Hetrick, J. P. (3 CE)	Anderson

Name and Course	Address
Heustess, W. J. (1 A)°	Clio
Hicks, B. L. (2 CE)	Timmonsville
Hicks, H. R. (1 TM)	Kershaw
Hicks, J. D. (3 Agron)	Effingham
Hicks, W. H. (1 E-CE)°	Hartsville
Higby, M. J. (1 A&S)	Clemson
Higginbotham, W. C. (3 TM)	Rowesville
High, R. E. (PG Ed)	Little River
Hildebrand, N. A. (4 AH)	St. Matthews
Hill, D. A. (3 ME)	Timmonsville
Hill, G. A. (1 E-EE)°	Timmonsville
Hill, J. R. (3 AH)	Abbeville
Hill, R. G. (4 Cr En)	Florence
Hill, R. S. (2 A&S)	Anderson
Hill, S. G. (1 E-EE)°	Moncks Corner
Hill, T. J. (1 E-TE)°	Trion, Ga.
Hill, T. S. (1 A&S)°	Wilmington, N. C.
Hill, W. G. (1 Pre-Vet)°	Abbeville
Hiller, L. G. (1 Pre-Med)°	Columbia
Hindman, J. D. (4 Chem)—	Red Wing, Minn.
Hines, J. M. (2 A&S)	St. Petersburg, Fla.
Hinnant, S. E. (2 VAE)	Andrews
Hinson, D. R. (1 E-ME)°	Lyman
Hinson, J. B. (2 A-Ag Ec)	Tatum
Hinson, T. W. (3 Ag En)	Lancaster
Hipp, F. A. (4 AH)	Saluda
Hipp, J. F. (2 Ar En)	Newberry
Hodges, F. P. (4 VAE)	Conway
Hodges, H. W. (4 AH)	South Norfolk, Va.
Hodgin, B. E. (4 TM)	Columbia
Hoffmeyer, H. G. (2 EE)	Florence
Hogner, R. P. (2 ME)	Clemson
Holbrooks, B. E. (2 ME)	Stanfield, N. C.
Holcombe, B. F. (4 ME)	Central
Holcombe, J. K. (Unc)°°-°	Pickens
Holcombe, J. V. (4 TM)	Greenville
Holder, R. T. (1 A&S)°	Spartanburg
Holladay, W. F. (1 Ch En)—	Ft. Deposit, Ala.
Holland, J. M. (1 Ar En)	Macon, Ga.
Holland, M. G. (Unc)°°	Pickens
Holley, B. H. (2 TM)	Graniteville
Holliday, B. C. (Unc)°°	Central
Holling, A. B. (2 Ar En)	Charleston
Holling, R. H. (1 E-ME)°	Charleston
Holman, R. E. (3 CE)	Florence
Holmes, P. J. (1 E-Ag En)°	Beaufort
Holmes, R. L. (3 TE)	Naval Base
Holt, A. H. (Unc)°°-°	Clemson
Holt, T. T. (1 A&S)°	Loris
Holtzclaw, D. M. (1 TM)°	Seneca
Holzschuh, B. P. (3 TM)	Teaneck, N. J.
Hood, B. M. (3 VAE)	Matthews, N. C.
Hood, J. J. (4 AH)	Ridgeway
Hood, W. P. (3 Pre-Med)	Hickory Grove
Hooton, N. A. (1 Cr En)°—	New Carlisle, Ind.
Hoover, E. A. (G Ind Ed)	Clemson
Hoover, F. J. (2 Chem)	Greenville
Hoover, H. L. (3 A&S)	Wooster, Ohio
Hope, F. H. (4 TM)	North Augusta
Hopkinson, R. G. (1 Ind Ed)°—	Hermine, Pa.
Horne, G. L. (3 AH)	Jonesville
Horne, J. O. (1 VAE)°	St. George
Horne, J. S. (4 AH)	St. George
Horne, M. B. (1 E-ME)	Charlotte, N. C.
Horton, W. C. (2 A-AH)	Ridgeland
Houghton, H. A. (2 Pre-For)—	Lakewood, Ohio
House, G. M. (1 E-CE)°	Mt. Pleasant
Houser, J. B. (1 Ed)	Bishopville
Howard, A. S. (G Phys)°°-°	Simpsonville
Howard, E. P. (1 E-Ag En)°	Simpsonville
Howard, H. B. (3 Cr En)	Taylors
Howard, J. M. (1 Pre-Vet)°—	Lake Butler, Fla.
Howard, W. C. (4 TC)	Canton, N. C.
Howe, C. E. (1 E-EE)°	Chester

Name and Course	*Address*
Howell, H. B. (3 Ag En)	Asheville, N. C.
Howell, J. H. (4 TC)	Columbia
Hubert, A. T. (4 AH)	Waynesboro, Ga.
Hucks, W. (4 VAE)	Galivants Ferry
Hudson, A. H. (3 Dairy)	Bluffton
Hudson, J. C. (3 Ed)	North Charleston
Hudson, W. A. (1 Ind Ed)—	North Charleston
Huey, R. Boyce (2 A&S)	Lancaster
Huey, R. Bunch (2 TC)	Cheraw
Huff, H. C. (1 E-CE)°	Woodruff
Huffman, R. L. (4 Ag Ec)	Newberry
Huffman, T. B. (3 VAE)	Cameron
Huggins, C. B. (4 Agron)	Aynor
Huggins, E. B. (4 TM)	Lancaster
Huggins, N. L. (3 Agron)	Johnsonville
Hughes, B. (3 TM)	Enoree
Hughes, C. G. (1 E-CE)°	Greenville
Hughes, G. F. (1 Ar En)°	Bamberg
Hughes, O. L. (4 AH)	Cordova
Humphrey, C. H. (1 Pre-For)°,	Georgetown
Humphrey, S. W. (3 Ind Ed)	Bethune
Humphries, J. F. (3 ME)	Columbia
Humphries, J. L. (3 ME)	Sumter
Hunsuck, J. D. (4 EE)	Spartanburg
Hunt, F. M. (1 E-CE)°	Seneca
Hunt, L. E. (3 Pre-Med)	Winnsboro
Hunt, R. B. (2 TM)	Taylors
Hunter, C. P. (2 TM)	Pickens
Hunter, H. H. (3 TM)	Central
Hunter, M. A. (3 EE)	Patrick
Hunter, O. D. (1 TM)°	Central
Hunter, R. E. (4 Pre-Med)	Clemson
Hunter, W. C. (1 A-AH)°	Gray Court
Hunter, W. R. (3 TE)	Rock Hill
Hursey, R. E. (3 ME)	Savannah, Ga.
Hutchinson, T. E. (1 A&S)°	Rock Hill
Hutson, W. W. (1 E-CE)	Orangeburg
Hutto, A. J. (4 Ag En)	Orangeburg
Hutto, H. R. (2 TE)	Rock Hill
Hyder, J. D. (3 AH)	Anderson
Hyder, R. J. (1 E-EE)	Seneca
Hyder, R. P. (1 E-ME)°	Seneca
Inabinet, B. C. (2 TM)	Columbia
Inabinet, D. A. (4 VAE)	St. Matthews
Inabinet, G. B. (1 E-EE)°	Bamberg
Ingram, J. F. (1 E-ME)°	Pageland
Irvin, F. L. (1 TM)	Henderson, N. C.
Ivester, J. C. (1 Pre-Med)°	Walhalla
Jackson, C. F. (1 A-Hort)°	Manning
Jackson, D. E. (1 E-EE)°	Laurens
Jackson, H. E. (1 Ed)°	Taylors
Jackson, J. C. (2 Ed)	Bennettsville
Jackson, J. E. (3 AH)	York
Jackson, J. H. (1 Pre-For)°	Sumter
Jackson, M. H. (1 E-TE)°	Fairforest
Jackson, R. Edward (1 Pre-Med)°—	Manning
Jackson, R. Eugene (2 Ar En)	Lancaster
Jackson, S. H. (2 VAE)	Manning
Jackson, W. M. (3 Ar En)—	Washington, D. C.
Jameson, H. A. (1 E-ME)°	Orangeburg
Jameson, R. B. (1 E-Ag En)	Pendleton
Jarvis, K. G. (3 A&S)	Westwood, N. J.
Jaudon, H. S. (3 TM)	Elberton, Ga.
Jeffcoat, H. H. (1 Cr En)	North
Jeffcoat, R. B. (3 Ar En)	Swansea
Jefferies, W. T. (4 A&S)	Burlington, N. C.
Jenkins, G. H. (2 Ag En)	Conway
Jenkins, R. A. (1 E-CE)	Anderson
Jenness, C. M. J. (2 ME)	Greenville
Jennings, H. E. (1 TM)°	Newberry
Jennings, J. H. (1 E-CE)°	Greenville
Jensen, R. A. (1 E-EE)°	Tampa, Fla.
Jervey, G. M. (1 E-EE)°	Charleston
Jewell, J. R. (1 TM)	Spartanburg
Johns, J. B. (1 E-ME)°	Orlando, Fla.
Johnson, A. C. (1 E-CE)	Marion
Johnson, C. (2 EE)	Charleston Heights

Name and Course	*Address*
Johnson, C. D. (1 A-AH)	Conway
Johnson, D. L. (2 CE)	Folly Beach
Johnson, E. G. (2 A&S)	Walhalla
Johnson, G. A. (2 EE)	Asheville, N. C.
Johnson, G. W. (3 TM)	McColl
Johnson, H. T. (2 ME)	Aiken
Johnson, J. E. (2 TM)	Union
Johnson, K. M. (1 Ag Ch)°—	Bloomingdale, Ga.
Johnson, R. A. (1 Ch En)°	Columbia
Johnson, S. T. (3 Ed)	Rock Hill
Johnson, T. M. (1 E-EE)°	Sumter
Johnson, W. E. (4 Ag Ec)	Aiken
Johnson, W. G. (1 E-EE)°,	Jonesville, N. C.
Johnson, W. L. (1 E-ME)	Charleston
Johnson, W. U. (1 E-ME)	Hartsville
Johnston, A. M. (3 Pre-Med)	St. George
Johnston, G. E. (1 E-ME)°	Estill
Jones, B. R. (3 TE)	Greenville
Jones, C. F. (1 TM)	Woodruff
Jones, E. B. (2 Ind Phys)	Columbia
Jones, F. A. (2 Ed)	Warsaw, N. C.
Jones, F. O. (1 E-CE)	Greenwood
Jones, G. T. (1 E-ME)°	Savannah, Ga.
Jones, G. W. (G VAE)°°	Pendleton
Jones, H. A. (2 Ag En)	Nichols
Jones, J. D. (1 Arch)°	Greenville
Jones, J. H. (2 EE)	Anderson
Jones, J. M. (2 EE)	Edwardsburg, Mich.
Jones, L. C. (1 A&S)°	Augusta, Ga.
Jones, R. M. (1 A-AH)	Sumter
Jones, R. P. (1 A-Dairy)°	Kershaw
Jones, R. R. (1 TM)	Moncks Corner
Jones, T. O. (1 E-Ag En)	Yonges Island
Jones, W. D. (1 Ch En)°	Asheville, N. C.
Jones, W. E. (4 Arch)	Durham, N. C.
Jones, W. F. (1 E-TE)°	Humboldt, Tenn.
Jones, W. Homer (1 Pre-Med)°—	Moncks Corner
Jones, W. Houston (4 TM)	Woodruff
Jones, W. M. (1 E-EE)°	Honea Path
Jordan, A. W. (1 A-AH)°—	Wilmington, N. C.
Jordan, C. B. (3 Dairy)	St. George
Jordan, K. G. (2 TC)	Anderson
Jordan, L. M. (1 E-Ag En)	Union
Jordan, R. P. (1 Ed)°	Florence
Julian, L. A. (1 E-CE)°	Easley
Junkins, A. D. (1 E-EE)°	Anderson
Kalinowski, H. W. (4 Ag Ec)—	Irvington, N. J.
Kaltenbach, L. T. (1 Ed)	Clairton, Pa.
Kane, M. A. (4 Ed)	Millburn, N. J.
Karegeannes, H. G. (1 A-AH)°—	Spartanburg
Kay, J. D. (1 A)	Seneca
Kay, W. G. (1 E-ME)	Allendale
Kay, W. P. (2 Pre-Med)	Belton
Keaton, J. C. (2 VAE)	Anderson
Keller, J. H. (4 Ar En)	Gaffney
Keller, W. A. (1 E-CE)°	Cameron
Kellers, F. (2 EE)	St. Matthews
Kelley, A. E. (1 TM)—	Kings Mountain, N. C.
Kelley, C. L. (1 A-Dairy)	Liberty
Kelley, C. M. (1 A-Ag Ec)	Lake City
Kelley, J. R. (2 Ag En)	Greenville
Kelley, T. E. (1 E)°	Lake City
Kelly, F. I. (1 E-ME)°	Sumter
Kelly, K. H. (2 CE)	Philadelphia, Pa.
Kelly, N. H. (1 Ed)°	Pageland
Kelly, R. E. (1 Pre-For)	Sumter
Kemp, J. R. (1 E-ME)	Denmark
Kennedy, W. C. (2 ME)	Spartanburg
Kennerly, W. L. (2 A-Hort)	Swansea
Kenney, G. N. (2 EE)	Anderson
Keown, H. R. (1 Ar En)°	Iva
Kern, J. G. (3 EE)	Congers, N. Y.
Ketner, D. Q. (2 A-Dairy)	Murphy, N. C.
Key, S. D. (1 A-Agron)	Columbia

Name and Course	Address
Key, W. A. (4 TM)	Columbia
Keys, R. A. (2 EE)	Anderson
Kinard, G. P. (G Ag En)°°	Clemson
Kinard, G. R. (1 E-Ag En)	Fairfax
Kinard, W. S. (3 AH)	Springfield
King, C. E. (1 E-EE)	Simpsonville
King, H. B. (1 E-CE)	Westminster
King, H. L. (4 CE)	Charleston
King, J. D. (3 Pre-Med)	Anderson
King, James L. (3 Poul)	Ridgeville
King, John L. (2 A-AH)	Central
King, Jimmy R. (3 TM)	Westminster
King, John R. (4 EE)	Floville, Ga.
King, L. W. (4 TM)	Cheraw
King, N. D. (1 Ed)	Anderson
King, R. L. (1 A-AH)	Central
Kingsmore, H. D. (3 Ed)	Buffalo
Kinion, N. F. (1 E-ME)	Greer
Kinsey, C. (3 A&S)	Atlanta, Ga.
Kirby, C. E. (4 EE)	Sumter
Kirby, L. B. (3 Ind Phys)	Newry
Kirby, R. W. (1 E-ME)°	Sumter
Kirkland, C. D. (2 TE)	Georgetown
Kirkland, K. L. (2 ME)	Anderson
Kirkley, F. E., Jr. (1 E-Ag En)	Central
Kirkley, F. E., Sr. (G)°°	Central
Kirkpatrick, W. C. (1 TM)	Richburg
Kissam, J. B. (2 A&S)	Georgetown
Kizer, G. R. (3 VAE)	St. George
Knight, G. P. (2 VAE)	Harleyville
Knight, O. W. (2 EE)	Kershaw
Knox, W. E. (1 E-ME)°	Easley
Koone, E. L. (1 TM)	Greenwood
Kowalski, C. M. (3 Ag En)	Anderson
Kowalski, P. R. (2 A&S)	Anderson
Kraft, G. A. (1 E-EE)	Greenville
Krauss, R. (1 A-AH)	Staten Island, N. Y.
Kruger, H. W. (2 Cr En)	Charleston
Kuemmerer, H. R. (3 Chem)	Walhalla
Kurgvel, J. (G AH)	Tallinn, Estonia
LaBruce, L. P. (1 A-Hort)	Myrtle Beach
LaMarche, L. J. (2 Ch En)	Naval Base
Lambert, G. F. (1 E-ME)—	Maryville, Tenn.
Lambeth, E. S. (1 Ar En)	Augusta, Ga.
Lancaster, H. A. (1 Cr En)°	Jonesville
Lancaster, M. S. (1 E-ME)°	Jonesville
Lander, A. M. (4 Ch En)	Spartanburg
Landers, W. M. (2 TM)	Asheville, N. C.
Lane, G. R. (1 A)	Mullins
Lane, R. P. (1 A-Ag Ec)	Central
Laney, G. M. (1 TC)°	Cheraw
Lanford, G. R. (2 ME)	Spartanburg
Lanford, H. L. (2 ME)	Woodruff
Langdale, G. W. (1 A-Agron)	Walterboro
Langley, B. R. (1 Pre-Med)°	Greenville
Langston, J. C. (3 Ent)	Hartsville
Langston, M. G. (2 A-AH)	Timmonsville
Langton, J. E. (1 E-ME)	New York, N. Y.
Lanham, W. D. (3 AH)	Edgefield
Lanier, L. A. (1 E-ME)	Savannah, Ga.
Laraway, W. D. (2 A-AH)	Dravosburg, Pa.
Larisey, C. T. (3 Pre-Med)	Hampton
Latham, M. C. (3 Pre-Med)	North Augusta
Latimer, R. C. (2 TM)	Florence
Latto, T. S. (3 Ar En)	Charleston
Lavender, A. C. (1 E-TE)°	Macon, Ga.
Law, W. P. (G Ag En)°°	Clemson
Lawrimore, B. S. (4 Ag Ec)	Conway
Lawson, W. C. (3 CE)	Buffalo
Lawson, W. L. (3 ME)	Charlotte, N. C.
Layton, P. (3 A&S)	Wilmington, Del.
Leake, Z. G. (1 TM)°	Greenville
Leamy, G. H. (2 Ch En)	New York, N. Y.
Leaphart, J. L. (4 CE)	North
LeCroy, J. R. (1 E-TE)	Walhalla
Lee, C. W. (1 TM)	McColl
Lee, D. D. (2 Ag En)	Dillon
Lee, J. D. (3 CE)	Piedmont
Lee, R. S. (2 Ag En)	Sumter

Name and Course	Address
Lee, T. B. (4 TM)	Gaffney
Leggett, W. L. (1 Ar En)°	Sumter
LeGrand, L. (1 TC)°	Greenville
Leitner, J. A. (2 A-AH)	Irmo
Leitner, L. T. (1 VAE)°	Marion
Leitner, W. A. (3 Ch En)	Clemson
Leonard, W. C. (3 EE)—	Johnson City, Tenn.
Letanosky, T. R. (1 Ed)°	Perryopolis, Pa.
Leutwyler, J. C. (4 Ch En)	Savannah, Ga.
Lewis, B. E. (1 E-Ag En)°	Dillon
Lewis, C. D. (2 VAE)	Branchville
Lewis, H. D. (3 CE)	Batesburg
Lewis, S. S. (2 A)	Leesville
Lewis, T. B. (4 ME)	Conway
Lidke, D. E. (4 Hort)	Maplewood, N. J.
Lifrage, H. O. (3 TM)	Salters
Ligon, J. T. (2 Ag En)	Easley
Limehouse, B. I. (1 Pre-Med)°,	Charleston
Lindell, B. S. (2 Arch)	Wilmington, Del.
Linder, C. A. L. (1 E-EE)°	Smoaks
Lindler, B. J. (2 VAE)	Saluda
Lindler, C. M. (3 Ag En)	Blair
Lindsay, J. H. (2 TM)	Clifton
Lindsay J. N. (1 A-Hort)°	Camden
Linton, W. T. (2 TM)	Columbia
Linsenby, R. B. (3 AH)	Chesterfield
Little, E. L. (1 Pre-For)°	Greenville
Little, C. T. (1 E-ME)°	Greenville
Little, W. E. (4 ME)	Myrtle Beach
Littlejohn, C. T. (1 TM)	Greenwood
Littlejohn, T. W. (3 Ag En)	Ruffin, N. C.
Littleton, B. H. (4 Chem)	Walhalla
Liverett, H. R. (1 E-EE)°—	Hendersonville, N. C.
Livingston, J. P. (Unc)°°	Clemson
Livingston, L. P. (1 A-Agron)°	Dalzell
Livingston, T. G. (4 TM)	Columbia
Locher, K. J. (1 Pre-Vet)	Fairlawn, N. J.
Logue, D. H. (1 TC)°	Cheraw
Lohman, R. O. (1 E-EE)°—	Hendersonville, N. C.
Lollis, O. L. (1 Ch En)°	Belton
Long, H. L. (1 E-ME)	Rock Hill
Long, J. E. (3 TM)	Greenville
Long, J. P. (4 A&S)	Greenwood
Long, N. V. (4 ME)	Ossining, N. Y.
Longshore, J. R. (2 TM)	Fort Mill
Lookabill, C. R. (2 Ind Ed)—	Asheville, N. C.
Lorelle, R. J. (4 EE)	Brooklyn, N. Y.
Lowery, E. K. (2 Ed)	Pageland
Lowery, K. S. (1 VAE)°	Kershaw
Lowery, R. J. (4 TM)	Lancaster
Lowry, C. (3 Ag En)	Pembroke, N. C.
Loyless, J. G. (1 Arch)°	Greenville
Lucas, C. D. (1 TM)°	High Point, N. C.
Lucas, F. E. (1 Arch)°	Charleston
Lucas, S. L. (2 ME)	Hickory, N. C.
Lucius, T. L. (1 TM)	Columbia
Luetjen, P. G. (3 EE)—	Queens Village, N. Y.
Luke, D. B. (3 Ag Ch)	North Augusta
Luna, B. C. (Unc)°°-°	Clemson
Lund, C. M. (G Ag En)°°	Clemson
Lundy, G. F. (3 Ar En)	Denmark
Lunsford, J. M. (4 TM)	Spartanburg
Lunsford, R. D. (3 Ind Phys)	Greenwood
Lynch, T. M. (1 E-EE)°	Anderson
Lynch, W. C. (1 E-EE)	Savannah, Ga.
Lyons, B. L. (2 Ed)	Walterboro
Lyons, G. E. (4 Ed)	Yemassee
McAlhany, R. E. (3 Ar En)	Charleston
McAlister, J. (4 AH)	Easley
McAlister, K. C. (3 TE)	Anderson
McAlister, R. L. (2 ME)	Pendleton
McAlister, W. E. (1 E-ME)°	Westminster
McAulay, W. F. (1 Ar En)°	Columbia
McBrian, J. L. (1 TC)°—	Port Washington, N. Y.

Name and Course	Address
McCabe, C. B. (3 Ag En)—	San Antonio, Fla.
McCall, E. M. (1 TM)*	Easley
McCall, J. T. (2 Ind Ed)—	Lake Toxaway, N. C.
McCanless, J. R. (1 E)*	Asheville, N. C.
McCarrell, R. B. (1 Pre-Med)	Columbia
McCarter, H. L. (2 Ag En)	Tyron, N. C.
McCarter, M. W. (4 Agron)	Clover
McClain, D. M. (2 TE)	La France
McClellan, W. D. (2 TE)	Anderson
McClelland, R. A. (2 TE)	Spartanburg
McClintock, W. H. (2 TM)	Rock Hill
McClure, C. M. (G Cr En)	Anderson
McClure, R. E. (4 TE)	Anderson
McClure, W. F. (4 Ag En)	Chesnee
McConnell, J. C. (1 E-TE)	Sandy Springs
McCormic, W. M. (1 E-TE)*	Sumter
McCown, G. S. (1 E-ME)*	Richland
McCown, J. M. (3 TE)	Richland
McCoy, H. H. (1 E-CE)*	Greenville
McCoy, J. P. (1 E-EE)*	Bishopville
McCrackan, M. L. (Unc)**	Clemson
McCracken, H. E. (2 Ag En)	Bluffton
McCracken, J. W. (2 TM)	Columbia
McCraw, L. G. (3 CE)	Sandy Springs
McCreight, R. W. (2 ME)	Greenwood
McCuen, B. H. (2 Pre-Med)	Greenville
McDaniel, B. T. (2 A-Dairy)	Pickens
McDaniel, C. C. (1 Pre-Med)	Leeds
McDaniel, D. R. (3 Ag En)	Lake City
McDaniel, G. W. (1 E-CE)	Greenville
McDaniel, O. H. (3 EE),	Orangeburg, N. Y.
McDaniel, R. C. (3 AH)	Leeds
McDaniel, R. L. (1 E-CE)*	Carlisle
McDonald, W. C. (1 E-CE)	Westminster
McDowell, F. L. (2 Ch En)—	Reidsville, N. C.
McElmurray, J. G. (4 Ag En),	Augusta, Ga.
McElveen, C. P. (3 ME)	Sumter
McElveen, H. D. (2 ME)	Columbia
McElveen, W. P. (2 Arch)	Columbia
McFadden, J. G. (1 E-EE)*	Rock Hill
McGarity, M. C. (3 Arch)	Spartanburg
McGee, C. M. (Unc)**-*	Clemson
McGee, E. T. (PG EE)	Anderson
McGill, D. M. (1 E-Ag En)	Anderson
McGill, H. B. (Unc)**-*	Greenville
McGill, J. C. (4 ME)	Charlotte, N. C.
McGougan, J. M. (1 TC)*	Bethune
McGraw, W. C. (2 Pre-Med)	Pendleton
McGuinn, J. H. (1 TC)	Chester
McKellar, P. A. (1 Ar En)*	Bennettsville
McKellar, R. A. (2 A-Dairy)—	Asheboro, N. C.
McKenzie, H. A. (2 Chem)	Savannah, Ga.
McKeown, H. A. (2 ME)	Chester
McKie, M. T. (1 E-ME)*	North Augusta
McKie, R. H. (3 Ind Ed)	Edgefield
McKinnell, H. W. (1 E-ME)*—	Charlotte, N. C.
McKinney, C. H. (1 A-AH)	Hodges
McKittrick, S. H. (1 Pre-Med)	Greenville
McLaughlin, F. E. (3 AH)	Florence
McLaurin, D. K. (4 CE)	Bethune
McLaurin, H. M. (1 A-AH)*	Wedgefield
McLean, W. R. (1 E-ME)*	Greenville
McLees, N. C. (G Hort)**	Walhalla
McLellan, H. C. (G Agron)**	Dillon
McLellan, R. F. (1 A)*	Dillon
McLendon, L. J. (2 ME)	Albany, Ga.
McLeod, H. E. (Unc)**	Clemson
McLeod, R. (4 AH)	Timmonsville
McMeekin, A. H. (2 A-AH)	Monticello
McMillan, M. K. (4 AH)	Mullins
McMillan, R. K. (2 Arch)	Spartanburg
McMillan, T. M. (2 VAE)	Bamberg
McMillian, W. W. (2 A-Ent)	Florence
McNatt, F. B. (3 Chem)	Clemson
McTeer, T. F. (1 A-AH)	Hartsville
McWhorter, R. W. (1 TM)	Liberty
Mabry, R. S. (4 TM)	Greenville
Mack, F. W. (1 Pre-Vet)*	North
Mackey, F. C. (1 TM)*	Bennettsville
Mackey, R. R. (3 TM)	Anderson
MacMillan, D. N. (3 AH),	Edgewater, N. J.
Madden, E. T. (4 TM)	Clearwater
Madden, J. A. (1 TM)	Laurens
Madden, J. L. (2 A-Dairy)	Greenville
Madden, W. L. (3 TM)	Laurens
Maddox, C. F. (1 A&S)	Anderson
Madlinger, G. J. (3 Arch),	Memphis, Tenn.
Magill, J. B. (1 TM)	Concord, N. C.
Mahaffey, C. R. (1 E-TE)*	Spartanburg
Mahaffey, J. E. (1 Ed)	Liberty
Mahaffey, L. A. (1 TM)	Gramling
Mahon, W. E. (3 Arch)	Greenville
Major, C. S. (4 Arch)	Anderson
Major, W. R. (4 Ar En)	Williamston
Maloney, C. S. (4 Dairy)	Adel, Ga.
Mann, P. R. (G Chem)**-*—	Cypress Chapel, Va.
Mann, W. K. (2 Ar En)*	Kingsport, Tenn.
Manning, G. B. (1 E-EE)*	Abbeville
Manning, W. M. (1 Ch En)*	Clio
Marazza, R. J. (2 ME)	Bovard, Pa.
Marbert, J. B. (2 CE)	Greenwood
Marchbanks, J. C. (2 Ed)	Anderson
Marchant, J. (1 E-EE)*	Harleyville
Marcoux, B. P. (3 CE)	Lake Wales, Fla.
Marion, C. G. (1 E-EE)*	Eastover
Marks, G. M. (3 ME)	Greenville
Marshall, A. H. (3 A-AH)	Heath Springs
Marshall, G. N. (1 E-ME)*	Sumter
Marshall, J. C. (2 TM)	Heath Springs
Martin, F. G. (1 E-ME)*	Westminster
Martin, F. W. (2 TM)	Bennettsville
Martin, G. D. (3 TM)	Charlotte, N. C.
Martin, J. D. (4 Ag En)	Lyman
Martin, J. F. (1 E-EE)*	Laurens
Martin, J. P. (2 ME)	Williamston
Martin, L. R. (1 Ch En)*	Anderson
Martin, M. B. (1 TM)*	Helena, Ga.
Martin, O. D. (2 TM)	Easley
Martin, P. R. (1 E-TE)	Abbeville
Martin, R. L. (1 A-AH)	West Union
Martin, T. O. (4 VAE)	Aynor
Mason, A. F. (3 CE)	Greenville
Massey, W. H. (2 TM)	Greenville
Massingill, W. B. (1 E-ME)*	Easley
Masters, D. W. (1 E-EE)*	Greenwood
Mathewes, C. W. (2 ME)	Columbia
Mathis, R. N. (2 A-AH)	Gaffney
Matthews, J. E. (2 Ar En)	Bishopville
Matthews, J. L. (2 ME)	Rock Hill
Matthews, J. M. (1 Ed)*	Lake City
Mattison, J. F. (4 TC)	Belton
Mattison, R. M. (1 Ch En)*	Donalds
Mattos, T. M. (2 Ed)	Greenville
Maul, G. H. (2 EE)	Charleston
Maxwell, C. R. (3 TM)	Greenville
May, D. V. (1 TM)	Greenville
May, R. C. (1 E-CE)	Rock Hill
Mayfield, C. V. (1 E-TE)*	Pelzer
Mayfield, T. L. (1 Cr En)*	Anderson
Mays, K. W. (4 TM)**	Columbia
Meader, L. N. (4 Ind Ed)	Chicago, Ill.
Meares, H. H. (1 Arch)*	Asheville, N. C.
Mellard, W. L. (2 A-AH)	Charleston
Melton, D. W. (1 VAE)	Lake City
Mentz, J. F. (1 E-CE)—	Lindenhurst, L. I., N. Y.
Meredith, B. R. (2 VAE)	Anderson
Merritt, C. W. (4 EE)	Piedmont
Messervy, L. W. (2 EE)	Charleston
Metz, F. E. (3 Ar En)	Anderson
Metz, W. G. (2 EE)	Clemson
Meyers, D. R. (3 TE)	Hinsdale, Ill.
Midden, T. L. (1 Ind Ed)*—	Mt. Pleasant, Pa.

Name and Course	Address
Middleton, L. S. (1 VAE)	Jefferson
Middleton, R. E. (3 Cr En)—	Clearwater, Fla.
Mihlstin, M. (4 TM)	Brooklyn, N. Y.
Mikell, J. J. (4 TM)	Greenville
Mikkelsen, H. D. (3 Arch)	Ludlow, Ky.
Milam, C. L. (3 AH)	Sandy Springs
Miley, D. H. (1 Arch)°	Walhalla
Millard, W. A. (2 Pre-Med)	Sumter
Miller, A. R. (1 Ind Ed)°—	Mt. Pleasant, Pa.
Miller, C. D. (2 EE)	Charleston
Miller, C. E. (3 Ch En)	Salters
Miller, H. J. (1 Pre-Med)°	Jefferson
Miller, James A. (2 Pre-For)—	Medway, Ohio
Miller, Joe A. (1 E-TE)°	Walhalla
Miller, J. G. (3 ME)	Greenville
Miller, J. H. (2 Pre-Med)	Honea Path
Miller, J. M. (1 E-Ag En)	Bennettsville
Miller, R. S. (1 E- CE)	Westminster
Miller, S. C. (2 CE)	Greenville
Miller, S. M. (1 VAE)	Andrews
Miller, V. L. (1 Ind Ed)°	New Ellenton
Miller, W. K. (3 Ar En)	Aiken
Miller, W. W. (1 E-ME)°—	Jacksonville, Fla.
Mills, E. C. (1 Ar En)	Columbia
Mills, H. H. (4 AH)	Ridgeland
Mills, J. R. (1 E-ME)	Hapeville, Ga.
Millsap, J. R. (4 VAE)	Gable
Minyard, J. L. (2 EE)	Canon, Ga.
Mishoe, T. M. (3 Agron)—	Tabor City, N. C.
Missroon, C. P. (1 E-ME)	Georgetown
Mitchell, A. D. (4 TE)	Laurens
Mitchell, A. T. (4 TE)	Greenville
Mitchell, Richard D. (4 Arch)	Greenville
Mitchell, Ryan D. (2 Arch)	Belton
Mitchell, R. T. (1 E-CE)	Charleston
Mitchell, W. D. (4 Ind Ed)	Spartanburg
Mittenzwei, F. L. (1 Pre-Med)°	Kline
Mixon, J. D. (4 Pre-Med)	Hampton
Mobley, J. R. (1 E-EE)°	Lancaster
Moisson, A. R. (1 Ch En)°	Greenville
Moncrief, C. E. (1 E-CE)°	Moultrie
Monroe, K. M. (2 EE)	Erwin, Tenn.
Montilla, F. (2 Arch)	Santurce, P. R.
Moody, G. H. (2 Pre-For)	Dillon
Moody, J. R. (3 Ag En)	Dillon
Mooneyhan, R. T. (4 TM)	West Columbia
Moore, A. C. (2 ME)	Anderson
Moore, A. L. K. (C Ed)°°	Sandy Springs
Moore, A. P. (1 E-ME)°	Savannah, Ga.
Moore, D. A. (2 A-Ag Ec)	Lake City
Moore, E. M. (3 TM)	Pendleton
Moore, F. M. (1 E-ME)°	Greenville
Moore, G. M. (1 E-EE)	Seneca
Moore, H. C. (3 Ag En)	Inman
Moore, J. H. (4 TM)	Toccoa, Ga.
Moore, James L. (1 TM)°	Chester
Moore, Joseph L. (3 TM)	Chester
Moore, J. W. (4 TM)	Chester
Moore, K. K. (2 TM)	Newberry
Moore, K. L. (4 Dairy)	Calhoun, Ga.
Moore, L. W. (1 A-Dairy)°	Bradley
Moore, R. L. (3 CE)	Charlotte, N. C.
Moore, R. P. (3 TM)	Pendleton
Moore, S. R. (2 Ag En)	Dalzell
Moore, W. C. (4 A&S)	Greenwood
Moore, W. L. (3 TE)	Pendleton
Moormann, H. M. (1 Pre-For)°—	Charleston Heights
Moose, G. H. (1 Ar En)	Concord, N. C.
Morgan, B. G. (1 E-EE)°	Salisbury, N. C.
Morgan, G. D. (3 TM)	Greenville
Morgan, J. W. (1 E-ME)°	Central
Morgan, M. C. (1 TM)	Great Falls
Morgan, M. D. (4 TM)	Gaffney
Morris, B. M. (2 TM)	Newberry

Name and Course	Address
Morris, D. (4 CE)	Shelby, N. C.
Morris, F. W. (1 TM)	Detroit, Mich.
Morrison, J. E. (1 A-Dairy)	Iva
Morrow, C. H. (1 E-EE)°	Clover
Morrow, S. J. (1 Pre-Med)	Inman
Morton, C. W. (2 ME)	Beaufort
Moseley, M. C. (3 TM)	Greenville
Moseley, N. F. (4 EE)	Winter Park, Fla.
Mosely, W. E. (3 ME)	Charleston
Moss, J. V. (1 Pre-Med)°	Gaffney
Mosteller, C. T. (2 Ind Ed)	Gaffney
Moulton, G. D. (3 TC)	Ridgewood, N. J.
Mulkey, C. W. (1 ChEn)°	Greenwood
Mull, B. R. (2 ME)	Greenville
Mullen, P. E. (1 A&S)°	Charleston
Mullinax, D. E. (Unc)°°	Central
Mullinax, J. M. (1 Ar En)°	Georgetown
Mullinax, W. A. (2 TM)°—	Fort Walton Beach, Fla.
Mullis, T. M. (2 ME)	York
Munnerlyn, M. (1 TM)°	Bennettsville
Murdaugh, M. P. (3 A&S)	Islandton
Murphree, H. W. (2 CE)	Troy, Ala.
Murphree, J. F. (1 A-Ag Ec)	Six Mile
Murphree, L. E. (4 VAE)	Tamassee
Murphy, C. B. (3 AH)	Greenwood
Murphy, J. A. (4 Ag En)	Starr
Murphy, J. P. (2 ME)	Charleston
Murray, T. A. (2 A-Ag Ec),	Red Bank, N. J.
Murray, T. F. (1 E-EE)°—	Washington, D. C.
Muzzey, W. M. (2 CE)	Philadelphia, Pa.
Myers, L. C. (1 E-EE)°	Reevesville
Myrick, W. E. (4 A&S)	Ulmers
Nabors, J. V. (1 A-Agron),	Bluefield, W. Va.
Nabors, R. L. (2 EE)	Talladega, Ala.
Nance, L. E. (2 A&S)	Galivants Ferry
Nasworthy, G. A. (2 ME),	Winter Park, Fla.
Neal, J. A. (1 Ar En)°	Greenville
Neely, R. L. (4 TC)	Rock Hill
Neely, W. J. (1 Pre-Vet)°	Rock Hill
Neil, A. G. (4 AH)	Waterloo
Nelms, K. (2 TM)	Dewey Rose, Ga.
Nelson, C. F. (4 ME)	Savannah, Ga.
Nelson, J. B. (2 TE)	Spartanburg
Nelson, J. W. (1 E-EE)	Piedmont
Nettles, E. W. (1 E-Ag En)°	Sumter
Nettles, W. C. (4 Ag Ch)	Clemson
New, W. K. (2 Ag En)	Greenville
Newell, P. P. (3 TE)	Brookline, Mass.
Newman, T. C. (1 Cr En)°	Canton, N. C.
Newman, W. H. (2 ME)	Charleston
Newton, A. F. (C Ind Ed)	Clemson
Newton, J. R. (1 E-ME)°	McColl
Newton, M. C. (1 Arch)°	Odessa, Del.
Nichols, C. S. (3 Ent)	College Park, Ga.
Nichols, F. M. (1 Ch En)°	Savannah, Ga.
Nicholson, E. G. (4 EE)°°	Anderson
Nicholson, W. M. (1 Ed)°	Salem
Nickles, B. G. (4 AH)	Seneca
Nickles, C. J. (1 Arch)	Abbeville
Nickles, M. B. (4 Pre-Med)	Laurens
Nix, J. W. (1 E-TE)°	Cateechee
Norris, B. J. (1 E-CE)°	Easley
Norris, D. E. (2 TM)	Greenville
Norris, G. F. (1 A-AH)	Taylors
Norris, R. G. (1 E-Ag En)°	Anderson
Norton, W. L. (2 EE)	Miami, Fla.
Norwood, B. L. (3 Agron)	McBee
Norwood, J. M. (2 A)	Iva
Nott, R. H. (4 CE)	Charlotte, N. C.
Nowack, R. F. (Unc)°°	Clemson
Nowell, J. G. (3 TM)	Charleston
Nunamaker, J. L. (1 Ed)°	Manning
Nutt, G. H. (2 Pre-Med)	Clemson
Oates, W. M. (1 TM)	Spartanburg
O'Bryant, G. D. (1 E-EE)	Spartanburg
O'Dell, G. D. (G Dairy)°°	Easley
O'Dell, W. R. (3 TM)	Newnan, Ga.
Ogden, J. W. (2 A&S)	Florence

Name and Course	*Address*
O'Hear, J. (3 Arch)	Charleston
Opt, P. C. (4 TM)	Belton
O'Quinn, J. J. (2 A-AH)	Ridgeland
Orr, R. J. (3 CE)	Anderson
Orr, W. L. (4 EE)	Hendersonville, N. C.
Osborne, H. E. (1 E-ME)	Fort Mill
Osteen, J. L. (1 E-EE)*	Greenville
Ott, A. L. (4 Arch)	Columbia
Outlaw, J. F. (1 E-EE)*	Hartsville
Outz, C. H. (3 AH)	Fair Play
Ouzts, C. A. (4 Ag Ec)	Ninety Six
Owen, J. D. (2 EE)	Norris
Owens, J. R. (1 E-EE)*	Charleston
Owens, R. S. (2 CE)	Orangeburg
Owens, S. L. (1 E-CE)	Easley
Pace, D. W. (1 E-ME)*	Pickens
Pace, K. M. (1 Ed)*	North Charleston
Pace, L. F. (2 CE)	Pickens
Paden, W. R. (1 E-ME)	Clemson
Padgett, A. L. (1 E-Ag En)*	Aiken
Padgett, D. H. (3 A&S)	Walterboro
Padgett, J. H. (G Ag Ec),	Hayesville, N. C.
Padgett, J. W. (1 A)*	Trenton
Padgett, L. N. (1 E-CE)*—	Charleston Heights
Padgette, D. D. (4 TE)	Saluda
Page, B. G. (2 VAE)	Tabor City, N. C.
Page, H. W. (1 VAE)*	Nichols
Page, R. G. (2 Ag En)	Dillon
Paget, J. M. (2 Pre-Vet)	Greer
Pagliei, J. A. (2 Ed)	Clairton, Pa.
Painter, B. A. (3 TM)	Arcadia
Painter, J. E. (1 E-EE)*	Gaffney
Painter, R. H. (2 EE)	Greenville
Palagonia, C. M. (1 Ar En)*—	New York, N. Y.
Palles, N. L. (3 EE)	Florence
Palmer, J. W. (1 E)*	Clemson
Pappas, E. P. (2 Arch)	Jacksonville, Fla.
Paradeses, S. D. (1 Pre-Med)	Columbia
Pardue, R. E. (4 ME)	Graniteville
Paredes, R. (4 AH)	Irwin, Pa.
Parillo, J. A. (1 Arch),	W. Catasaugua, Pa.
Park, L. M. (2 EE)	Winnsboro
Parker, A. J. (2 Arch)	Spartanburg
Parker, B. F. (3 Agron)	Old Fort, N. C.
Parker, B. H. (1 TM)	Rock Hill
Parker, J. W. (3 CE)	Savannah, Ga.
Parker, R. J. (1 E-TE)*	Simpsonville
Parker, R. M. (3 A&S)	Lancaster
Parker, R. S. (2 EE)	Spartanburg
Parker, W. M. (3 Arch)	Spartanburg
Parks, W. P. (2 A-AH)	McCormick
Parks, W. R. (1 E-ME)*	Spartanburg
Parris, J. W. (1 A-Agron)*	Campobello
Parrott, C. D. (1 Ch En)*	York
Parsons, L. P. (2 A-Hort)	Georgetown
Parsons, V. H. (1 E-ME)*	Georgetown
Passinos, B. (3 ME)	Greer
Pate, C. T. (3 TM)	Bennettsville
Pate, J. D. (4 TM)	Winnsboro
Pate, W. L. (2 Ed)	Lamar
Patrick, C. H. (2 TC)	Greenville
Patrick, J. D. (4 Ag En)	Clemson
Patrick, R. E. (3 TM)	Gaffney
Patrick, W. R. (2 A&S)	Charleston
Patterson, A. M. (1 TM)	Central
Patterson, R. W. (3 ME)	Clemson
Pattie, B. D. (3 Ch En)	London, England
Patton, J. M. (1 E-EE)*	Fountain Inn
Payne, L. A. (4 Ind Ed)	Sandersville, Ga.
Payne, R. L. (1 TM)*	Anderson
Pearce, B. M. (1 Arch)*	Fort Mill
Pearce, H. E. (1 E-Ag En)*	McColl
Pearce, P. S. (1 E-EE)	Charleston
Pearman, S. N. (4 Agron)	Columbia
Peck, P. E. (3 CE)	Vero Beach, Fla.
Pendleton, R. C. (2 A)	Chevy Chase, Md.
Pennell, J. E. (G Chem)**	Anderson
Perez, O. (1 E-ME)	New York, N. Y.

Name and Course	*Address*
Permenter, L. F. (1 E-EE)*	Spartanburg
Perna, A. J. (2 Ch En)	Brooklyn, N. Y.
Perry, W. J. (4 Ar En)**	Timmonsville
Peters, C. D. (4 CE)	North
Petersen, D. H. (Unc)**-*	Pendleton
Pettigrew, J. L. (3 ME)	Starr
Pettus, H. E. (4 TM)	Fort Mill
Pettus, J. L. (1 E-EE)*	Clover
Petty, J. B. (1 VAE)*	Chesnee
Philhower, L. S. (3 Ag Ec)—	Williamsburg, Va.
Philips, J. C. (G Chem)**-*—	Washington, D. C.
Phillips, B. C. (2 ME)	Wellford
Phillips, B. K. (1 E-TE)*	Gaffney
Phillips, E. S. (1 A&S)*,	Harrisonburg, Va.
Phillips, H. W. (1 TM)*	Kershaw
Phillips, J. (1 E-TE)*	Brooklyn, N. Y.
Phillips, J. R. (1 A-Dairy)	Piedmont
Phillips, J. W. (4 TE)	Summerton
Phillips, L. C. (1 TM)*	Wellford
Phillips, N. R. (2 Ag En)	Easley
Phillips, R. L. (2 Ar En)	Anderson
Phillips, T. B. (1 TM)	Elkin, N. C.
Phipps, J. D. (4 Arch)	Lake City
Pickelsimer, H. M. (3 EE)	Piedmont
Pickens, H. A. (3 CE)	Anderson
Pierce, G. W. (2 TM)	Greenville
Pike, J. D. (1 TM)*	Moreland, Ga.
Pilot, J. S. (1 Ed)*	Rankin, Pa.
Pinckney, J. A. (1 Arch)*	Greenville
Pinckney, J. E. (2 Ar En)	Walterboro
Pittman, C. A. (4 TM)	Perkasie, Pa.
Pittman, J. F. (G Ag Ec)**	Seneca
Pitts, A. H. (3 AH)	Fort Motte
Pitts, C. I. (1 Arch)	Ware Shoals
Pitts, F. E. (1 Cr En)*	Greenwood
Pitts, J. D. (3 ME)	Rock Hill
Platt, B. A. (1 Arch)	Ocean Drive
Plauche, E. L. (1 Ed)*—	Parkersburg, W. Va.
Player, D. W. (1 A)*	Elliott
Plemons, T. (1 E-EE)*	Lockhart
Plowden, I. V. (2 TE)	Sumter
Plowden, S. E. (1 A-Hort)*	Manning
Plumblee, H. E. (3 EE)	Greer
Polhemus, W. L. (3 TC)	St. Andrew, Fla.
Poore, T. C. (3 TM)	Williamston
Poovey, C. E. (4 CE)	Hickory, N. C.
Pope, J. R. (1 E-Ag En)*,	Hyattsville, Md.
Porcher, G. L. (4 Arch)	Charleston
Porcher, J. P. (3 CE)	Charleston
Porter, J. F. (2 Arch)	Winnsboro
Porter, K. M. (3 EE),	East Flat Rock, N. C.
Porter, V. C. (G Ed)**	Morganton, N. C.
Potts, R. O. (4 TM)	Fort Mill
Powell, G. W. (1 A-AH)*	Williston
Powell, J. T. (1 A-AH)*	West Union
Powell, J. W. (3 AH)	Clemson
Powell, R. S. (2 TC)	Rock Hill
Powell, S. B. (1 E-EE)*	Kingstree
Powers, G. T. (2 TM)	Columbia
Powers, W. O. (1 E-CE)	Timmonsville
Pratt, B. B. (1 TM)	Liberty
Preacher, H. W. (1 E)*	Brunson
Prescott, J. C. (3 VAE)	Ridgeland
Presley, R. F. (1 A-Poul)*	Spartanburg
Pressley, C. M. (2 EE)	Aiken
Pressley, T. B. (1 E-Ag En)*	Lowrys
Pressley, W. B. (2 A-Ag Ec)—	Biltmore, N. C.
Price, C. A. (1 E-EE)	Gaffney
Price, C. D. (2 EE)	Greenville
Price, J. H. (3 Ar En)	Florence
Price, O. T. (3 VAE)	Ridge Spring
Price, Ralph B. (2 TE)	West Columbia
Price, Ray B. (3 CE)	Burton
Priester, A. U. (2 Ed)	La Grange, Ga.
Priester, H. R. (1 Ch En)*	Fairfax
Priester, W. L. (2 A-Dairy)	Bamberg

Name and Course	Address
Prince, G. E. (4 Ind Phys)	Columbia
Pritchard, F. G. (1 E-Ag En)°	Sumter
Proctor, C. L. (1 A&S)	Ware Shoals
Proffitt, J. C. (2 ME)	Greenville
Prosser, F. J. (1 Pre-For)	Florence
Pruitt, J. W. (2 A)	Due West
Pruitt, R. L. (2 EE)	Calhoun Falls
Puckhaber, W. F. (2 Arch)	Charleston
Pugh, A. J. (1 Ch En)°	Prosperity
Pugh, R. D. (1 E-EE)°	Greer
Purvis, W. J. (3 TM)	Esmont, Va.
Puryear, E. F. (2 TM)	Cheraw
Putman, R. W. (2 ME)	Greenville
Putnam, D. M. (1 Arch)°	Laurens
Quarles, C. H. (4 AH)	Abbeville
Quattlebaum, D. E. (2 A-Dairy)	Chester
Quattlebaum, R. S. (2 Ag En)	Chester
Queen, J. H. (1 E-EE)°—	Kings Mountain, N. C.
Quinones, J. U. (2 Arch)°	Santurce, P. R.
Rabon, P. T. (1 E-ME)	Loris
Raftelis, J. M. (2 ME)	Georgetown
Ragsdale, B. L. (3 Dairy)	Belton
Railey, G. L. (1 A-AH)°	Columbia
Rainey, T. B. (2 TE)	Anderson
Ramage, W. S. (3 AH)	Laurens
Ramey, W. S. (1 TM)°	Honea Path
Ramsey, R. H. (2 Ag En)	Brevard, N. C.
Randall, R. A. (2 TE)	La France
Randall, R. H. (4 VAE)	Ridge Spring
Randall, T. E. (2 ME)	Greenville
Rast, B. M. (1 E-ME)°	Cameron
Rast, W. J. (2 CE)	Greenville
Rause, J. D. (1 Ed)	Greensburg, Pa.
Rauton, L. R. (2 A-AH)	Ridge Spring
Rauton, R. M. (1 A-AH)°	Ridge Spring
Ravenel, R. H. (2 ME)	Sanford, Fla.
Rawl, W. B. (3 ME)	Spartanburg
Ray, S. F. (4 CE)	Townville
Ready, C. L. (3 ME)	Graniteville
Reamer, C. S. (1 E-ME)°,	Philadelphia, Pa.
Redfearn, J. H. (2 Ag En)—	Wadesboro, N. C.
Redman, E. M. (1 E-EE)°	Yonges Island
Redmond, K. C. (1 E-CE)°	Central
Reece, C. W. (4 Cr En)	Greer
Reece, R. W. (2 ME)	Pickens
Reed, A. J. (2 TM)	Whitmire
Reed, W. L. (1 E-TE)°	Whitmire
Reese, D. R. (1 E-EE)°—	Hendersonville, N. C.
Reese, W. A. (1 A&S)°	Greer
Reeves, C. Q. (1 E-CE)°	Charleston
Reeves, H. I. (1 E-ME)°	Osborn
Reeves, J. B. (2 TM)	Taylors
Reeves, L. E. (1 E-ME)°	Greer
Reeves, R. P. (3 Ag En)	Ravenel
Reeves, S. J. (3 TM)	Heath Springs
Reid, T. P. (4 Ind Ed)	Walhalla
Reinhold, F. W. (2 TM)	Lombard, Ill.
Renew, J. D. (1 Cr En)°	Barnwell
Rennerfeldt, D. D. (1 E-CE)°	Anderson
Revis, R. G. (2 TM)	Pendleton
Reynolds, I. M. (3 AH)	Sumter
Reynolds, P. G. (4 Ar En)	Sumter
Reynolds, R. E. (1 A-AH)	Timmonsville
Reynolds, T. L. (1 A-AH)—	Waynesboro, Ga.
Rhinehart, J. D. (3 TM)	Inman
Rhode, A. L. (4 AH)	Cottageville
Rhodes, M. B. (Unc)°°°	Williamston
Rice, E. A. (3 ME)	Naval Base
Rice, S. M. (3 Ag En)	Allendale
Richards, D. S. (1 TM)°	Charlotte, N. C.
Richardson, F. A. (2 Pre-Med)	Seneca
Richardson, J. A. (2 Ag En)	Lancaster
Richardson, J. L. (4 TE)	Fair Play
Richardson, M. K. (2 ME)	Gastonia, N. C.
Richardson, W. H. (3 TE)	Greenville
Richardson, W. L. (1 E-EE)°	Toccoa, Ga.
Richey, C. G. (2 A&S)	Ware Shoals
Richey, E. K. (Unc)°°	Central
Richey, J. W. (2 ME)	Piedmont
Richey, R. M. (1 E-EE)°	Baltimore, Md.
Richey, W. B. (2 TM)	Ware Shoals
Riffle, D. E. (1 TM)°,	Barboursville, W. Va.
Riggins, W. H. (2 Ar En)	Greenville
Rimrodt, L. K. (3 TM)	Walhalla
Riser, J. W. (2 VAE)	Bowman
Rivers, E. D. (2 CE)	Chesterfield
Rivers, F. J. (4 AH)	Chesterfield
Rivers, M. E. (3 CE)	Hampton
Roache, B. E. (G Ed)°°	Pelzer
Robbins, R. S. (Unc)°°	Belton
Roberts, B. L. (2 A-AH)	Chester
Roberts, C. D. (2 Ind Ed)	York
Roberts, J. C. (2 A-AH)	Columbia
Roberts, Jack R. (1 A-Dairy)	Greenville
Roberts, Jerry R. (1 TM)°	York
Roberts, J. W. (3 Ag En)	Greenville
Roberts, W. S. (2 A-Hort),	Gastonia, N. C.
Robertshaw, W. L. (1 TM)	Taylors
Robertson, K. M. (1 E-CE)°	Charleston
Robinett, W. B. (4 EE)	Conway
Robinette, O. J. (2 Cr En)	Pacolet
Robinson, D. M. (4 Hort)	Lancaster
Robinson, J. A. (1 A&S)	Easley
Robinson, J. D. (2 CE)	Enka, N. C.
Roche, F. D. (1 A&S)°	Sumter
Rodgers, J. C. (1 A-AH)°	Williston
Roff, W. T. (G TC)	Suffern, N. Y.
Rogers, C. R. (1 E-Ag En)	Mullins
Rogers, D. K. (1 Ind Phys)°	Pelzer
Rogers, J. C. (2 VAE)	Pelzer
Rogers, J. D. (2 Ar En)	Easley
Rogers, J. K. (1 TM)	Liberty
Rogers, J. T. (1 Ed)	Florence
Rogers, T. N. (1 A-AH)	Fork
Rogers, V. A. (2 A-AH)	Lowndesville
Rogers, W. B. (G Phys)	Greenville
Rogers, W. E. (1 VAE)°	Mullins
Rogers, W. K. (1 Ed)	Walhalla
Rogers, W. P. (2 VAE)	Mullins
Rogowski, M. F. (4 Hort)	Irvington, N. J.
Rohdenburg, C. H. (1 E-EE)	Iva
Roman, A. R. (2 TM)	Columbia
Roof, D. W. (1 Arch)°	Columbia
Roper, N. A. (1 E-ME)°	Pickens
Ross, D. H. (4 TM)	Rock Hill
Ross, L. C. (4 ME)	Charlotte, N. C.
Rountree, J. W. (1 Cr En)°	Augusta, Ga.
Routh, W. E. (G Chem)°—	Greensboro, N. C.
Rowe, C. B. (1 Ch En)°,	Camp Stewart, Ga.
Rowe, W. W. (2 A-AH)	Summerton
Royall, E. M. (1 TM)°	Mt. Pleasant
Rozendale, D. (2 CE)—	Lookout Mountain, Tenn.
Rubenstein, R. D. (3 ME)—	Hendersonville, N. C.
Rucker, G. F. (1 E-ME)°	Edgefield
Rudolph, F. E. (2 EE)	Savannah, Ga.
Ruiz, J. B. (3 Ind Ed)	Asheville, N. C.
Rush, B. W. (1 TM)°	Glendale
Rush, W. A. (1 TM)°	Greenwood
Russell, J. S. (1 TM)°	Spartanburg
Rutherford, W. F. (4 Pre-Med)	Newberry
Rutland, H. G. (1 Ch En)°	Fairfax
Rutledge, C. R. (2 Ind Phys)	Walhalla
Rutledge, T. T. (2 TM)	Easley
Rutz, A. E. (2 Ag En)	Camaguey, Cuba
Ryan, B. M. (3 AH)	Washington, D. C.
Ryve, A. B. (1 E-EE)°	Columbia
Ryttenberg, H. J. (1 A-Ent)	Sumter
Salmon, J. D. (PG Hort)°—	Ft. McPherson, Ga.
Salmond, W. C. (1 E-EE)°	Camden
Salter, E. L. (3 CE)	Walterboro
Salters, J. A. (G AH)°°	Trio
Sams, M. W. (3 Ag En)	Walterboro

Name and Course	Address
Sanders, C. B. (4 TM)	Anderson
Sanders, C. I. (3 Chem)	Ninety Six
Sanders, C. T. (1 TM)°	Richburg
Sanders, D. E. B. (2 CE)°	Spartanburg
Sanders, E. R. (2 A-Hort)	Frogmore
Sanders, F. G. (1 TM)	Jonesville
Sanders, J. C. (1 E-TE)	Seneca
Sanders, J. D. (1 TM)	Chester
Sanders, O. B. (4 Ed)	Yonges Island
Sanders, R. B. (1 E-EE)°	Ninety Six
Sanders, R. R. (3 TM)	Callison
Sanders, W. R. (1 E-EE)°	Rock Hill
Sandifer, R. L. (2 VAE)	Florence
Sanko, G. (4 Ed)	Aiken
Sargent, E. B. (2 Ag En)	Dade City, Fla.
Sartor, W. K. (1 Pre-Vet)°	Darlington
Satterfield, D. E. (4 Arch)	Lyman
Satterfield, D. G. (3 EE)	Lyman
Sauls, E. T. (1 Ed)°	Cordova
Saunders, C. F. (2 CE)	Sumter
Saunders, J. R. (2 Ag En), Wauchula, Fla.	
Savacool, R. C. (2 ME)	Bay Head, N. J.
Sawyer, G. W. (4 VAE)	Monetta
Saylors, J. H. (1 A&S)°	Easley
Saylors, R. L. (4 TM)	Ninety Six
Scaife, J. O. (1 Pre-Vet)°	Myrtle Beach
Scarborough, J. C. (1 E-ME)°	Lykesland
Scarborough, R. G. (2 TM)	Columbia
Scarpa, E. A. (1 Cr En)	Charleston
Schaefer, W. B. (2 Pre-Med)	Toccoa, Ga.
Schall, J. E. (1 Ch En)°	Aiken
Schirmer, W. (4 Chem)	Charleston
Schladensky, G. F. (1 Ch En)°	Huntingdon Valley, Pa.
Schlock, A. A. (G VAE)	Seneca
Schmidt, C. W. (2 ME)°	Clemson
Scogin, W. A. (1 E-EE)°	Clinton
Scurry, J. F. (1 A-AH)	Chappells
Seaber, J. A. (1 E-ME)	Blythewood
Seabrook, W. B. (4 ME)	Anderson
Seagraves, D. H. (4 TM)	Athens, Ga.
Sease, C. F. (4 Agron)	Ehrhardt
Sease, J. (4 Agron)	Ehrhardt
Sease, J. D. (1 Cr En)°	Columbia
Sease, T. M. (2 Ed)	Clinton
Seawright, R. E. (1 E-TE)°	Ware Shoals
Segal, C. K. (2 ME)°	Rock Hill
Segars, C. A. (1 A-Agron)°	Oswego
Sexton, S. H. (1 E-TE)°	Waco, Texas
Shaffer, J. K. (1 Ch En)	Columbia
Shands, E. B. (2 VAE)	Spartanburg
Shane, D. C. (4 TM)	Florence
Shank, S. E. (1 TE)	Mullins
Shannon, E. C. (1 E-Ag En)	Loris
Sharkey, A. M. (4 Ind Ed)	Raleigh, N. C.
Sharp, W. K. (1 A-Dairy)°	Anderson
Shaw, J. E. (3 Ch En)	Florence
Shealy, D. A. (1 Ed)	Chester
Shealy, E. B. (1 Pre-Med)°	Batesburg
Shealy, L. L. (3 Ind Ed)	Summerville
Shealy, T. L. (3 TM)	Spartanburg
Shealy, W. W. (2 A&S)	Columbia
Shearer, S. D. (4 CE)	Anderson
Shedd, T. E. (1 A-AH)	New Orleans, La.
Sheely, W. C. (2 EE)	Ballentine
Shenman, L. E. (2 EE), Staten Island, N. Y.	
Sherer, R. B. (4 EE)	Rock Hill
Sheridan, L. L. (2 EE)	Anderson
Sheriff, H. G. (1 A&S)°	Lyman
Sherrill, J. N. (1 E-CE)°	Spindale, N. C.
Shigley, D. G. (1 E-EE)°	Miami, Fla.
Shirlaw, E. J. (1 E-ME)°	Anderson
Shirley, D. A. (1 TM)	Langley
Shirley, G. H. (1 Ed)°	Seneca
Shirley, R. D. (3 TM)	Langley
Shoaf, I. A. (1 Ed)°	Vanderbilt, Pa.
Shoemaker, G. H. (1 Arch)°,	Odenton, Md.
Shokes, E. L. (1 E-EE)°	Charleston
Shook, C. M. (3 TM)	Greenville
Shoolbred, R. F. (3 CE)	Columbia

Name and Course	Address
Shore, P. C. (2 A&S)	Baldwin, Ga.
Shriner, R. F. (1 E-EE)°—	Charleston Heights
Shumpert, J. C. (1 E-EE)°	North
Shumpert, P. K. (3 ME)	North
Si, M. K. (4 TE)	Syriam, Burma
Sieg, R. M. (1 Ed)	Savannah, Ga.
Sifford, D. D. (2 A-AH)	Stanley, N. C.
Silvey, H. F. (1 E-EE)°	Anderson
Simmons, C. E. (1 E-ME)	Pickens
Simmons, G. R. (1 Cr En)°	Swansea
Simmons, W. J. (1 TM)°	La France
Simms, B. R. (3 TM)	Anderson
Simons, M. (1 Ind Phys)°	Summerville
Simons, T. J. (1 A&S)°	Charleston
Simpson, F. H. (2 TM)	Anderson
Sims, R. C. (3 EE)	Spartanburg
Sinclair, J. C. (3 TE)	Camden
Sinclair, J. L. (1 E-ME)°	Camden
Sinclair, J. P. (1 E-EE)°	Savannah, Ga.
Sineath, C. L. (2 Ed)	Islandton
Sistare, J. D. (1 Ag Ch)	Lancaster
Skelton, B. J. (2 A-Hort)	Clemson
Skelton, B. R. (3 A&S)	Clemson
Skinner, J. T. (1 E-ME)	Wedgefield
Skove, M. J. (2 Ind Phys)°	Clemson
Sloan, J. A. (4 ME)	Clemson
Small, L. F. (4 Ag En)	Nichols
Small, W. E. (1 A-Hort)°	Charleston
Smart, D. E. (2 TE)	Greenwood
Smith, A. G. (2 VAE)	Greenville
Smith, B. C. (4 Ed)	Conover, N. C.
Smith, C. D. (4 Dairy)	Spartanburg
Smith, C. J. (1 Ch En)°	Charleston
Smith, C. R. (3 EE)	Orangeburg
Smith, D. F. (1 E-ME)°	Pittsburgh, Pa.
Smith, D. W. (2 VAE)	Edgefield
Smith, E. M. (2 A-AH)	Abbeville
Smith, E. T. (2 TM)	Startex
Smith, G. F. (1 E-ME)°	Greenville
Smith, G. G. (1 E-ME)°	Ashland, Va.
Smith, G. N. (1 E-EE)°	Anderson
Smith, H. C. (1 E-EE)°	Greenwood
Smith, J. B. (2 TM)	Kinards
Smith, Jimmy D. (3 TM)	Liberty
Smith, Joe D. (1 E-ME)°	Georgetown
Smith, J. E. (4 AH)	Kinards
Smith, J. F. (2 VAE)	Madison
Smith, J. K. (2 TM)	Taylors
Smith, J. L. (3 AH)	McCormick
Smith, Jerry R. (1 A&S)°	Macon, Ga.
Smith, John R. (4 Pre-Med)	Charleston
Smith, J. T. (2 Pre-Med)	Easley
Smith, J. W. (1 E-ME)°	Bishopville
Smith, L. C. (4 TE)	Greenwood
Smith, L. E. (1 E-EE)°	North Charleston
Smith, L. N. (2 CE)	Savannah, Ga.
Smith, M. C. (4 TM)	Winnsboro
Smith, M. G. (1 VAE)°	York
Smith, M. H. (1 E-ME)°	Sumter
Smith, M. L. (3 CE)	Anderson
Smith, M. W. (1 Pre-Med)°	Greenville
Smith, R. D. (1 E)°	Bishopville
Smith, R. E. (1 E-ME)°	Barnwell
Smith, R. F. (2 A&S)	Landrum
Smith, R. H. (Unc)°°	Pickens
Smith, R. L. (2 TC)	Pelzer
Smith, R. R. (3 EE)	Brevard, N. C.
Smith, S. E. (3 ME)	North Charleston
Smith, S. N. (4 Ag En)	Spartanburg
Smith, T. E. (2 VAE)	Naples, N. C.
Smith, W. E. (3 Ag En)	Rowesville
Smith, W. H. (2 TM)	Spartanburg
Smoak, H. G. (3 AH)	Pacolet
Smoak, J. A. (1 E-Ag En)°	Yonges Island
Smoak, J. F. (1 Cr En)°	Columbia
Snapp, O. I. (3 CE)	Ft. Valley, Ga.
Snavely, W. B. (1 E-EE)°	Anderson
Snider, I. L. (1 E-CE)	Anderson
Snipes, H. B. (3 TM)	Anderson

Name and Course	Address
Snipes, H. J. (1 Ed)°	Easley
Snoddy, J. W. (2 Cr En)	Dillon
Snypp, J. R. (1 Pre-Vet)°	Rock Hill
Sorrell, W. F. (1 E-CE)°	Taylors
Soudan, A. E. (1 A-AH)°	Glenview, Ill.
Southern, B. F. (2 Chem)	Travelers Rest
Southworth, W. H. (1 A)°,	Somerset, Mass.
Sowell, J. W. (3 VAE)	Kershaw
Sowell, M. E. (2 VAE)°	McBee
Sox, D. K. (2 TM)	West Columbia
Sparks, E. L. (1 E-EE)°	Spartanburg
Sparks, L. M. (G Ent)°°	Clemson
Spearman, D. L. (1 TM)°	Pelzer
Spearman, E. H. (1 E-ME)°	Central
Spearman, E. L. (3 CE)	Ninety Six
Spearman, J. D. (1 E-CE)°—	North Charleston
Spearman, N. B. (1 A)°	Greenville
Spence, W. D. (1 Ch En)°	Columbia
Spencer, B. R. (3 TM)	Greenwood
Spiers, W. J. (1 E-Ag En)°	Cameron
Spivey, C. B. (1 E-ME)°	North Augusta
Spooner, R. J. (1 TM)	Ogdensburg, N. Y.
Sprawls, P. (3 Ind Phys)	Williston
Springer, R. W. (1 A-Dairy)°	Seneca
Sprouse, B. J. (2 TM)	Slater
Squires, J. D. (2 A-Agron)	Aynor
Stack, C. N. (1 A)	Pinewood
Stafford, W. F. (4 Ch En)	Oswego
Stahl, E. (3 TM)	Elmhurst, N. Y.
Stakely, J. O. (Unc)°°	Clemson
Stall, A. N. (2 TM)	Greenville
Stallings, E. L. (2 EE)	Newberry
Stamps, H. D. (2 A&S)	Piedmont
Stanley, J. D. (3 EE)	Clemson
Stanley, R. L. (1 E-EE)°	Varnville
Stansell, H. D. (4 TM)	Greenville
Stansell, M. J. (1 E-ME)°	Westminster
Staples, F. D. (3 TE)	Abbeville
Starkey, L. V. (3 A&S)	Clemson
Starnes, C. R. (4 TM)	Gastonia, N. C.
Starnes, F. K. (1 TM)°	Lancaster
Starnes, W. E. (1 TM)°	Great Falls
Stas, J. E. (1 A)°	Latrobe, Pa.
Steed, J. A. (1 E-ME)°	Anderson
Steedly, J. R. (1 Ed)°	Bamberg
Steele, J. T. (1 E-CE)°	Rock Hill
Steele, N. D. (2 EE)	Statesville, N. C.
Stegall, E. M. S. (Unc)°°	Anderson
Steinbrecher, J. E. (1 E)°—	Huntington, W. Va.
Steinmeyer, J. H. (3 A&S)	Barnwell
Stelling, C. M. (1 Ind Phys)°—	Augusta, Ga.
Stembridge, G. E. (1 A)°	Ellijay, Ga.
Stephens, J. H. (2 TM)	Rock Hill
Stephens, R. L. (1 A-Agron)°	Dillon
Stephens, V. T. (1 Ch En)	Central
Stephenson, R. F. (2 A&S)	Winnsboro
Steuer, W. T. (2 EE)	Marion
Stevens, F. W. (2 Ar En)	Charleston
Stevens, J. W. (1 E-ME),	North Charleston
Stevenson, E. A. (4 AH)	Ulmers
Stevenson, J. C. (2 Pre-For)	Clemson
Stevenson, R. F. (2 TM)	Greenwood
Stewart, D. W. (2 A-AH)	Fountain Inn
Stewart, M. E. (Unc)°°	Central
Stewart, R. J. (2 ME)	Humboldt, Tenn.
Still, D. B. (1 A-AH)	Blackville
Still, J. E. (3 TM)	North Augusta
Stoddard, R. C. (2 VAE)	Owings
Stokes, F. M. (1 Ch En)°	Greer
Stokes, L. E. (1 E-Ag En)	Darlington
Stokes, P. W. (2 CE)	Charleston
Stone, C. L. (1 TM)	Piedmont
Stone, R. (4 VAE)	Hyman
Stone, W. O. (4 TC)	Newberry
Stoops, R. F. (1 E-EE)°—	Charleston Heights
Stramm, R. A. (3 A&S))	Charleston

Name and Course	Address
Strange, C. N. (3 AH)	Taylors
Strange, H. W. (1 Arch)°	Columbia
Stribling, H. D. (2 ME)	Clemson
Strickland, E. B. (1 E)°	Green Sea
Strickland, J. C. (1 A-AH)	Smoaks
Stringer, A. F. (1 Pre-Vet)°	Belton
Strock, R. L. (1 Ed)°	Cope
Strom, J. L. (3 EE)	Charleston
Stuart, B. W. (1 E-ME)°	Hamer
Stubbs, S. W. (2 Ar En)	Sumter
Stuck, C. G. (2 A-Ag Ec)	Pomaria
Sturgis, W. B. (2 Ch En)	Rock Hill
Suber, C. (1 E-ME)°	Anderson
Suber, R. D. (3 Agron)	Orangeburg
Suggs, J. D. (1 E-EE)°	Columbia
Suggs, T. R. (4 Pre-Med)	Loris
Sullivan, D. G. (3 TE)	Spartanburg
Sullivan, J. K. (2 Chem)	Greenwood
Sullivan, P. B. (1 E-ME)°	Arlington, Va.
Sullivan, R. L. (4 EE)—	Cristobal, Canal Zone
Summers, J. W. (3 Ar En)	Orangeburg
Sumner, W. T. (4 Arch)	Spartanburg
Suriani, O. N. (2 Ar En)°,	New York, N. Y.
Sutherland, A. C. (3 TM)	Pendleton
Swearingen, G. T. (4 AH)	Trenton
Sweat, L. W. (1 E-CE)°	Ladson
Sweet, G. S. (1 E-EE)°	Beaufort
Swetenburg, J. R. (3 TE)	Anderson
Swygert, J. K. (3 Ind Ed)	Ballentine
Swygert, R. H. (2 A-AH)	Iva
Taber, J. W. (4 Pre-Med)	Sandy Springs
Talbert, J. C. (4 A&S)	Concord, N. C.
Talley, J. O. (1 E-ME)°	Greenville
Talley, R. H. (1 A)	Tamassee
Tankersley, L. D. (4 Arch)	Greenville
Tanner, R. C. (4 Ag En)	Kingstree
Tanner, R. D. (1 E-CE)°	Easley
Tanner, R. V. (2 ME)	Kingstree
Tannery, D. E. (2 CE)	Westminster
Tarleton, B. L. (3 TE)	Rock Hill
Tarpley, W. A. (G Ent)°	Norwood, Ga.
Tarte, P. E. (2 TM)	Abbeville
Tate, G. T. (3 EE)	Greenville
Tatham, J. R. (4 TE)	Greenville
Taylor, C. B. (2 A-Agron)	Jefferson
Taylor, D. T. (4 TE)	Florence
Taylor, G. R. (2 ME)	Erwin, Tenn.
Taylor, J. A. (1 E-EE)	Greenville
Taylor, J. H. (1 E-ME)°	Calhoun Falls
Taylor, J. K. (1 A&S)°	Lancaster
Taylor, J. M. (1 E-CE)°	Andrews
Taylor, J. S. (2 TE)	Arlington, Va.
Taylor, R. H. (1 Arch)°	Columbia
Taylor, T. W. (1 A-AH)	Laurens
Taylor, W. H. (3 EE)	Anderson
Templeton, C. (1 Cr En)°	Greenville
Templeton, J. A. (4 TM)	Greenville
Terry, J. P. (1 Ch En)°	Hartsville
Thackston, T. A. (2 ME)	Charlotte, N. C.
Than, M. M. (4 TE)	Rangoon, Burma
Tharpe, B. J. (4 Ch En)	Varnville
Theos, C. J. (2 EE)	Charleston
Thomas, J. B. (1 TM)°	Easley
Thomas, J. H. (2 Ind Ed)	West Columbia
Thomas, James W. (2 ME)	Florence
Thomas, John W. (3 Agron)	Lake City
Thomas, L. P. (2 ME)	Spartanburg
Thomas, L. W. (1 E-EE)	Spartanburg
Thomas, M. H. (2 VAE)	Mullins
Thomas, R. B. (Unc)°°-°	Clemson
Thomas, R. L. (1 TM)°	Blenheim
Thomas, W. C. (2 Ag En)	Edgemoor
Thomas, Wendell H. (PG Ag Ec)—	Greenville
Thomas, William H. (1 VAE)	Longs
Thomas, W. L. (1 Ed)°	Layton, Pa.
Thomason, J. F. (3 Cr En)	Greenville
Thomason, J. M. (1 Cr En)°	Olanta
Thomason, W. P. (1 E-EE)°	Laurens

Name and Course	*Address*
Thompson, A. G. (2 TE)	Columbia
Thompson, H. D. (3 TM)	London, Canada
Thompson, Harold E. (2 Ch En)	Anderson
Thompson, Huston E. (4 TE)	Gray Court
Thompson, H. F. (1 E-ME)—	Charleston Heights
Thompson, M. H. (1 TM)	Pauline
Thompson, S. G. (4 TC)—	Charleston Heights
Thompson, T. A. (1 A)°	Kingstree
Thorne, J. C. (4 EE)	Chesnee
Thornton, J. R. (4 TM)	Greenville
Thornton, T. W. (1 TM)	Elberton, Ga.
Thruston, T. F. (1 E-TE)°	Greenville
Tice, J. D. (3 TM)	Anderson
Tiller, W. E. (2 Ind Phys)	Anderson
Tillman, J. (1 E-EE)°	Glennville, Ga.
Timmerman, A. J. (1 Pre-Med)°,	Hartsville
Timmerman, J. A. (2 Pre-Med)	Pelzer
Tinsley, H. D. (1 E-EE)°	Hodges
Tinsley, J. F. N. (3 TM)	Easley
Tinsley, J. K. (4 TM)	Forest City, N. C.
Tisdale, J. W. (3 Pre-Med)	Mayesville
Tisdale, R. J. (3 TE)	High Shoals, N. C.
Tobias, L. A. (1 Ed)°	Hostetter, Pa.
Tolbert, R. E. (1 Cr En)°—	Chambersburg, Pa.
Tonin, L. (1 Ed)°	Wendel, Pa.
Torbik, R. A. (1 E-CE)°—	Scotch Plains, N. J.
Torrence, R. M. (3 TE)	Rock Hill
Toth, W. J. (2 EE)	Canonsburg, Pa.
Towers, F. W. (2 Ar En)	Flat Rock, N. C.
Townsend, G. E. (3 ME)	Rock Hill
Townsend, J. A. (1 TM)	Bennettsville
Townsend, J. M. (1 TM)°	Bennettsville
Tragus, E. T. (2 Pre-Med)	Allentown, Pa.
Treadaway, J. P. (1 Pre-Vet)°—	Lumberton, N. C.
Tribble, R. L. (1 E-ME)°,	Charlotte, N. C.
Tribble, W. C. (1 Pre-Vet)	Piedmont
Trimmier, J. R. (2 Ind Phys)	Bedford, Pa.
Tripp, O. M. P. (Unc)°°	Easley
Tritapoe, H. G. (2 EE)	Graniteville
Trively, T. H. (4 Dairy)	Clemson
Trotter, O. (1 Cr En)°	Pickens
Trotter, P. R. (Unc)°°	Pelzer
Trowell, J. M. (2 Chem)	Pacolet
Truesdel, J. D. (1 E-ME)	Kershaw
Truluck, D. L. (3 Ind Phys)	Hampton
Tucker, C. B. (4 VAE)	Mt. Croghan
Tucker, C. D. (1 E-CE)°	Charleston
Tucker, M. L. (G)°°	Williamston
Tumbleston, I. W. (1 Ed)	Yonges Island
Turner, A. E. (1 A&S)°—	Miami Springs, Fla.
Turner, B. N. (Unc)°°	Pickens
Turner, C. R. (4 AH)	Pelzer
Turner, D. H. (1 E-EE)°	Blacksburg
Turner, D. L. R. (2 TM)	Spartanburg
Turner, J. A. (2 VAE)	Pamplico
Turner, J. H. (2 EE)	Marion
Turner, L. J. (4 Pre-Med)	North Augusta
Turner, M. H. (Unc)°°	Piedmont
Turner, P. (3 TC)	Greenville
Turner, R. A. (2 Ind Ed)	Blacksburg
Turner, R. P. (2 VAE)	Woodruff
Turner, S. F. (Unc)°°	Pickens
Turner, T. A. (4 Ind Ed)	Blacksburg
Turner, W. K. (4 Arch)	Columbia
Tuten, J. M. (4 EE&Ind Phys)	Greenville
Uldrick, J. P. (PG ME)	Donalds
Ulmer, J. C. (4 AH)	Elloree
Underwood, J. R. (4 VAE)	Walhalla
Valentine, B. J. (2 ME)	North Augusta
Van Arsdale, W. K. (1 E-EE)°	Greer
Van Blaricom, L. O. (Unc)°°-°	Clemson
Vance, C. E. (2 Cr En)	Greenville
Vannice, C. W. (1 E-EE)°	Georgetown
Van Ravestein, J. H. (1 E-EE)°,	Piedmont

Name and Course	*Address*
Varnadoe, R. H. (1 E-EE)°	Hardeeville
Varnadore, G. E. (1 TC)°	Lancaster
Vaughan, O. H. (G ME)	Seneca
Vaughn, C. M. (1 E-ME)°	Greer
Venturella, G. P. (1 E-Ag En)°	Anderson
Verdin, J. W. (3 Dairy)	Greenville
Vermillion, R. J. (G VAE)°°	Fair Play
Voight, W. B. (3 A&S)	Summerville
Wactor, W. R. (2 Ch En)	Orangeburg
Walden, R. (4 CE)	Fairforest
Walker, H. C. (1 E-ME)°	Decatur, Ga.
Walker, H. O. (4 Ar En)°°	Greenville
Walker, J. E. (1 E-EE)°	Arlington, Va.
Walker, J. G. (1 E-ME)°	Marion
Walker, W. E. (2 Chem)	Rock Hill
Wall, A. D. (3 Ind Ed)	Charleston
Wall, B. C. (2 CE)	North Augusta
Wall, H. H. (2 Ed)	Ridgeland
Wall, J. E. (1 VAE)°	Chesnee
Wall, J. W. (2 A-AH)	Ridgeland
Wallace, J. H. (2 TM)	Gaffney
Wallace, L. A. (3 Agron)	Cades
Walpole, B. L. (4 Agron)	Johns Island
Walters, E. H. (4 Ag En)	Lancaster
Walters, J. E. (1 Pre-For)°	Clemson
Wannamaker, R. B. (1 A-AH)°—	Orangeburg
Ward, A. W. (4 ME)	Birmingham, Ala.
Ward, D. L. (Unc)°°	Pickens
Ward, L. R. (Unc)°°	Pickens
Ware, G. R. (4 Agron)	Due West
Warner, J. R. (2 EE)	Charleston Heights
Warren, G. (1 A&S)°	Hampton
Warren, W. R. (1 Cr En)°	Spartanburg
Warriner, L. R. (4 TM)	Emory, Va.
Washburn, W. H. (2 EE)	Bostic, N. C.
Washington, C. E. (3 TM)	Honea Path
Washington, J. M. (1 Ch En)°	Clemson
Washington, T. E. (1 E-EE)°	Clemson
Wasson, F. J. (1 E-ME)	Statesville, N. C.
Wasson, W. N. (3 CE)	Laurens
Waters, G. D. (1 VAE)	Bethune
Waters, J. R. (3 CE)	Beaufort
Watford, B. J. (2 A-Dairy)	Timmonsville
Watson, B. G. (2 CE)	Spartanburg
Watson, J. K. (2 VAE)	Batesburg
Watson, T. C. (2 ME)	Taylors
Watson, Z. S. (3 EE)	Marion
Watts, J. H. (4 CE)	Mountville
Way, F. M. (1 A-AH)°	Charleston
Weaver, D. G. (1 TM)	Easley
Weaver, J. R. (2 ME)	Florence
Webb, B. K. (4 Ag En)	Cross Anchor
Webb, C. R. (1 E-CE)°	Elkton, Md.
Weber, T. W. (3 Cr En)—	Woodbridge, N. J.
Webster, C. (3 VAE)	Blenheim
Webster, H. K. (1 E)°	Lake City
Weed, R. O. (4 Hort)	Irmo
Weeks, J. W. (1 E-ME)°	Pinewood
Weeks, W. C. (1 A-AH)°	Williston, Fla.
Weimorts, S. (1 Ind Ed)	Williston
Weir, J. M. (1 E-EE)°	Belton
Welch, M. O. (2 A-Agron)	Ehrhardt
Weldon, W. W. (4 VAE)	Bennettsville
Wells, D. O. (3 Arch)	Pacolet
Wells, J. W. (2 EE)	Columbia
Wells, W. H. (1 E-ME)	Pacolet Mills
Wensing, T. J. (1 Ed)°	Greensburg, Pa.
Wessinger, W. Y. (1 Ch En)°	Leesville
West, A. S. (1 E-ME)	Cassatt
West, F. B. (4 VAE)	Conway
West, F. E. (1 E-ME)°	Camden
West, M. L. (4 AH)	Holly Hill
West, R. L. (4 VAE)	Bowman
West, W. H. (2 EE)	Simpsonville
Westbrook, B. G. (2 A-AH)	Campobello
Westbury, B. M. (1 Pre-Vet)	St. George
Westbury, T. O. (1 E-EE)°	Grover
Whelan, D. J. (3 EE)	Savannah, Ga.

Name and Course	Address
Whetsell, E. D. (1 E-EE)°	Bowman
Whetstone, J. F. (3 CE)	North
Whisonant, J. S. (1 E-ME)°	Gaffney
White, A. E. (1 E-Ag En)°	Mt. Pleasant
White, C. H. (2 Ed)	Greenville
White, H. M. (G Chem)°°	Camden
White, J. A. (4 Pre-Med)—	Greensboro, N. C.
White, J. R. (1 E-ME)	Seneca
White, K. B. (2 A&S)	Pacolet
White, L. A. (4 TM)	Camden
White, M. V. (1 Arch)	Anderson
White, P. M. (3 EE)	Greenwood
White, R. W. (2 Ar En)	Savannah, Ga.
White, S. M. (4 Pre-Med)	Clemson
Whiteaker, J. A. (1 E-ME)°	Rock Hill
Whitehead, B. J. (3 TM)	Great Falls
Whiteside, P. W. (4 AH)—	Dearmanville, Ala.
Whitesides, J. C. (4 Ag En)	Clover
Whitfield, H. K. (2 ME)	Anderson
Whitlaw, J. T. (4 Ent)	Silver Spring, Md.
Whitlock, C. K. (1 Pre-Med)°	Lake City
Whitlock, R. E. (4 TM)	Lake City
Whitlow, D. R. (3 EE)	Royston, Ga.
Whitmire, D. T. (1 E-ME)	Pickens
Whittaker, J. R. (1 Pre-Vet)°	Gray Court
Whitten, R. A. (4 TM)	Macon, Ga.
Whitten, W. A. (1 E-CE)	Anderson
Whitworth, C. J. (3 Chem)	Toccoa, Ga.
Wicker, H. R. (1 E-EE)°	Greenville
Wicker, W. L. (1 E-ME)°	Georgetown
Wiggins, B. S. (3 Dairy)	Hopkins
Wiggins, J. C. (1 E-CE)°	Garnett
Wiggins, J. E. (1 E-CE)	Arlington, Va.
Wiggins, J. W. (3 VAE)	Charleston
Wiggins, W. W. (1 E-CE)°,	Arlington, Va.
Wigington, E. E. (1 E-ME)°	Walhalla
Wigington, J. (2 ME)	Salem
Wigington, M. (1 Pre-For)	Salem
Wigington, W. F. (3 AH)	Piedmont
Wilder, B. E. (1 E-TE)°	Spartanburg
Wilkerson, J. T. (4 TM)	Anderson
Wilkerson, R. W. (2 Ar En)	Winnsboro
Wilkes, G. C. (3 Ind Ed)	Clinton
Wilkes, W. L. (2 CE)	Columbia
Wilkie, J. E. (3 CE)	Gastonia, N. C.
Wilkins, D. F. (4 TM)	Chesnee
Wilkins, J. D. (2 A-AH)	Chesnee
Willard, R. O. (3 TM)	Asheboro, N. C.
Williams, F. E. (3 TE)	Lancaster
Williams, H. M. (3 EE)	Campobello
Williams, H. S. (2 TM)	Greenville
Williams, J. A. (2 ME)	Fairfax
Williams, L. (2 Pre-Vet)	Marion
Williams, R. E. (1 Ag Ch)°	Edon, Ohio
Williams, S. B. (G Ed)°°	Greer
Williams, T. L. (2 Pre-Vet)	Rock Hill
Williams, T. R. (2 A-AH)	Edgefield
Williams, T. W. (2 Arch)	Taylors
Williams, W. G. (1 E-ME)	Greenville
Williams, W. L. (1 Ed)°—	Moundsville, W. Va.
Williams, W. T. (1 E-ME)°	Easley
Williamson, H. S. (1 Pre-Med),	Naval Base
Williamson, J. H. (1 E-ME)—	Charleston Heights
Willis, J. K. (4 VAE)	Clio
Wills, F. D. (2 Ind Phys)	Monetta
Wilson, B. L. (4 TE)	Anderson
Wilson, B. S. (2 Cr En)	Charleston
Wilson, D. B. (3 ME)	Spartanburg
Wilson, D. L. (2 A-Ag Ec)	Cades
Wilson, H. L. (3 ME)	Kingstree
Wilson, H. R. (1 E-EE)°	Anderson
Wilson, J. C. (2 TM)	Central

Name and Course	Address
Wilson, J. P. (2 Pre-Med)	Walterboro
Wilson, J. W. (1 E-EE)	Fort Mill
Wilson, L. C. (2 ME)	Anderson
Wilson, L. G. (1 E-TE)°	Wellford
Wilson, L. O. (2 EE)	Fort Mill
Wilson, R. F. (3 ME)	Atlanta, Ga.
Wilson, W. B. (1 Ed)°	Rock Hill
Wilson, W. C. (1 Cr En)°	Anderson
Wilson, W. D. (3 ME)	Camden
Wilson, W. N. (2 TM)	Anderson
Wilson, W. S. (1 E-ME)°	Greer
Wimberly, F. N. (1 E-EE)°	Camden
Winborne, W. R. (1 Arch)°	Conway
Winchester, D. B. (3 ME)	Pickens
Winchester, J. D. (1 TM)	Pickens
Winchester, S. W. (1 E-EE)°	Fort Mill
Wingard, T. K. (1 E-ME)°	Lexington
Wingate, E. K. (2 ME)	Charleston
Winslett, W. A. (1 VAE)°	Easley
Wise, T. H. (2 EE)	Greenville
Witherspoon, D. M. (1 Pre-Vet)	Elloree
Witherspoon, W. D. (2 A-AH)—	Timmonsville
Witt, J. L. (Unc)°°-°	Clemson
Wofford, E. L. (2 A-Poul),	Gainesville, Ga.
Wolff, P. W. (4 TM)	Anderson
Womack, T. P. (1 Ent)	Brunswick, Ga.
Wood, J. C. (1 E-ME)°	Dillon
Wood, J. L. (2 TM)	Williamston
Wood, K. J. (2 ME)	Greenville
Woodall, C. E. (3 VAE)	Clemson
Woodard, J. W. (2 Ed)	Georgetown
Woods, B. O. (1 E-ME)°	Easley
Woods, G. B. (3 EE)	Rock Hill
Woods, P. A. (2 Ed)	Naval Base
Woods, T. R. (2 ME)	Jacksonville, Fla.
Wooten, E. T. (4 Poul)	Greer
Workman, G. S. (3 Arch)	Rock Hill
Workman, J. P. (4 Dairy)°°	Kinards
Workman, N. R. (1 E-ME)	Kinards
Worley, F. C. (4 Ag En)	Nichols
Worthy, W. E. (4 TM)	Chester
Wrenn, R. G. (1 VAE)°	Clinton
Wrenn, T. W. (2 ME)	Greenville
Wright, B. R. (1 Arch)	Belton
Wright, C. D. (4 Ar En)°°	Shalimar, Fla.
Wright, E. J. (3 Agron)	Belton
Wright, H. T. (1 Ed)°	High Point, N. C.
Wright, J. W. (2 A-AH)	Johnston
Wright, L. H. (3 Chem)—	Staten Island, N. Y.
Wright, S. P. (1 E-ME)	Asheville, N. C.
Wyatt, C. N. (4 TM)	Greenville
Wyatt, R. L. (4 EE)	Florence
Wyman, J. F. (3 AH)	Estill
Wynn, F. E. (1 TM)	Taylors
Yancey, W. H. (4 Ag Ec)	Atlanta, Ga.
Yarborough, G. L. (3 Cr En)—	Newport News, Va.
Yarborough, T. C. (1 E-ME)°—	Timmonsville
Yarborough, W. T. (1 Ed)	Walhalla
Yaun, L. A. (3 A&S)	Aiken
Yeargin, R. A. (1 Ch En)°	Greer
Yeary, R. C. (1 A&S)°	Nicholasville, Ky.
Yike, R. M. (3 A&S)	Atlanta, Ga.
Yockel, V. M. (1 TM)°	Jersey City, N. J.
Yonce, C. E. (1 A-AH)°	Ridge Spring
York, F. H. (1 E-ME)°	Allendale
Young, H. L. (1 A-AH)°	Hemingway
Young, J. E. (3 AH)	Orangeburg
Young, R. W. (1 E-CE)	Rock Hill
Young, S. H. (2 TM)	Timmonsville
Zimmerman, C. G. (2 TM)	Florence
Zorn, R. A. (1 A-Ag Ec)	Denmark

NUMBER OF STUDENTS MAJORING IN EACH CURRICULUM, FIRST SEMESTER, 1954-1955

Classification	Agriculture	Pre-Forestry	Pre-Veterinary	Arts and Sciences	Industrial Physics	Pre-Medicine	Agric. Chemistry	Chemistry	Education	Industrial Ed.	Voc. Agric. Ed.	Agric. Engr.	Arch. Engr.	Architecture	Ceramic Engr.	Chemical Engr.	Civil Engr.	Electrical Engr.	Mech. Engr.	Textile Chemistry	Textile Engr.	Textile Mfg.	Postgraduate	Graduate	Unclassified	Enroll. by Classes
Senior	80	...	...	19	4	12	1	7	11	8	20	15	9	19	6	9	14	25	23	9	25	72	...	...	...	388
Junior	61	...	...	24	5	11	1	7	5	7	12	23	13	17	7	11	37	48	41	4	28	66	...	...	...	428
Sophomore	89	4	8	35	8	21	1	7	19	15	34	36	20	17	10	14	38	84	87	12	21	86	...	...	...	666
Freshman	112	11	18	37	3	38	3	5	45	18	37	42	15	35	27	44	76	154	178	14	41	129	...	...	42	1,082
Postgraduate	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	20	...	...	20
Graduate	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	64	...	64
Unclassified	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	42	42
Total	342	15	26	115	20	82	6	26	80	48	103	116	57	88	50	78	165	311	329	39	115	353	20	64	42	2,690

ENROLLMENT BY COUNTIES AND STATES, FIRST SEMESTER, 1954-1955

County	*Total*
Abbeville	30
Aiken	38
Allendale	13
Anderson	223
Bamberg	23
Barnwell	14
Beaufort	12
Berkeley	12
Calhoun	10
Charleston	131
Cherokee	28
Chester	36
Chesterfield	30
Clarendon	12
Colleton	18
Darlington	31
Dillon	17
Dorchester	16
Edgefield	12
Fairfield	12
Florence	77
Georgetown	22
Greenville	241
Greenwood	79
Hampton	17
Horry	46
Jasper	13
Kershaw	23
Lancaster	34
Laurens	48
Lee	9
Lexington	29
Marion	26
Marlboro	24
McCormick	5
Newberry	28
Oconee	85
Orangeburg	49
Pickens	167
Richland	85
Saluda	18
Spartanburg	151
Sumter	52
Union	15
Williamsburg	22
York	85
South Carolina Total	2,168

State or Country	*Total*
Alabama	7
Burma	3
California	1
Canada	1
Canal Zone	1
Delaware	5
District of Columbia	5
Estonia	1
Florida	40
Georgia	103
Illinois	5
Indiana	1
Kansas	2
Kentucky	3
Louisiana	2
Maryland	10
Massachusetts	6
Michigan	4
Missouri	1
Netherlands West Indies	1
New Jersey	28
New York	45
North Carolina	151
Ohio	4
Pennsylvania	43
Puerto Rico	3
South Carolina	2,168
Tennessee	13
Texas	1
Virginia	24
Washington	1
West Virginia	7
Grand Total	2,690

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INDEX—Continued