

Daniel

Volume XXXVI

NASHVILLE, TENN.

Number 9

THE BULLETIN

of

Tennessee Agricultural and
Industrial State College



Catalog Number: 1947-1948

Announcement: 1948-1949

Published Monthly by Authority of the State Board of Education

Entered August 16, 1912, at the Post Office, Nashville, Tenn., as
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THE FRANKLIN CO., OH.

CALENDAR FOR 1948

JANUARY							FEBRUARY							MARCH							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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8	9	10	11	12	13	14	8	9	10	11	12	13	14	8	9	10	11	12	13	14	8	9	10	11	12	13	14
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MAY							JUNE							JULY							AUGUST						
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SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER						
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BASIC PHILOSOPHY OF THE COLLEGE

How we should educate the youth of Tennessee should be determined by Nature's gifts in the form of natural and human resources. Tennessee abounds in natural and human resources and in general compares favorably with other states in the Union.

Being aware of the potentialities for converting and reshaping these resources into useful and worthwhile things, it is the purpose of education to develop them and thus increase the productivity of the State for the total good of the nation.

The College further realizes its keen responsibility for fulfilling its purpose in a program of education extending from the nursery school to the university.

Tennessee Agricultural and Industrial State College purposes to educate the youth by assisting and directing him in a complete knowledge and understanding of these resources and of the value of developing and utilizing them to the end that Tennessee may take its rightful place in the vanguard of the states of the nation.

No. 111-1949

THE FRANKLIN CO., OH.

CALENDAR FOR 1949

JANUARY							FEBRUARY							MARCH							APRIL						
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CALENDAR FOR THE SESSION 1948-49

September 15, Wednesday..... First Faculty Meeting

FALL QUARTER, 1948

September 16-18, Thursday-Saturday..... Freshmen Week Program
 September 20, Monday..... Freshmen Registration
 September 21-22, Tuesday-Wednesday..... General Registration
 September 23, Thursday..... Classes Begin
 November 25, Thursday..... Thanksgiving Holiday
 December 11, Saturday..... Fall Quarter Ends

WINTER QUARTER, 1948-49

December 13-14, Monday-Tuesday..... Registration Winter Quarter
 December 15, Wednesday..... Classes Begin
 December 21, Tuesday (12 noon)-
 January 3 Monday (8:00 a. m.)..... Christmas Recess
 March 10, Thursday..... Examinations close,
 Winter Quarter Ends

SPRING QUARTER, 1949

March 14-15, Monday-Tuesday..... Registration
 March 16, Wednesday..... Classes Begin
 May 27, Friday..... Examinations Close,
 Spring Quarter Ends
 May 29, Sunday..... Baccalaureate Sermon
 May 30, Monday..... Commencement Exercises

SUMMER QUARTER, 1949

June 6, Monday..... Registration, First Term
 Summer Quarter
 July 13, Wednesday..... First Term Ends
 July 14, Thursday..... Registration, Second Term
 Summer Quarter
 August 19, Friday..... Summer Quarter Ends

TENNESSEE STATE BOARD OF EDUCATION

GOVERNOR JIM NANCE McCORD, *Ex-Officio Member*.....Nashville
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SUPERINTENDENT ERNEST C. BALL Memphis
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MR. WM. R. WEBB.....Bell Buckle
MR. SAM WILSON.....Loudon
MISS MAUDE HOLMAN, *Executive Secretary*Nashville

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GEORGE WILLIAM GORE, JR., A.B., Ed.M., Ph.D. X	Dean of the College
EARL L. SASSER, B.S., M.A., Ph.D. X	Registrar
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✓ E. P. JOHNSON, B.S.	Bursar
NONA I. WORK, A.B.	Cashier
JAMES M. BELLE, B.S. X	Supervisor of Physical Plant
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✓ MARTHA M. BROWN X	Library Consultant
*VIRGINIA S. NYABONGO, B.A., M.A., Ph.D. X	Student Personnel Director
†C. EDNA ADAMS, A.B., M.A.	Acting Student Personnel Director
W. K. FOX, B.S., B.D. X	Dean of Men
✓ EDNA R. HANKAL, A.B.	Dean of Women
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MATTIE E. BIOUS REED, B.S.	Dietician
JANIE E. ELLIOTT	Cafeteria Supervisor

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HUBERT B. CROUCH, A.B., M.S., Ph.D.	
GEORGE W. GORE, JR., B.A., Ed.M., Ph.D.	
ALMA DUNN JONES, A.B., M.A.,	Secretary

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✓ EVELYN CARTER, B.S.	Bookkeeper, Business Office
✓ MARY F. CARTER, B.S., M.A. X	Assistant Registrar
✓ MILDRED MAE CATER, B.S.	Executive Clerk, President's Office

*On leave, half year, 1947-48.

†Half Year, 1947-48.

MINNIE F. CONNER	Secretary to Division of History and Geography
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✓ LAVINIA DUMAS	Matron of Wilson Hall
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CLARA M. GLEAVES	Clerk, Registrar's Office
**HELEN L. GLOVER, B.S.	Secretary to President
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✓ M. R. HARDY, B.S.	Clerk, Post Office
✓ RUBY HARPER	Secretary to the Department of Health and Physical Education
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✓ VERA A. HOWELL, B.S.	Clerk, Registrar's Office
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DOROTHY MCKEE, B.S.	Secretary to Business Manager
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ETHEL MOORE, B.S.	Clerk, Business Office
MARTHA MOORE, B.S.	Clerk and Secretary, Business Office
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FRANCIS L. PRATER, B.S.	Secretary to Registrar
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✓ HELYNE WILHOITE, B.S.	Secretary to Division of Humanities
DORRIS WILLIAMS, B.S.	Secretary, Office of Veterans' Affairs

**On leave 1947-1948.

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MARTHA M. BROWN	Library Consultant
COLLYE LEE RILEY, A.B., B.L.S.	Cataloger
DOROTHY LEAVELLE STEVENS, B.S., B.L.S.	Assistant Cataloger
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BESSIE FOGLE KEAN, A.B.	Circulation Assistant
MODESTINE YOUNG, B.S.	Reserves Assistant
LILLIAN BARBOUR, B.S.	Circulation Assistant
MARGARET ROSE CAMPBELLE, B.S.	Reference Assistant
MILDRED A. JOYNER, B.S.	Secretary to Librarian

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L. C. FARBES	Supervisor of Carpentry and Repairs
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JOSEPH R. MARKS, B.S.	Chief Engineer
M. L. MORRISON, A.B.	Custodian
ROY OVERTON, B.S.	Warehouse Supervisor
GRADY SHERRILL, B.S.	Assistant Engineer
LUCIUS UPSHAW	Chef Cook

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SAMUEL H. FREEMAN, B.S., M.D.	Director
CARR A. TREHERNE, A.B., M.D.	College Physician
**DONLEY H. TURPIN, B.S., D.D.S.	College Dentist
ISABELLE CROWDER, R.N.	College Nurse
CORINE H. FLOYD	College Nurse
QUEEN WASHINGTON, R.N.	College Nurse

**Died March 26, 1948.

OFFICERS OF INSTRUCTION

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GEORGE W. GORE, JR., A.B. DePauw University; Graduate work, University of Chicago; Ed. M., Harvard University; Ph.D., Columbia University, <i>Dean of the College.</i>
EARL L. SASSER, A.B., Shaw University; M.S., Ph.D., Cornell University, <i>Reg- istrar.</i>

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*On leave of absence.

Pinkston

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- ✓ ~~ROBERTA O. PEDDY, B.S., Winston-Salem Teachers College, M.A., University of Michigan, Serving as Consultant in State Educational Program.~~
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- ✓ CHARITY M. MANCE, A.B., Howard University, A.B., University of Michigan, *Associate Professor of Education and Psychology.*
- ✓ CHARLIE F. TILLMAN, A.B., Fisk University, A.M., Columbia University, *Associate Professor of Education.*
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- Mrs. Harper*
in Knoxville
Shelton Matthews
- ✓ COLLYE L. RILEY, A.B., Clark College, B.L.S., Hampton Institute, *Assistant Professor of Library Service.*
- ✓ DOROTHY L. STEVENS, B.S., Tennessee State College, B.L.S., University of Chicago, *Assistant Professor of Library Service.*
- ✓ MARIE B. STRANGE, American Conservatory of Music, Nakutin School of Voice, *Assistant Professor of Music.*
- ✓ VELMA V. WATERS, A.B., Clark College, M.A., Columbia University, *Assistant Professor of Education.*
- ✓ BARBARA L. BRYANT, B.S., Long Island University, *Instructor in Health and Physical Education*
- ✓ EDDIE MOZELL JENKINS, B.S., Hampton Institute, *Instructor in Physical Education.*
- ✓ VELMA SINGLETON LOWE, A.B., Fisk University, B.L.S., Atlanta University, *Instructor in Library Service.*
- ✓ VERNON E. MCCAIN, B.S., Langston University, M.S., Tennessee State College, *Instructor in Health and Physical Education.*
- ✓ PEGGY M. WILLIAMS, B.S., Tennessee State College, *Instructor in Health and Physical Education.*
- ✓ LAWRENCE SIMMONS, B.S., Tennessee State College, *Instructor in Health and Physical Education.*
- CARR A. TREHERNE, A.B., Lincoln University (Pa.), M.D., Meharry Medical College, *Part-time Instructor in Health.*
- **DONLEY H. TURPIN, B.S., Tennessee State College, D.D.S., Meharry Medical College, *Part-time Instructor in Health.*
- CLYDE J. KINCAIDE, B.S., Tennessee State College, *Director of Athletic Publicity and Business Manager of Athletics.*
- MAE ETTA MCCAIN, B.S., Tennessee State College, *Assistant Instructor in Elementary Education.*
- *On leave.
**Died March 26, 1948.

DIVISION OF ENGINEERING AND INDUSTRIAL EDUCATION

- ✓ WILLIAM V. HARPER, B.S., South Carolina State A. & M. College, M.S., Wayne University, *Itinerant Teacher Trainer of Trade and Industrial Education, Acting Director of Division of Engineering and Industrial Education.*
- ✓ PRESTON E. STEWART, B.S., South Carolina State A & M College; further study Pennsylvania State College and New York University, *Head, Department of Building Trades, Associate Professor of Industrial Education.*
- ✓ FURMAN F. WILLIAMS, B.S., South Carolina State A & M College; further study Massachusetts Institute of Technology, *Head, Department of Metal Trades, Associate Professor of Industrial Education.*

Dr. Howard Crump
gc Frankl, Sec

- ✓ L. WINTER MCKISSACK, A.B., Fisk University, B.S., Howard University, Registered Architect, *Acting Head, Department of Building Construction Engineering, Associate Professor of Engineering.*
- ✓ BENSON L. DUTTON, B.S. in C.E., Pennsylvania State College, Registered Civil Engineer, *Head Civil Engineering Department, Professor of Civil Engineering.*
- ✓ CECIL M. RYAN, B.S., Langston University, C.F.I., United States Department of Commerce, *Acting Head, Department of Mechanics and Aviation, Assistant Professor of Aviation Education.*
- JAMES E. TAYLOR, JR., B.S., M.A., State University of Iowa; C.F.I. United States Department of Commerce; C.A.A. *Visiting Professor (Part-time), Aviation Education.*
- ✓ MARSHALL L. FIELDS, B.S., West Virginia State College, Certificate, Aircraft Sheet Metal Work, *Associate Professor of Industrial Education, Instructor of Sheet Metal.*
- ✓ WM. C. MCNEILL, B.S. in C.E., University of Pennsylvania, *Associate Professor of Engineering.*
- ✓ ELLIOTT H. GRAY, Certificate, New York School of Aviation; Instructor, Rating, Master Tech. Rating, Roosevelt School of Aeronautics, C.P.R., A. & E. Mech., A.A.F Pilot, Com Pilot's License, *Instructor of Aero Mechanics*
- ✓ JAMES M. BELLE, B.S., Tennessee A & I State College, *Instructor of Surveying, Superintendent of Buildings and Grounds.*
- ✓ HARRY W. TAYLOR, B.S., Tuskegee Institute; further study Hampton Institute, University of Cincinnati, Purdue University, *Instructor of Auto Mechanics.*
- ✓ HARRY E. LASH, A.B., N. C. Agricultural and Technical College; further study, Tennessee A & I State College, *Assistant Instructor in Mechanical Drawing.*
- ✓ JOHN G. SANDERS, B.S., Prairie View State College, *Instructor of Radio.*
- ✓ ERNEST M. MABINS, B.S., Tennessee A & I State College, *Instructor of Welding.*
- ✓ JOSEPH R. MARKS, B.S., Tennessee A & I State College, *Instructor of Pipe Trades.*
- ✓ LEON C. FARBES, Tuskegee Institute, *Technician, Woodworking.*
- ✓ W. ELBERT JOHNSTON, Normal Diploma and Trade Certificate Hampton Institute; further study South Carolina State A. & M. College; *Technician, Masonry.*
- DELL S. CROWDER, Diploma in Refrigeration and Air Conditioning, Midway Television Institute, *Technician, Electric Household Appliances.*
- ✓ WILLIAM K. BROWN, Motor Machinist, U. S. Navy, *Assistant Technician, Auto Mechanics.*
- ✓ EDWARD D. HARRIS, *Asst. Technician, Electricity.*
- ✓ EARL L. GARY, Trade Certificate Tuskegee Institute, *Technician, Shoe Repairs*

Haylo Howard, masonry
Edward Young
Mitchell.
James Grant

Vera Howell
Gwendolyn Croft

DIVISION OF HISTORY AND GEOGRAPHY

- ✓ MERL R. EPPSE, B.A. Drake University, M.A. and further graduate work Columbia University, *Director of the Division and Professor of History.*
- ✓ ELSIE M. LEWIS, B.A. Fisk University, M.A. University of Southern California, Ph.D. University of Chicago, *Professor of History.*
- ✓ WILLIAM F. BUTLER, B.A., M.A. Colorado State College, further graduate study, University of Minnesota, *Associate Professor of History.*
- ✓ WILLIAM KAPPAN FOX, B.S., Tennessee State College, B.D., University of Chicago, further graduate study, Drew University, *Associate Professor of History.*
- ~~KENNETH A. JOHNSON, B.A., Colby College, M.A. Harvard University, further graduate study, University of Minnesota, *Associate Professor of History.*~~
- ✓ FREDERICK J. D. MCKINNEY, B.A., M.A. Ball State Teachers College, further graduate study, University of Chicago, *Associate Professor of Geography.*
- ~~MAZIE O. TYSON, B.S., Howard University, M.A. Ohio State University; further graduate study, Clark University (Mass.), *Head of Department of Geography and Associate Professor of Geography.*~~
- ✓ *RALEIGH A. WILSON, B.A., M.A., Iowa University, further graduate study, University of Wisconsin, *Associate Professor of History.*
- ✓ LOIS C McDUGALD, A.B., Livingstone College, A.M., Indiana University, *Assistant Professor of History.*
- ✓ JAMES K. ANTHONY, B.S., Ohio State University, *Instructor of Geography.*

DIVISION OF HOME ECONOMICS

- ✓ *ERNA B. JONES, B.S. Prairie View University, M.S. Colorado State College, *Director of the Division and Professor of Home Economics Education.*
- BERTHA M. SAWYER, B.S., M.A., New York University, further study at Columbia University, *Consultant.*
- ✓ CHRISTINE ALEXANDER, B.S. Tennessee State College, M.A. Columbia University, *Associate Professor of Foods and Nutrition.*
- ✓ MATTYE C. FLOWERS, A.B. Lane College, M.S. Iowa State College, *Itinerant Teacher Trainer and Associate Professor of Home Economics Education.*
- ✓ GERALDINE B. FORT, B.S. Tennessee State College, M.A. Columbia University, *Associate Professor of Textiles and Clothing.*
- ~~SELENA A. JOSEPH, B.S. Southern University, M.A. Michigan State College, *Assistant Professor of Foods and Nutrition.*~~

*On leave, 1947-48.

Miss Naomi Potts, BS Hunter MStale
 Mrs Ethel Smith - Acting Head of Clothing
 Christina Hall -

- ✓ RUTH A. McDOWELL, B.S., Princess Anne College, M.Ed., Pennsylvania State College, *Instructor in Child Development.*
- ✓ CATHERINE B. MCKINNEY, B.S. Tennessee State College, *Instructor in Textiles and Clothing.*
- ~~SARA P. ROBINSON, B.S., Tennessee State College, M.S., Cornell University, *Resident Teacher Trainer and Assistant Professor of Home Economics Education.*~~
- ✓ BEULAH S. SHUTE, B.S. University of Minnesota, *Instructor in Foods and Nutrition.*
- IRENE B. PEEBLES, B.S. Tennessee State College, *Laboratory Assistant in Child Development.*
- ✓ JUANITA C. REED, B.S. Tuskegee Institute, *Laboratory Assistant in Clothing.*
- MATTIE B. REED, B.S. Alcorn College, *Dietician.*
- ~~CATHERINE RAY, B.S., Tennessee State College, *General Supervisor of Cafeteria.*~~
- ~~CAMILLE D. ROBINSON, B.S. Tennessee State College, *Secretary to the Division.*~~ *studying*

DIVISION OF THE HUMANITIES

- ✓ THOMAS E. POAG, A.B., Morgan State College, M.A., Ohio State University, Ph.D., Cornell University, *Director of the Division of the Humanities, Professor and Head of the Department of Speech and Drama.*
- ✓ *GEORGE W. GORE, JR., A.B. DePauw University; Graduate Work, University of Chicago, Ed.M., Harvard University, Ph.D., Columbia University, *Professor of Journalism.*
- ✓ ALMA D. JONES, B.S., Tennessee A & I State College, M.A., and further graduate study, Columbia University, *Professor of English, and Chairman of Freshman English.*
- ✓ EARL L. SASSER, B.S., Shaw University, M.A., Ph.D., Cornell University, *Professor of English.* *Supv of grad of work*
- ✓ **LAURA M. AVERITTE, B.S., Tennessee State College, graduate work, University of Chicago, M.A., and further study, Columbia University, *Associate Professor of English.* *22*
- ~~CRAWFORD B. LINDSAY, A.B., Talladega College, A.M., and further graduate study, University of Michigan, *Associate Professor of English.*~~
- ✓ HINTON C. JONES, A.B., Morehouse College, A.M., and further graduate study, Cornell University, *Assistant Professor of English, and Chairman of Sophomore English.*
- *BENTON ADAMS, B.S., Tennessee State College, *Instructor in Drama and Art.*
- ✓ LOIS BELTON, B.S., Wilberforce University, M.A., Ohio State University, *Instructor in Speech and English.*

*On leave 1947-48.

**On leave.

Augusta M. Weather - Roman Day, Assoc Prof

- ✓ MARY F. CARTER, B.S. Tennessee State College, M.A. Fisk University, *Instructor in English.*
- ✓ ROBERT J. HUDSON, B.S. Tennessee A & I State College, M.A. New York University, *Instructor in English.*
- ✓ MILLICENT D. JORDAN, A.B., Spelman College, M.A., Columbia University, *Instructor in Speech and English.*
- ✓ HELEN M. HOUGHJON, A.B. Talladega College, M.A., University of Michigan, *Instructor in English.*
- ✓ IOLA E. LEWIS, A.B., Allen University, M.A., Howard University, *Instructor in English.*
- ✓ MYRTLE N. SEETS, B.A., and further graduate study, Fisk University, *Instructor in English.*
- ALMA T. WATRINS, B.S. Ohio State University, M.A. Columbia University, special study, Universidad Nacional de Mexico, Escuela de Verano, Santander, Spain, L'Ecole de Vacances, Toulouse, France, *Associate Professor of Romance Languages, Head of the Department of Modern Foreign Languages.*
- ✓ VIRGINIA S. NYABONGO, A.B., Bennett College, M.A., Ph.D., University of Wisconsin, Certificat d'Etudes Francaises Diplome d'Etudes Superieures de Phonetique University of Grenoble, France, *Part-time Professor of Romance Languages.*
- ✓ HELENA R. BLACK, A.B., Morris Brown College, M.A., University of Pennsylvania, further graduate work University of Chicago, *Instructor in Romance Languages.*
- ✓ GLADYS R. KELLOGG, B.A., Hunter College, M.A., Atlanta University, *Instructor in Romance Languages.*
- ARDENIA A. RAMBEAU, A.B., Tennessee A & I State College, *Instructor in French.*
- ✓ HAZEL L. WRIGHT, A.B., Wayne University, M.A., University of Michigan, *Instructor in French.*
- ✓ *FRANCES THOMPSON, B.S.A., Massachusetts Art School, M.A., Harvard University, foreign study, University of Prague, Czechoslovakia, *Professor of Stage and Costume Design.*
- *MARIE BROOKS STRANGE, American Conservatory of Music, Cosmopolitan School of Music, Nakutin School of Voice, *Assistant Professor of Music.*
- ✓ HELYNE G. WILHOITE, B.S., Tennessee A & I State College, *Secretary, Division of the Humanities.*

*Division of Education.

Beulah Wilson, Grad Asst
Singer Buchanan, Grad Asst

DIVISION OF POLITICAL AND SOCIAL SCIENCE

- ALVIN W. ROSE, A.B. Lincoln University (Mo.), M.A. University of Iowa, Ph.D. University of Chicago, *Director of the Division of Political and Social Science, Professor and Chairman of the Department of Sociology.*
- ✓ SUSIE O. BRYANT, A.B., Howard University, M.A., Columbia University, Ph.D., New York University, *Head and Professor of Political Science.*
- ✓ MARY E. LEE, A. B., Ohio State University, M.S.C., Western Reserve University, *Chairman and Associate Professor of Social Administration.*
- ✓ JEROME HOLLAND, A.B., Cornell University, M.A., The University of Pennsylvania, *Associate Professor of Sociology. Director*
- *RALEIGH A. WILSON, B.A., M.A. Iowa University, further graduate study University of Wisconsin, *Associate Professor of Government.*
- ✓ GLADYS B. BUTLER, A.B., M.A. Colorado State College, further graduate study University of Chicago, *Assistant Professor of Sociology.*
- ✓ KATHLEEN POAG, A.B. Ohio State University, M.A., Tennessee State College, *Instructor in Sociology.*
- ✓ NORA L. ROY, A.B., Ohio State University, *Instructor in Sociology.*
- ✓ RACHEL J. PATILLO, B.S., M.S. Tennessee State College. *Instructor in Social Studies for Veterans.*
- ✓ MARY E. EVANS, B.S., Tennessee State College, *Secretary to the Division.*

*On leave 1947-'48.

Mr. Clyde Leathers

DIVISION OF SCIENCE

- ✓ HUBERT B. CROUCH, A.B., Texas College; M.S., Ph.D., Iowa State College. *Director of the Division of Science, Professor and Head of the Department of Biology.*
- EDWARD FERGUSON, JR., A.B., M.S., Ph.D., University of Illinois. *Professor of Biology.*
- MARION R. MYLES, B.S., University of Pennsylvania; M.S., Atlanta University; Ph.D., Iowa State College. *Associate Professor of Biology.*
- ✓ ROBERT H. JORDAN, A.B., A.M., University of Kansas. *Assistant Professor of Biology.*
- CLEM RUSS, B.S., Wilberforce University; M.S., University of Pittsburgh. *Assistant Professor of Biology.*
- ✓ MARTHA M. ALLEN, A.B., Tougaloo College; M.A., Fisk University. *Instructor in College Science and Biology.*

Henderson K Wood, Gladys Burgen
Clyde Leathers, Goye Hall
Margaret Boh, Grad Asst

CATHERINE A. MARYLAND, B.S., Tennessee A. & I. State College. *Assistant Instructor in Biology.*

~~GENDOLYN PYRTLE, B.S., Wilberforce University; D.C.S., Ohio College of Chiroprody. *Assistant Instructor in Biology.*~~

✓ CARL M. HILL, B.S., Hampton Institute; M.S., Ph.D., Cornell University. *Professor and Head of the Department of Chemistry.*

✓ MARY E. HILL, B.S., Virginia State College; M.S., University of Pennsylvania. *Assistant Professor of Chemistry.*

ALFRED S. SPRIGGS, B.S., Dillard University; M.S., Howard University. *Assistant Professor of Chemistry.*

✓ JAMES U. LOWE, JR., B.S., Virginia State College; M.S., University of Cincinnati. *Assistant Professor of Chemistry.*

YANCEY GRIGGS, B.S., Tennessee A & I State College. *Assistant Instructor in Chemistry.*

✓ JULIA T. HAWKINS, B.S., Morgan State College. *Assistant Instructor in Chemistry.*

✓ ALGER V. BOSWELL, A.B., Wiley College; M.A., Northwestern University. *Professor and Head of the Department of Mathematics.*

SADIE C. GASAWAY, B.S., LeMoyne College; M.A., University of Illinois. *Instructor in Mathematics.*

✓ ANNIE G. SASSER, B.S., Shaw University; M.S., Prairie View State College. *Instructor in Mathematics.*

✓ WILLIAM C. McNEILL, JR., B.S. in C.E., University of Pennsylvania. *Professor and Acting Head of the Department of Physics.*

Clyde Dillard
David C Gandy, BS Morehouse, MS Atlanta Che
Billy Pignone, Instructor in Chem
Gilbert Lenter, " " "
Roberta Robinson, ABerg St, NIA Benton

THE COLLEGE

Historical Statement

The State Normal Schools of Tennessee were established by an act of the General Assembly of 1909. That Act is popularly known as the General Education Bill, and included appropriations for all public school agencies of the state.

Agricultural and Industrial State Normal School at Nashville opened June 19, 1912. In 1922 the institution was raised to the status of a four-year state teachers' college and empowered to grant the bachelor's degree. The first degrees were granted in June, 1924.

In 1941 the General Assembly authorized the State Board of Education to establish a program of studies leading to the master's degree.

The college is supported from State and Federal funds, the latter in accordance with the Morrill and other Acts that provided support for land grant institutions in the several states.

Purpose of the College

The purpose of an educational institution may be stated in terms of services required by society, in terms of the changes to be produced in students or in terms of both. As the only state-supported higher educational institution for Negroes in Tennessee, the college has the obligation to fulfill the following aims:

- I. To perform all of the services set forth for a land-grant institution.
- II. To offer as complete a program of work as is possible in the fields of general and applied knowledge as is commonly represented by schools of Liberal Arts, Education, Agriculture, Home Economics, Engineering, Business, Medicine, Law and related fields.
- III. To offer an opportunity for the development of the citizens of the state to insure maximum contribution based upon a reasonable opportunity for preparation in specialized fields.
- IV. To give leadership to practitioners in these fields.
- V. To serve as a capstone of the state educational system.

Locations and Facilities

The college is located in the northwest part of the historic city of Nashville, Tennessee, at 35th Avenue and Centennial Boulevard. Its campus, farm lands, and pastures occupy 320 acres of scenic rolling grounds and fertile fields extending to the southwest banks of the Cumberland River.

The central campus consists of twenty-four permanent modern buildings in a landscape design that rivals the most beautiful college campuses in the south. In addition to the buildings on the central campus are numerous other structures including the "Veterans Village" of fifty dwelling units, and several buildings for projects of various kinds in agriculture.

For recreation, the college provides two swimming pools, a battery of several tennis courts, a picnic area with all the natural beauty of lakes and pathways in a setting of native and exotic trees, shrubs, and flowers, a gymnasium, an indoor general recreation center, and a modern athletic field.

MAJOR BUILDINGS AND EQUIPMENT

The Administration and Health Building is on the south campus near Centennial Boulevard. It provides administrative offices for the President, the Dean, Registrar, Director of Student Personnel, Business Office, and other members of the faculty, class rooms, and auditorium which accommodates approximately one thousand persons, a Little Theatre for students in drama and speech activities, an indoor swimming pool and a gymnasium.

The Memorial Library erected in 1927 in the center of the campus is easily accessible to academic buildings and residence halls. The Reference-Periodical room on the first houses the reference collection, more than 400 current magazines, 30 newspapers and 10,000 government documents. Adjacent rooms accommodate graduate students and a library service classroom.

The General Reading room on the second floor provides seating capacity for 150 students and stack space for 30,000 volumes. The Librarian's Office and the Cataloging Department are also located on this floor.

The present Library staff consists of 10 full-time employes and 17 student assistants.

Plans for an annex to the building will increase the total book capacity to 120,000 volumes and will provide increased graduate and undergraduate reading space, faculty studies conference rooms as well as additional work space for the staff.

The Harned (Science) Hall is located on the north campus east of the College Library. It provides class rooms, lecture auditoriums, offices and twelve modernly equipped laboratories for biology, chemistry and physics.

The Women's Vocational Building is located west of the College Library. In this building are laboratories for Fine Arts and Crafts, for Home Economics, which includes Foods, Nutrition, Clothing and Textiles, Home Furnishing and Home Management, for Business Education, which includes Typewriting, Machines and Office Procedure. The Cafeteria is on the first floor of the building. Music studios for instruction in Piano, Voice, and Instruments are located on the second floor.

The Industrial Arts Building is situated on the south campus. It contains offices, classrooms and laboratories for engineering and agriculture, shops for machine shop practice, sheet metal, plumbing, welding, shoe repairing, radio and electricity.

The Vocational Shop Building is located on the north campus and contains shops for auto mechanics and aero mechanics.

The Basement Floor of Recreation Hall contains shops for carpentry and bricklaying.

Temporary Class Room Buildings (No. I & II) are situated southeast of the Administration Building.

A Temporary Health Clinic, located west of Hale Hall, will be completed by Spring, 1948, which will consist of twelve beds—six for boys and six for girls, offices for the medical doctor and the dentist, with adequate facilities for complete examination and treatment.

Residence Halls for Women. Hale Hall, located west of the College Library, is a modern three-story, fire-proof building for upper-class women. Wilson Hall, located north of Hale Hall, is a modern building that houses freshman and sophomore women students and also some faculty apartments.

Residence Hall for Men, East Hall, is located on the northeast part of the campus. It houses men students of the college and temporarily some faculty families.

Veterans Quarters. In addition to the permanent residences for students, the college has recently established several temporary units for married veterans and college families, and for single veterans. "Trailer City" is located on the northeast section of the campus with units to accommodate fifty veteran families. Two barrack units are located on the south side of the campus to accommodate one hundred and sixty single veterans and twelve veterans families.

The Field House is located on the north side of Centennial Boulevard at the south end of the Athletic Field. It is a modern stone structure with quarters for visiting teams, and offices for the staff of Health and Physical Education.

The College Barn Unit is located on the east part of the campus north of Centennial Boulevard. The unit consists of a modern dairy section for milking, a maternity ward for dairy husbandry, a spacious unit for sheltering cattle, a unit of stalls for work animals, a shelter for farm machinery, two inspection and review pavilions; and storage lofts, bins, and a silo for the storage of agricultural products.

In addition to the major buildings, there are the warehouse, power plant, stadium, other farm houses, green house and garages.

Field Laboratory and Recreation Area. This area is located west of the Administration Building and includes three artificial lakes stocked with native frogs, other aquatic animals and several kinds of representative plants for biological study. One of the lakes is also available for canoeing and swimming. The surrounding area is landscaped with ornamental and flowering plants for field study. Facilities are also in the area for picnics and other kinds of entertainments.

The Faculty Residences include five teacher's cottages, the Alumni Building, the Faculty Women's Residence, the second floor of the Recreation Hall, and twelve temporary apartments for veteran teachers and their families.

The President's Home, "Goodwill Manor," is located on the east campus.

The Recreation Hall, located on the north campus, provides space for many types of student and faculty recreation on the first floor.

Secondary Schools; is a member of and accredited by the American Association Library Service Club. For departmental minors.

Naturalists club for students of nature study.

ACCREDITATION

The College is fully accredited by the Southern Association of Colleges and Secondary Schools; a member of and accredited by the American Association of Teachers College as an "A" Class institution; and is a member of the Teachers College Extension Association.

STUDENT ORGANIZATIONS AND ACTIVITIES

There are about fifty extra-curricular organizations at the College. Intelligent and active participation in a reasonable number of such activities provides opportunity for leadership, cooperation, fellowship, and complements the learning, through curricular offerings and residence life, of attitudes, appreciations, and modes of behavior, as well as information and skills.

Student Government

The Student Council, the key student organization, exists on the campus to promote the general welfare of the College, to protect the general welfare of the College, to provide active participation in student affairs, to create an intermediary between faculty and students in matters of general welfare, and to train for leadership. Its twelve members represent the classes of the College and the graduate division.

Religious Organizations and Activities

The Religious Organizations at the College include the Student Christian Association, Sunday School, Quiet Hour, Third Sunday Services, Vesper Services, Religious Emphasis Week, Baptist Student Union, and the Numen Club.

Athletic Organizations

Varsity and Intramural athletics are promoted. Teams in football, soccer, softball, field hockey, basketball, boxing, swimming, track, and tennis engage in intramural and inter-collegiate competition. The T Club is composed of men who have won the College Letter in a major sport. The Physical Education Club promotes all intramural competition.

Class Organizations

The College classes (Freshman, Sophomore, Junior, Senior) are organized and at their meetings throughout the year plan social and other class programs. Students in the Graduate Division are organized in the Graduate Club.

Departmental Organizations

Departmental organizations include:

The Tennessee State College Collegiate Chapter of the New Farmers of America. For majors in Agriculture.

The Tennessee State College Collegiate Chapter of the New Farmers of America. For majors in Business Education and Administration.

Elementary Education Club. For departmental majors.

The Tennessee State College Chapter of the Future Teachers of America. For majors in Education.

Library Service Club. For departmental majors.

Physical Education Club. For departmental majors.

Engineering and Industrial Education Club. For departmental majors.

History Study Club. For departmental majors.

Home Economics Club. For departmental majors.

Beta Kappa Alpha Speech and Drama Society. For majors and minors in speech and drama, and for members of the Tennessee State Players Guild.

Humanities Club. For majors in the Division of Humanities.

English Club. For departmental majors.

French Club. For departmental majors.

Spanish Club. For departmental majors.

Laicos S. Ronoh Honor Society. For honor students in Political and Social Science.

International Relations Club. For students of international affairs.

Biology Club. For departmental majors.

Chemistry Club. For departmental majors.

Literary Organizations

The literary organizations at the college include:

Tennessee State College Players Guild.

Lambda Eta Sigma Society. For honor students in English.

The Student Forensic and Debating Society.

The Tennessee State College Town Hall Association.

Musical Organization

Musical organizations include the College Band and Orchestra, the College Choir, the Concert Singers, the Women's Ensemble.

National Honor Societies

Phi Beta Tau Chapter of Alpha Kappa Mu Honor Society is located at Tennessee Agricultural and Industrial State College.

Xi Chapter of Beta Kappa Chi Scientific Society is a National organization for outstanding students and scholars in the Natural Sciences and Mathematics.

Other national honor societies include Delta Phi Delta Journalistic Society and Iota Phi Lambda for majors in Business Education.

Fraternities and Sororities

The following national Greek Letter Fraternities have chapters at the College: Alpha Phi Alpha, Kappa Alpha Psi, Omega Psi Phi, and Phi Beta Sigma.

The following national Greek Letter Sororities have chapters at the College: Alpha Kappa Alpha, Delta Sigma Theta, Sigma Gamma Rho, and Zeta Phi Beta.

There are the following pledge clubs at the College: Sphinx Club, Scrollers Club, Lampados Club, Crescent Club, Ivy Leaf Club, Pyramid Club, Aurora Club, and the Archonian Club.

THE G. P. HAMILTON SCHOLARSHIP

The G. P. Hamilton Scholarship is awarded to the freshman or sophomore, preferably a freshman, who has maintained the highest scholastic average for the current year. The student must be a graduate of a high school located in Shelby County in order to be eligible for the \$100 award.

ALUMNI ASSOCIATION

The College has an active and loyal Alumni Association, the object of which is to continue the friendship of student days, to promote an intimate relationship between the alumni and the students of the College and to advance the cause of education. The Association usually meets during the Thanksgiving and the Commencement seasons.

THE STUDENT HANDBOOK

The Student Handbook is a compact reference book which gives a comprehensive view of life at the Tennessee Agricultural and Industrial State College and of the privileges and responsibilities of students as individuals, groups and organizations.

COLLEGE QUARTERLY FEES

Tuition:	
Residents of Tennessee.....	\$ 00.00
Non-Residents of Tennessee	75.00
Vocational Specialized Training Courses.....	126.00
Maintenance	29.00
Board (in College Cafeteria)	75.80
Room (in College dormitory)	15.00
Laboratory Fees (per course)	1.00 to 5.00

The amounts of laboratory fees are stated in the course descriptions. To determine the total laboratory fees that must be paid each quarter, add fees stated for each laboratory course pursued.

<i>Estimated Annual Budget</i>	<i>Low</i>	<i>Medium</i>
Tuition (residents of Tennessee).....	\$ 00.00	\$ 00.00
Maintenance	87.00	87.00
Textbooks and School Supplies.....	40.00	60.00
Laboratory Fees	12.00	25.00
Board	227.40	270.00
Room	45.00	45.00
Total for residents of Tennessee who live on College campus	\$411.40	\$487.00
For residents of Tennessee who live off College campus, add	90.00	110.00
Total for non-boarding residents of Tennessee.....	\$501.40	\$597.00

Non-residents of Tennessee should add \$225 tuition to proper category above.

Partial payments on a quarterly basis may be made as follows: Day students must pay full \$29.00; Tennessee boarders may make a down payment of \$79.80 with monthly payments of \$20.00. Total amount per quarter for Tennessee boarders is \$119.80, not including laboratory fees and school supplies. Out-of-state boarders may make a down payment of \$104.80 with monthly payments of \$45.00. Total amount per quarter for out-of-state boarders is \$194.80.

Room Reservations:

A \$10.00 room reservation fee is required. This room reservation fee of \$10.00 is *not* refundable. It is forfeited if the room is not taken; it is applied on expenses if the room is taken. This fee should be paid only after the student has been notified that a room has been reserved.

Other Fees:

Regular fees, including tuition, board and room, maintenance, and laboratory are paid on the quarterly or term basis. These fees must be paid at the time of registration in the Fall, Winter, Spring and Summer quarters.

January 2; Spring, March 19; Summer, June 9. No refunds except for board in cases of illness of over two weeks' duration. Students should send credits and payments directly to A. and I. State College before quarter begins.

*Explanation of Fees**Tuition Fee:*

1. Students who are residents of Tennessee are not required to pay a tuition fee.

2. Students who are non-residents of Tennessee will be required to pay a tuition fee of \$225 a year.

Maintenance Fees:

All students are required to pay \$29 per quarter.

Laboratory Fees:

Laboratory fees are charged in each course that requires regular laboratory

periods. The fees are charged to replace materials consumed or used during course. For charges in each laboratory course, see course description.

Special Fees

Late Registration Fee:

Students who register after the last regular registration day in any quarter must pay a late registration fee of \$1 for each day late up to five days (\$5).

Transcript Fees:

A student may secure an official transcript of his record by the payment of a fee of \$1. No transcript will be issued for a student whose college account is delinquent.

Graduation Fees:

A diploma fee of \$10 shall be paid before one is eligible to receive a degree from the College.

Music:

Piano or Voice, one lesson weekly, \$7.50 per quarter; two lessons weekly, \$14 per quarter.

Organ, one lesson weekly, \$20 per quarter.

ADMISSION

To Freshman Class

Official credentials should be sent to the Registrar soon after the close of the school year, and, on receipt of these, the Registrar will communicate with the applicant regarding his admission. If the application for admission is not received until the week before the opening of the college, it may not be possible for the student to be notified of his status prior to his arrival at the college. Credentials should include a complete record of all previous secondary school and advanced work.

All matters relating to admission to the college and to credit for work at other schools and colleges shall be referred to the Registrar. All credits, applications for admission, and inquiries about admission, should be addressed to the Registrar, Tennessee A. & I. College, Nashville 8, Tennessee.

The applicant must receive notice of approval and acceptance before coming. All high school and college transcripts and an application blank must be on file in the registrar's office before approval and acceptance.

General Requirements—Age: An applicant must be at least sixteen years of age.

Character: An applicant must furnish satisfactory evidence of good moral character (usually the recommendation of the high school principal).

Aptitude Test: An applicant (except students applying for advanced standing) must take an aptitude test and the English Placement Test.

Credentials: The high school credits, or transcript, in the case of those applying for advanced standing, must be filed with the Registrar before the applicant may be officially admitted.

Recommended High School Work:

The applicant for admission by certificate should present credit for a minimum of fifteen units with the following desirable prerequisites:

English	3 units
American History	1 unit
Laboratory Science (Biology, Chemistry or Physics)	1 unit
Algebra	1 unit
Plane Geometry	1 unit
Electives	8 units
Total	15 units

One unit each in Biology, Chemistry, and Physics is recommended for students who plan majors in Agriculture, Home Economics, and the Natural Sciences.

Admission With Advanced Standing

Students from accredited colleges, teachers colleges, and universities who have pursued college courses equivalent to those of A. and I. State College, and who have been granted honorable dismissal from their former institutions, may be admitted to the College. Former students of such institutions cannot be received as freshmen on the basis of their preparatory school records.

Applicants for admission who have had any work whatsoever in another institution of higher learning, regardless of whether or not they wish to receive credit for it, must submit to the Registrar complete credentials of both their high school and college work.

Admission of Transfer Students

A student who has failed in his work at another institution and is not entitled to continue there will be admitted to the College only through special action of the Admissions Committee. The student's grades on his transfer work must be equal at least to the minimum requirements which A. and I. State College requires of its own students to be eligible for readmission. Others whose records do not meet the standards required by the College may be refused admission, or may be admitted on scholastic probation or on any other condition that may seem advisable.

No student will be approved and admitted with advanced standing if he does not have on file his high school and college transcripts and a letter of honorable dismissal from the last college attended.

With Standing as a Special Student

Applicants who do not possess all of the requirements for admission and who are not candidates for a degree, may be admitted to the College upon giving satisfactory evidence that they are prepared to take advantageously the courses selected. Applicants applying for admission to standing as a special student are required to present to the Registrar in advance of their coming an official detailed statement of their preparatory studies for evaluation and approval.

To the Upper Division

To be eligible for work in the Upper Division the applicant (transfers as well as those having previous attendance at the College) must have passed at least nine-tenths of the number of hours required in the first two years of the curriculum under which he is registered; he must also have an average of "C" on all work taken.

CLASS LOAD

Number of Hours Allowed:

Students are expected to carry the equivalent of 12 credit hours of college work a week.

For all students the maximum number of credit hours a week that may be elected without special permission is 18, the normal load is 16, the minimum is 12. Without special permission, the 18 hour maximum load may be increased by one credit hour of required Physical Education, or one credit hour of Choir, but not by both.

The Committee on Admissions and Scholarship regulates the maximum load for a given student on the basis of his apparent ability and other factors.

Request for permission to carry a sub-minimum load (less than 12 credit hours) must be addressed to the Dean of College.

Extra Hours

Except where outlined curricular requirements necessitate, no student may enroll for more than 18 quarter hours without the permission of the Committee on Admission and Scholarship.

Students may make application for extra hours by obtaining from the Office of the Dean proper forms, filling out the forms and filing them in the Office of the Dean during the registration periods. The student is notified promptly concerning the action taken on his application. It is deemed more desirable for a student to do work of a high grade of excellence with a normal load than to take extra subjects with mediocre success.

REGISTRATION

All students are expected to register and pay their fees before the day designated in the College Calendar for classes to begin, and to report promptly to their classes on the first day that classes are scheduled.

New Students and Students in Continuous Residence for a School Year: Registration consists of the following steps in the order indicated. (Unless the student follows these instructions in every detail his registration will not be complete. Registration is held in the Gymnasium (or A300) and in the Main Office of the Administration Building on the South Campus.)

1. The student should proceed as follows:
 - A. For necessary admission requirements see p.
 - B. In order to register for *any* quarter a student must have a certified "Permit to Register" which may be obtained from the Office of the Registrar. If you are in continuous residence, it will be necessary

to present a matriculation card in order to get your validated Permit to Register.

- a. To begin registration, show Permit to Register at Auditorium Entrance
 - b. Obtain and fill out registration forms and six schedule cards (blue if a city student, white if a dormitory student).
 - c. Get classification at entrance of gymnasium.
- C. Secure from the faculty adviser—class schedule sheet, schedule blanks and class admission cards.
- a. Student will copy complete schedule on five schedule cards and fill out one class admission card for each course. Fill out two schedule blanks.
 - b. Student will get on schedule cards a teacher's signature for each course.
 - c. Student will get faculty adviser's signature on schedule cards.
 - d. Get Registrar's approval at Final Checker Station.
- D. In Bursar's Office submit card to Assessment Clerk for assessment.
- a. Student will file with the Bursar five schedule cards and one class admission card for each course.
 - b. Student will pay fees and get official receipt, matriculation card, and student activity book from the Bursar. (A student is not officially enrolled in class until all fees have been paid to the Bursar's Office.)
- E. Student will report to his classes according to the college calendar.
2. Late registration fees will be charged as follows:
- | | |
|------------------|--------|
| First day | \$1.00 |
| Second day | 2.00 |
| Third day | 3.00 |
| Fourth day | 4.00 |
| Fifth day | 5.00 |

ADMISSION TO CLASSES

A student is officially admitted to class only upon the basis of the teacher's receipt of a class admission card from the Registrar's office.

Instructors shall not permit students to enter classes until a class admission card has been received from the Registrar's Office.

Class rolls are made up from class admission cards indicating the section and time of the class in which the student is enrolled. Changes cannot be made by the instructor.

To drop or add a course after completion of registration, the student must obtain the signatures of approval from the teachers concerned and the major adviser. This approval must be on the official form provided by the College and obtained from the Registrar's office.

A course dropped without complete official approval (a copy of which must be filed in the Registrar's Office) is recorded as a FAILURE.

Every student will be held responsible for the performance of all work assigned to him and for regular attendance to his classes.

CLASS AUDITORS

Regular students may enter classes as auditors, subject to the approval of the adviser and of the instructor whose class is visited. Auditors are under no obligations of regular attendance, preparation, recitation, or examination, and receive no credit. They may not take part in class discussion or laboratory or field work.

All class auditors must have a class admission card marked "auditor" which will be turned in to the Registrar's office at the end of each quarter.

Persons other than regular students may be admitted as auditors only with the consent of the Registrar; they are required to register, pay fees for auditors, and to have class cards for the courses they elect to attend.

GRADING SYSTEM AND SCHOLARSHIP STANDARDS

Class Attendance

1. It is a regulation of the College that teachers keep accurate records of all class attendance. Regularity and punctuality are required; therefore, the student's attendance record becomes an important part of his personnel data.
2. Any student knowing he must be absent from class or classes will make advance arrangement with the respective instructors for the absence.
3. Classwork missed will be made up to the satisfaction of the instructor.
4. The student is under obligation to attend all classes for which he is registered. Failure to attend any class for which he is registered will constitute an irregular withdrawal and will result in a mark of "F" on the record.

Examinations

Regular Examination. An examination is required in every course except purely laboratory subjects. In laboratory subjects the instructor shall determine the requirements for the satisfactory completion of the course.

Examinations are held at the end of each quarter. Students who complete satisfactorily the work of a quarter in any subject will receive grades designated by the following: "A," "B," "C," "D," which are the passing grades for the college.

Daily Quizzes and Tests. When any student is absent from a quiz or test because of illness, his professor will not give the additional quiz or examination unless the student presents a written statement from the Dean.

Special Examinations. Students who are absent from regular quarterly examinations shall be marked absent (x). They must file in advance with the Registrar an acceptable excuse signed by the Dean, if they desire to secure permission to take the examination at a later date. If permission is secured,

the examination must be taken at the next regular stated time in the quarter in which the student is in residence providing this time does not exceed 12 months. A fee of \$2.00 will be charged.

Condition and Absence Examination. If a student is reported "conditioned" in any subject, or "Absent" from any final examination, and does not remove the deficiency within one year the work must be repeated in class. If conflicts occur in the schedule arranged for the examination, the student should report to the Office of the Dean. A senior conditioned in any subject, or absent from any examination during the last quarter, may be given an opportunity to remove his deficiency before the close of the quarter, but not later than one week before commencement. Only students unavoidably prevented from taking the condition examinations in accordance with the above arrangement will be permitted to take them at a later date, and then only upon payment of two dollars. (See also above). Before a student may remove an "absence" grade, he must present his instructor a permit from the Dean.

Absences—Students are expected to attend all meetings of their classes and be punctual. Instructors shall keep a record of class attendance and punctuality. Class attendance and punctuality shall be an inseparable part of class achievement.

Whenever in the opinion of the instructor a student is absenting himself from class or is habitually tardy in such manner as to constitute an infringement of College discipline and an impairment of good scholarship, he shall as warning, report the student, with a record of his class absences, to the office of the Dean. If improvement is not effected thereby, the instructor may request the Dean to drop the student from class with a failure.

When a student has absented himself from class six or more times he is to be reported to the Dean's Office for disciplinary action.

Grading System

Grades—The standing or record of a student in courses of undergraduate level is indicated by the following letters A, B, C, D, F, W, P and I. "A" denotes excellent scholarship; "B," good; "C," average; "D," poor; "F," failure; "W," withdrawn without credit; "P," passing in a nonprepared course; "I," incompleting work.

"I" is given to a student whose recitation and examination grades are satisfactory, but whose grades are withheld on account of failure to complete some required portion of the course, laboratory, shop or parallel exercises. The removal of the incomplete cannot be delayed more than one year. At this time the "I" will be changed to "F."

"W" is recorded for the student who officially withdraws from a course.

"F" is given to a student who fails to do a passing quality of work or who fails to remove a grade of "I" within the period of one year.

Credit for a course in which the student has received a grade of "F" may be obtained only by successfully repeating the course.

The several grades yield quality points as follows:

"A"	4 quality points per quarter hour
"B"	3 quality points per quarter hour
"C"	2 quality points per quarter hour
"D"	1 quality point per quarter hour
"F"	0 quality point per quarter hour
"P"	0 quality points per quarter hour
"W"	0 quality points per quarter hour
"I"	0 quality points per quarter hour

No student shall receive a degree from A. and I. State College who shall not have credited to him an average of two quality points for each quarter hour credit offered by him to satisfy the requirements for graduation.

Cumulative Average: To find the Scholarship Index—

1. Get total of all quarter hours. (Deduct hours for required Physical Education since these carry no quality points.)
2. Total all quality points.
3. Divide the total quality points by the total quarter hours (from which required Physical Education hours have been deducted.) The resulting figure is the scholarship index or cumulative average.

Honor Roll: Students whose point average for 12 quarter hours credit is 3.25 shall be placed on the honor roll for that particular quarter.

Issuance of Grades: At the close of each quarter of attendance a report of grades earned will be recorded in the course book. A copy of these grades will be issued to the student upon his calling for it at the Registrar's Office. A copy of these grades will be sent to the parents or guardian of each student.

Change of Program

Necessary changes in program of classes must have been made by the end of the tenth calendar day after the first meeting of classes.

The grade of "W" will be assigned only when the registrar's record shows completion of an Official Drop form. If a student withdraws from a class without having filed with the Registrar a completed Official Drop form, he is awarded a grade of "F."

Permission to drop courses will not be given after the end of the fourteenth day of the quarter.

To Veterans: Veterans may not change approved schedules or drop below twelve hours load without approval by the Office of Veterans Affairs.

DROPPING STUDENT FROM ACADEMIC PROGRAM FOR POOR SCHOLARSHIP

Criteria

Upon failure to maintain a 1.5 average in a given quarter, the student is placed on probation for a maximum period of two quarters with a reduced load of twelve to fourteen quarter hours. If after the first probationary quarter he has raised his quarter average to 1.5 or above, he is taken off probation. If he fails to make a 1.5 quarter average, the probationary period extends through the following quarter, and if he fails to make a 1.5 average for that quarter, he is dropped from the regular curriculum of the college.

After six quarters of residence, if the student does not have a 2.0 cumulative average, he is dropped from the academic or regular curricular program of the college. The dropped student may apply for entrance to Specialized Training.

Quarter Grade Reports

1. Grades are recorded in duplicate each quarter for each student enrolled. The original copy is made in the course book (if it is on file), one carbon copy is issued to the student, and one carbon copy is issued to his parent or guardian.

2. One purpose of the course book is to provide a form of record which the student may handle. The book, along with a course book record sheet, is filed (open flat) in the student's folder. The student may get his course book upon request by signing the course book record sheet if he is currently enrolled, or by filing a letter of request if he is not currently enrolled. In any case, the folder must contain either the course book or a statement signed concerning its withdrawal.

3. The recording of quarter grades for report to students is done only once per quarter. If the course book is not in the folder at the time the recording is done, the grades are entered upon a loose leaf and placed in the folder. The Registrar's Office does NOT enter this report in the course book later. The student may attach this report at the proper place in his course book.

4. The procedure announced above is effective as of the Fall Quarter, 1946. The record of work done prior to this date will be entered into the course book at the fee rate of 25c per term.

5. The student copy of the quarter grade report may be had either by calling in person for it at the Registrar's Office or by submitting a self-addressed stamped envelope in which the report may be mailed. If the student is currently enrolled at the time of the release of the report it is preferable that he call in person for the report as soon as the date of release is announced; if the student is *not* currently enrolled at the time of the release of the report, before leaving the campus, he should deposit with the Registrar's office a stamped self-addressed envelope in which the report will be mailed.

6. It is preferable that each graduating senior make the final withdrawal of his course book at the time when he receives report of having completed all course work for graduation.

7. Grades for graduate credit are NOT recorded in a course book. For graduate students, quarter grade reports are made in triplicate on loose forms. The original is filed in the student's folder whence, in cumulative form, it may be withdrawn in the same manner as the undergraduate course book. One carbon is issued to the student through the same procedure as that followed in the case of undergraduates. The other carbon copy is submitted to the Dean of Instruction.

8. A fee of one dollar is charged for each official transcript copy of the student's up-to-date permanent record.

RESIDENCE

To be recommended for any degree the candidate must have been in residence in this College at least one academic year and have earned while in residence here not less than forty-five hours of credit. The Senior year, or its equivalent (the last forty-five hours offered for the degree and the last nine months of residence) must have been spent in residence in this College.

DEGREES WITH HONORS

The degree of bachelor of science or bachelor of arts with honors is awarded in two grades, namely: With distinction and with high distinction. To be graduated with distinction, the student must earn a ratio of at least 3.0. To be graduated with high distinction, the student must earn a ratio of not less than 3.5.

CLASSIFICATION OF STUDENTS

Matriculated students are classified as follows:

Freshmen: those who have completed less than 48 quarter hours.

Sophomores: those who have completed more than 48 quarter hours but less than 96 quarter hours.

Juniors: those who have completed more than 96 quarter hours but less than 144 quarter hours and have an average of "C"(2.0) in all work taken.

Seniors: those who have completed 144 quarter hours or more and have an average of "C"(2.0) in all work taken.

Specials: those who are either lacking in the required entrance units, or wish to pursue particular studies without reference to graduation, may be admitted with the permission of the Dean of the College.

Specialized Training: those who are pursuing some terminal trade course without reference to qualification for a degree.

Unclassified: those whose high school transcripts are not on file.

Graduate Students: those who have received college degrees from accredited institutions, and who have fulfilled the requirements for graduate study.

REQUIREMENTS FOR GRADUATION WITH THE BACHELOR'S DEGREE

Completion of 191.0 quarter hours credit, submission of an approved Senior Project, passing the comprehensive examination, approval of the division Director, Dean of the College and the Registrar are requirements for graduation with the bachelor's degree in the following Divisions:

The Division of Education
 The Division of History and Geography
 The Division of Home Economics
 The Division of Humanities
 The Division of Political and Social Science
 The Division of Science

The Division of Agriculture: Completion of 198.0 quarter hours credits; write a Senior Project; pass the comprehensive examination; be approved by the division Director, Dean of the College and the Registrar.

The Division of Business Administration and Education: Completion of 197 quarter hours credits, as outlined in the respective curricula; write a Senior Project; pass the comprehensive examination; be approved by the division Director, Dean of the College and Registrar.

The Division of Engineering: Completion of 198.0 and 211.0 quarter hour credits, as outlined in the respective curricula; write a Senior Project; pass the comprehensive examination; be approved by the division Director, Dean of the College and Registrar.

APPLICATION FOR A BACHELOR'S DEGREE

1. A candidate for a degree must file with the Registrar a "Senior Standing Blank" six months prior to the date of graduation. This must be approved by the candidate's Major Adviser, divisional head and the Dean of the College.

2. An "Application For Degree" form must be filed in triplicate in the Office of the Registrar by the student's Division Director not later than the tenth day of the student's final quarter registration.

3. The diploma fee must be paid and all accounts cleared at least one month prior to the date of graduation.

DEGREES OFFERED

The College offers two undergraduate degrees, namely: Bachelor of Science and Bachelor of Arts. In the graduate division the student may qualify for the degrees of Master of Arts, Master of Science, and Master of Education.

TRANSCRIPTS

To be official a transcript must bear the seal of the College. Official transcripts are not given to students or alumni, but are mailed directly

to the institutions or persons considering the applicant for admission or employment.

WITHDRAWAL

To officially withdraw from the college one must make application on the form provided by the office of the Dean of Instruction. The application must receive official approval and signature of the Registrar.

STUDENT EMPLOYMENT

The College has a placement bureau which assists students in finding suitable part-time employment on the campus and in the city. However, the student is urged to come to college with most of his fees on hand, especially for the first quarter of advanced study. As the first year is one of general adjustment to college life and studies, the freshman is advised not to work.

COLLEGE STANDARDS

The College does not undertake to prescribe in detail either its requirements or its prohibitions. Students are met on a plane of mutual regard and helpfulness. Appeal is made to a proper sense of the proprieties of life and the necessities of organization on such a basis. It does not require a gross and overt act to sever the connection of a student to whom such appeal proves vain.

It is expected that students will live up to the ideals of American students: that every student will be a gentleman or a lady in all relations and associations; that he or she will be diligent in study, prompt and regular in class, at chapel, Sunday School, Third Sunday Services, Vesper, and other public services, and give respectful attention to those conducting them; that he or she will properly observe the hours set apart for study and refrain from noise or disturbance of any kind; that contemplated changes of room, board, classes, courses, etc., or plans for any unusual entertainments, meetings, or exercises, will be submitted to the proper administrative officials for approval before action is taken; and that the student will not leave the city without permission previously obtained.

ENGLISH PROFICIENCY REQUIREMENT

Students are expected to maintain a satisfactory standard of oral and written English throughout the College course. Any student may be reported by a member of the faculty for examination in English, and, if found deficient by the *Committee on Student English*, be required to take without credit such further work in English as the Committee may direct.

Every candidate for a first degree shall be given a test, ordinarily during the winter quarter of the year next preceding his intended graduation, in the use of simple expository English. Should he fail in this test he shall take such further and appropriate work in English as the *Committee on Student English* may direct until he shall have proven to its satisfaction that he has overcome his deficiency in this respect.

LIVING ACCOMMODATIONS

There are residence halls on the campus which provide opportunities for personal, social, and intellectual companionship and experience in group living. Each student should bring a pillow, sheets, pillow cases, spreads, blankets, two pairs of curtains, towels, dresser and table covers and any other articles which will make rooms comfortable and attractive. Excellent meals are available in the college cafeteria.

HEALTH SERVICE

The Student Health Service aims to provide for a healthful college community through a physical examination of all entering students, a follow-up of the examination, medical and dental counsel as the occasion requires. Hospital rooms and a dental office are provided for in the residence halls. A physician, dentist, and nurse are members of the college staff.

GUIDANCE

The Student Personnel program aims to reach the interests, needs, and purposes of all students through the Guidance Services; to make available varied, illimitable assistance for superior educational, social, and vocational adjustment and development. Reaching that goal involves the coordinate planning and cooperation of numerous college officials, faculty and staff members, among them, the Director of Student Personnel, the Dean of Women, the Dean of Men, the Dean of the College, the Registrar, the Director of Health and Physical Education, Directors of Residence Halls, supporting counselors such as Freshman Counselors, Faculty Major Advisers for Departments and Divisions, such committees as the Guidance Committee, the Freshman Week Committee, the Decorum Committee, the Faculty Advisory Council; and consultant specialists in medicine, psychiatry, psychology, social work, vocational choice and placement.

In solving specific problems students are assisted individually and in groups, directly and by referral.

Upon being admitted to the College, each student is assigned by the Registrar on a basis of the student's choice of Division, to the Director of that Division, who appoints a member of the Faculty of that Division as Adviser.

The duties of the adviser are to assist the student in selecting his subjects so as to secure a well-rounded education, as well as to aid him in interpreting the requirements and to oblige him to meet them in their proper sequence. The responsibility for the selection of courses rests, in the final analysis, upon the student and it is not the province of the adviser to refuse approval of a course which the student is entitled to elect. Similarly, it is the primary duty of the student to meet the requirements of his course in their proper order, so that he may, in his senior year, find himself eligible for graduation. When the student is cerning his choice of studies. He is urged to confer with his adviser frequently, student registers for each quarter, he is required to consult his adviser at least monthly, during each quarter.

The advisers for freshmen and sophomores are members of the faculty of the division in which the student is registered. The advisers of freshmen are also known as Freshman Counselors. Faculty Freshman Counselors counsel freshmen on innumerable social, vocational, and related educational matters about which freshmen need information and assistance such as adaptation to new ideas, how to study, health and emotional adjustment, budgeting time and money, extra-class activities, residence halls and home relationships, vocational orientation and choice.

Major advisers are members of the staff of the Department in which the student is doing his major work. Major advisers counsel students not only in curricular or educational matters but give attention to the whole student—his health, financial adjustment, social adjustment, vocational choice and proposed after-college adjustment to life.

Tests and inventories are available for use with all students. These include tests of mental ability, aptitude and achievement tests, study, personality, and vocational inventories.

FRESHMAN WEEK

All Freshmen are expected to be present at the college the week preceeding the beginning of instruction in September and to remain throughout the week. The week is devoted to conferences with advisers and counselors, objective tests and inventories, registration and assignment to classes, lectures and discussions on subjects of importance to new students.

SUMMER QUARTER

Graduates of A. and I. State College or of other recognized institutions may avail themselves of the Summer Quarter of this College to secure Master's degrees. The requirement for the Master's degree may be satisfied by full-time resident study at the College during three Summer Quarters.

In summer, a graduate student using the facilities of the College either in a formal class or in the preparation and writing of a thesis must pay full fees.

The spirit of the rules that direct the work of graduate students in the other quarters of the College session directs also, naturally, the work of graduate students in Summer Quarters. Owing to the shortness of a Summer Quarter, the thesis title should, if possible, be determined by the professor in charge of the graduate student's major subject in conference with the student within three weeks after the beginning of the Summer Quarter in which the student starts his graduate work. Work on the thesis should run concurrently, from the time of entry upon graduate study for a Master's degree, with the required lecture or laboratory courses. In this way, under normal conditions, the thesis will be easily completed by the time a student has finished his lecture or laboratory requirements.

In no case may the selection of a thesis subject and work on the thesis be deferred later than the second week of a second Summer Quarter, if the student expects to get his Master's degree at the end of a third Summer Quarter.

The College requires that the thesis be worked out under the immediate direction of the major professor by the student in residence at the College. To this end, frequent conferences are held by the professor with the student.

VETERANS' EDUCATION

COMMITTEE ON VETERANS' AFFAIRS

RACHEL J. PATILLO, *Director of Veterans' Affairs*
 WALTER S. DAVIS, *President of the College*
 GEORGE W. GORE, JR., *Dean of the College*
 EARL L. SASSER, *Registrar of the College*
 ALGER V. BOSWELL, *Consultant*
 HUBERT B. CROUCH, *Consultant*
 ALMA DUNN-JONES, *Consultant*
 PEARL W. GORE, *Counselor in Financial Accounts*
 WILLIAM V. HARPER, *Counselor in Industrial Problems*
 DORRIS C. WILLIAMS, *Secretary*

Statement of Purpose and Scope

Tennessee State College recognizes its responsibilities toward men and women who have been in one of the armed services and who upon being honorably discharged wish to begin or to continue their college education. In order to serve more adequately the peculiar needs of veterans, the College has established the Office of Veterans' Affairs as an appreciation for the patriotic services of the gallant young Americans where information in regard to the College's offerings of value to veterans may be obtained. In this office, all matters relative to the education of veterans under the G. I. Bill of Rights are centralized to serve more adequately the special needs of veterans. This office also serves as the first point of contact for the release of information to all veterans who are interested in a program of work.

The objectives of the office are two-fold—to provide, as far as possible, a program for each returning serviceman to meet his individual need and further his personal objective, and to assist the veteran in completing his college education in the shortest time consistent with thoroughness and quality. It is through this office that the College keeps in touch with the various government and civil agencies interested in veterans' problems. For further information regarding offerings of interest to veterans, write Office of Veterans' Affairs, Room 201, Industrial Building, Tennessee State College, Nashville 8, Tennessee.

General Information

In order to facilitate time in receiving subsistence checks, veterans are advised to follow these instructions:

1. Contact the nearest Veterans Administration at the earliest possible date after discharge, and file application form 1950 before coming to College.
2. Single veterans without dependents must submit a Letter of Eligibility and a photostatic copy of discharge.
3. Married veterans, the above credentials plus a certified copy of their marriage certificate and form 686c. Secure the copy of marriage certificate from the County Court Clerk in the County where married. Form 686c may be secured from the Veterans Administration.

4. Veterans claiming dependents other than a wife, in addition to aforementioned credentials must also submit a birth certificate and form 8-509, *Affidavit for Dependents*. Secure this form from the Veterans' Administration.

Expenses

Due to the present over-crowded conditions in the dormitories, the College can not promise living accommodations to additional students on the campus. Approval for admission does not obligate the College to provide living quarters on or off the campus. If a veteran is approved for admission as a City student, he must secure own room. The College does not assume the responsibility of locating a room for city students.

When rooms on the campus are available, the charges are: Civilian dormitory \$12.00 per quarter; Veteran's dormitory, double room \$7.50 per month, Veterans' dormitory, single room \$10.00 per month.

Tuition costs, laboratory fees, books and supplies for the furtherance of veterans' education, the total cost not to exceed \$500.00 a school year will be paid to the College by the Veterans Administration in accordance with established charges to other students. Board, lodging, other living expenses and travel incident to the student's education will not be paid by the Veterans' Administration, but by the individual. Room and board must be paid in advance. Veterans should bring sufficient money to live at least one month while waiting for the first subsistence check from the Veterans Administration.

Admission

All veterans who are entering Tennessee State College as new students or former students must file an application on the Veterans' Application blank (back of catalog) one month prior to the date of registration. Applications for admission must be approved by the Committee on Admissions and a written notice from the Registrar's Office received by the applicant before coming to College. Only those students having a Permit to Register will be allowed to begin registration.

Students who enter academic courses leading to a degree must submit to the Registrar's office scholastic records from high school or college. Transfer students must submit in addition to scholastic records, a letter of honorable dismissal from the college previously attended. All veterans must bring evidence of having been approved for educational or vocational training benefits by the Veterans Administration. Veterans may enter College at the beginning of each six weeks period, unless the director of the division considers entrance at such time to be a handicap to the individual.

Courses Offered

Veterans who qualify are permitted to enroll in any department that is open to other students with the same qualifications. The divisions of Agriculture, Business Administration and Industrial Education offer special terminable courses to those persons who are of sub-college level or those who do not plan to work toward a degree. Upon satisfactory completion of work in these special courses, the veteran will receive a *certificate of attainment*.

The specialized training includes instruction in the following fields:

- | | |
|-------------------------------------|------------------------------------|
| (a) Auto Mechanics | (h) Electricity and Radio |
| (b) Aero Mechanics | (i) Bricklaying and Trowel Trades |
| (c) Woodwork | (j) Repair of Household Appliances |
| (d) Plumbing | |
| (e) Machine Shop | (k) Aviation Flight Training |
| (f) Arc and Electric Welding | (l) Sheet Metal |
| (g) Shoe Repairing and Leather Work | (m) Drafting |

The general entrance requirements will be those for admission to high school or above. It is preferred that veterans who will enroll for these courses will have had at least two years of high school work, however, the institution will not deny any veteran the opportunity of preparing for gainful employment if he has not had two years of high school work. A trainee must be able to read understandably literature in his respective field.

Regulations Governing Majors
Public Law 346

Veterans training under Public Law 346 may select their course of training, but can not change the course without the approval of the Veterans Administration's training officer.

In order to carry out the provisions and intent of that section of V. A. Instruction No. 4, Title II, Public Law 346, 78th Congress, which related to changes of courses, a wide application of advisement and guidance procedure is necessary in determining the practicability for making changes of courses of instruction and must be on the approval of the Training Officer.

Paragraph 3(E) (2) of the Instruction referred to above provides for applications of the advisement. Training Officers should be alert to detect indications of unsatisfactory progress before the veteran has exhausted an undue amount of his entitlement or has become discouraged by complete failure. In such cases the training officer talks the problem over with the veteran and makes necessary adjustments, and where found desirable the training officer approves a change as requested.

In all cases of request for change of course, the consideration of such change requires the application of reevaluation procedure similar to that prescribed for cases under Public Law 16. The reasons for the change of courses must be submitted by the training officer to the Advisement and Guidance Section, Regional Office, Veterans Administration.

Public Law 16

All veterans training under Public Law 16 must pursue the course outlined by the Veterans Administration which is determined upon the findings of tests administered in the Guidance Center and the extent of the veteran's service-incurred disability. In rare cases where the veteran does not reach his objective and desires to change his course the veteran must return to the Guidance

Center for a series of tests to determine a new objective in accordance with the veteran's disability.

The Advisement and Guidance Section in providing educational and vocational guidance will use Veteran Administration forms of the 1902 series in outlining a new objective as provided upon initial advisement. Failure to comply to this procedure will subject the veteran to discontinuance of training under Public Law 16.

Course Load
Collegiate Courses

A full-time course will consist of not less than 12 hours. Part-time courses will be measured in fractions of one-fourth, one-half, and three-fourth, with a proportionate reduction in the veterans' subsistence allowance and also a reduction in the allowable fees that may be paid for tuition and related expenses.

In literary courses the veteran's check will be determined by the following scale:

12 hours and above.....	100% subsistence check
9-11 hours and above.....	75% subsistence check
6-8 hours and above.....	50% subsistence check
3-5 hours and above.....	25% subsistence check
0-2 hours and above.....	not eligible to participate in program

Trade Courses

Veterans in trade courses must devote exclusively of studies other than trade, the minimum hours in shops or practical work:

25 clock hours.....	Full time and full check
18-24 clock hours.....	75% check
12-17 clock hours.....	50% check
6-11 clock hours.....	25% check
0-5 clock hours.....	not eligible to participate in program

Class Attendance and Decorum

Veterans are required by the Veterans Administration to attend classes regularly. When a veteran is absent three consecutive days without notice to the Office of Veterans' Affairs that the absence is due to illness or for some other good reason, the Office of Veterans' Affairs is required on the third day to notify the Veterans Administration on the presumption that training has been interrupted or discontinued, whereupon, the Veterans Administration will discontinue the veteran's subsistence allowance.

Veterans' training, general decorum and progress must at all times be maintained in satisfactory manner, conforming to the ideals and policies of Tennessee State College.

PLAN OF ACADEMIC ORGANIZATION

Tennessee Agricultural and Industrial State College is composed of ten major divisions as follows:

- I. THE DIVISION OF AGRICULTURE
 - Agricultural Economics
 - Agricultural Education
 - Agricultural Engineering
 - Agronomy
 - Animal Husbandry
 - Horticulture
 - Poultry Husbandry
 - Agriculture
- II. THE DIVISION OF BUSINESS
 - Accountancy
 - Business Administration
 - Business Education
 - Economics
- III. THE DIVISION OF EDUCATION
 - Elementary Education
 - Secondary Education
 - Psychology
 - Health and Physical Education
 - Library Service, Art and Music
- IV. THE DIVISION OF ENGINEERING AND INDUSTRIAL EDUCATION
 - General Engineering
 - Building Construction Engineering
 - Industrial Education
 - Trades
- V. THE DIVISION OF HISTORY AND GEOGRAPHY
 - Geography
 - History
- VI. THE DIVISION OF HOME ECONOMICS
 - Child Care and Nursery School
 - Clothing and Textiles
 - Foods and Nutrition
 - Home Economics Education
 - Home Management
- VII. THE DIVISION OF THE HUMANITIES
 - English
 - Foreign Languages
 - Speech and Dramatics

- VIII. DIVISION OF POLITICAL AND SOCIAL SCIENCE
 - Political Science
 - Sociology
 - Social Administration
- IX. THE DIVISION OF SCIENCE
 - Biology
 - Chemistry
 - Mathematics
 - Natural Science
 - Physics
- X. THE GRADUATE DIVISION
 - Advanced Courses
 - Research
 - Field Studies

DIVISION OF AGRICULTURE

WALTER A. FLOWERS, *Director of the Division and Professor of Agricultural Education*

CORNELIUS KING, *Associate Director, in charge of instruction, and Professor of Agricultural Economics*

WALTER S. DAVIS, *President of the College and Professor of Agriculture*

WALTER M. AUSTIN, *Instructor in Agricultural Economics.*

KARL M. KEYES, *Associate Professor of Agricultural Engineering.*

ALFRED W. SHUTE, *Head of the Department and Professor of Animal Industry.*

THEODORE R. WOOD, *Technician, Department of Animal Industry.*

ROBERT EDWARD HURST, *Associate Professor of Biochemistry.*

A. B. DAVIS, *Technician, Department of Animal Industry.*

J. W. FORD, *Technician, Department of Animal Industry.*

MAJOR F. SPAULDING, *Head of the Department and Professor of Agronomy*

JOSEPH C. CROFTON, *Assistant Professor of Agronomy.*

HAZO CARTER, *Instructor, Department of Agronomy.*

HENRY C. HARDY, *Farm Manager*

DAVID A. WILLISTON, *Professor of Horticulture and Landscape Architecture*

NEAL MCALPIN, *Assistant Professor of Horticulture*

EARLY J. THORNTON, *Head of the Department of Poultry Husbandry and Associate Professor of Poultry.*

HENRY L. TAYLOR, *Assistant Professor of Poultry*

CARRIE EPPERSON, *Secretary, Division of Agriculture*

The Division of Agriculture offers instruction in the general field of agriculture and provides the student with the opportunity for specialized training in one Major and one Minor field of concentration in Agriculture. This gives the foundation required for those who desire to go directly into farming, teach vocational agricultural in the secondary schools, enter the field of agricultural extension work, or enter some more specialized phase of the agricultural industry.

CURRICULA OFFERED

All Freshmen and Sophomore students take courses as outlined in the General Agricultural Curriculum for Freshman and Sophomore Students.

After completing the first two years of work, each student selects Major and Minor fields of concentration. Presently Majors are offered in Agricultural Education, Agronomy, and Animal Industry. Minors are offered in all departments of the Division.

A student is expected to complete a minimum of 27 quarter hours of work in his major and 18 quarter hours of work in his minor field of concentration, respectively. These requirements are in addition to those listed in the General Agricultural Curriculum. Guidance in determining courses to pursue will be provided by Major and Minor advisors to be selected by each student before entering upon the work of the Junior year.

The curriculum in Agricultural Education is primarily for the training of prospective teachers of Vocational Agriculture and the completion of which qualifies for eligibility to a State Certificate certifying an individual to teach Vocational Agriculture.

The curriculum in Agronomy has as its objective training in Agriculture with emphasis on the basic principles of crops and soils. Supporting and elective courses are chosen from related fields to broaden the students knowledge in the entire field of Agronomy and the related phases of technical Agriculture.

A curriculum leading to a major in Animal Industry is also offered. It aims to fit the student to meet the general problem that may arise in the care and management of the various types of livestock and in the field of Animal Industry generally.

Graduate work leading to the Master's Degree is offered in the following departments of the Division of Agriculture: Agricultural Education, Agronomy, and Animal Industry. Majors or Minors may be taken in either one of these departments.

GENERAL CURRICULUM FOR FRESHMAN AND SOPHOMORE AGRICULTURAL STUDENTS

FRESHMAN YEAR	Quarter			SOPHOMORE YEAR	Quarter		
	Hours Credit				Hours Credit		
<i>Name of Courses</i>	I	II	III	<i>Name of Courses</i>	I	II	III
Agriculture 101-2-3.....	1	1	1	Agriculture 201-2-3.....	1	1	1
Animal Industry 102-3...			3	Agricultural Seminar 201-			
Poultry Husbandry 101-2		3	3	2-3	1	1	1
Horticulture 101-3.....		3	3	Agronomy 201-2-3	3	3	3
Chemistry 101-2-3.....	4	4	4	Animal Industry 201....		3	
Mathematics 101-41-43...	3	3	3	Agricultural Engineering			
English 101-2-3.....	3	3	3	202-3		3	3
Physical Education 101-				Agricultural Economics			
2-3	1	1	1	201-2-3	3	3	3
	—	—	—	Zoology 101-2-3	4	4	4
	18	18	18	English 201-2-3	3	3	3
				Physical Education			
				201-2-3	1	1	1
					—	—	—
					19	19	19

CURRICULUM FOR AGRICULTURAL EDUCATION MAJORS

JUNIOR YEAR	Quarter			SENIOR YEAR	Quarter		
	Hours Credit				Hours Credit		
Name of Courses	I	II	III	Name of Courses	I	II	III
Chemistry 321	4			Agricultural Education			
Psychology 211	3			402-3-412-22	12	3	
Agriculture 303			3	Agriculture 401-3	3	3	
Animal Industry 301-3-12	3	3	3	English 322		3	
Agriculture Education				Educational Psychology			
301-2-3	1	1	1	243		3	
Agricultural Economics				Agricultural Engineering			
301-2-403	3	3	3	401-3	3	3	
Agriculture Engineering				Agricultural Economics			
302		3		401	3		
Agricultural Seminar				Agriculture 450		3	
301-2-3	1	1	1	Agricultural Seminar			
Education 341		3		401-2-3	1	1	1
Political Science 313			3	Agriculture	4	5	0
Electives	3	5	5	History 411			3
	—	—	—	Agricultural Engineering			
	18	19	19	301		3	
				Electives	6	3	
					—	—	—
					19	19	19

CURRICULUM FOR AGRONOMY MAJORS

JUNIOR YEAR	Quarter			SENIOR YEAR	Quarter		
	Hours Credit				Hours Credit		
Name of Courses	I	II	III	Name of Courses	I	II	III
Agronomy 301-2-3	3	3	3	Agronomy 401-2-3	3	3	3
Chemistry 324-25-26	4	4	4	Zoology 321-22	3	3	
Animal Industry 301-3-12	3	3	3	Horticulture 303			3
Agricultural Economics				Agricultural Economics			
301-2-403	3	3	3	411	3		
Zoology 433			4	Animal Industry 403			3
Agronomy 311-12-13	1	1	1	English 321-22-23	3	3	3
Agricultural Seminar				Senior Project (Ag 450)	1	1	1
301-2-3	1	1	1	Agricultural Seminar			
Electives	4	4		401-2-3	1	1	1
	—	—	—	Animal Industry 411-12-13	1	1	1
	19	19	19	402-412-22		12	3
				Electives	6	6	6
					—	—	—
					17	17	17

CURRICULUM FOR ANIMAL INDUSTRY MAJORS

JUNIOR YEAR	Quarter			SENIOR YEAR	Quarter		
	Hours Credit				Hours Credit		
Name of Courses	I	II	III	Name of Courses	I	II	III
Chemistry 321-22	4	4		English 322			3
Zoology 211			4	Agronomy 401-2	3	3	
Bacteriology 241		4		Agricultural Engineering			
Agricultural Economics				401			3
301-2	3	3		Agricultural Economics			
Animal Industry 301-2-3				403			3
311-12-13	6	6	6	Animal Industry 401-2-3	3	3	3
Agricultural Seminar				Senior Project (Ag 450)	1	1	1
301-2-3	1	1	1	Agricultural Seminar			
Electives		3	6	401-2-3	1	1	1
	—	—	—	Animal Industry 411-			
	19	18	18	12-13	7	7	7
				Electives	6	6	9
					—	—	—
					18	18	18

DEPARTMENTS OF INSTRUCTION

AGRICULTURE

Statement regarding the numbering, lettering, and description of courses:

1. The general interpretation of numbers assigned to courses is as follows. Freshmen 100, Sophomores 200, Juniors 300, Seniors 400, and Graduate students 500.

The first figure in the course number indicates the class of students for whom the course is primarily intended; the second number gives the departmental sequence; and the third number tells the quarter in which the work is offered.

2. The abbreviations for the departmental subjects are given below:

A Ec—Agricultural Economics
 A Ed—Agricultural Education
 A E—Agricultural Engineering
 Agr—Agronomy
 A I—Animal Industry
 H—Horticulture
 P H—Poultry Husbandry
 Ag—Agriculture

3. Description of courses gives the symbol of the course the title, the number of quarter hours of credit (parenthesis), and the number of class and laboratory hours per week together with a brief explanation of the content of the courses.

Agricultural Economics

A Ec 201. *Agricultural Economics*. (3) 3 + 0 The principles of economics as applied to the special problems of agriculture, land values, farm ownership, tenancy, farm credit farm labor price movements and marketing.

A Ec 202-203. *Farm Organization and Management*. (6) 3 + 0 & 2 + 2 Principles and problems in the organization and management of the farm as a business unit including types of farms, layouts, enterprises combinations, nature of farming, cost and adjustments to price changes.

A Ec 301. *Marketing Agricultural Products*. (3) 3 + 0 The development of marketing, its scope, channels and agencies of distribution, functions, costs, methods used and services.

A Ec 302. *Farm Records and Accounts*. (3) 2 + 2 Planning a system of records and accounts suitable to meet the needs of the individual farm and farmer; practice in keeping the records; training in the interpretation and analysis of farm records.

A Ec 303. *Cooperative Economics*. (3) 3 + 0 Development of cooperative action types of cooperative organizations, and examples of some successful cooperative endeavors. Emphasis will be placed on cooperative activi-

ties and organizations that are proving most helpful to farmers and rural people in general.

A Ec 401. (422) *Farm Finance*. (3) 3 + 0 Farmers' credit needs, methods of financing agriculture, and institutions supplying credit.

A Ec 402. *Elements of Land Economics*. (3) 3 + 0 Problems of land economics; characteristics of land, classification of land, present and future use of land; forest and mineral land; ownership of land; land credit. land values; methods of valuation; social ends of land use; policies of land settlement; taxation of land.

A Ec 403 (401) *Agricultural Institutions*. (3) 3 + 0 A study of the functions, activities, and inter-relationships of federal, state and county agricultural institutions.

A Ec 411. *Tabular and Graphic Presentation of Data*. (3) 2 + 2 A study of tables and charts of simple magnitudes and their use in presenting statistical data.

Agricultural Education

A Ed 301-2-3. (321) *Introduction to Teaching Vocational Agriculture*. (3) 1 + 0 A three-hour course that extends through the Junior year. Each pupil further considers the necessary preparation that one must make in order to teach Vocational Agriculture. Each pupil makes a detailed study of the program and activities of the Vocational Agriculture teacher in the practice school. Consideration is given to the organization of programs of instruction in Vocational Agriculture and to the philosophy of Vocational Agricultural Education. One hour per quarter. Open only to juniors and seniors.

A Ed 402. (421) *Methods and Materials in Special Education for Out-of-School Youths and Adults*. (3) 3 + 0 A consideration of the problems of organization and leadership of out-of-school groups in rural areas. Special attention is given to the use of the conference procedure with its utilization of the greater background of experience of the members of part-time and evening classes.

A Ed 403. (423) *Special Devices, Reports and Seminar*. (3) 3 + 0 The use of special devices to meet special situations; reports to state and county authorities; desirable publicity.

A Ed 412. (422) *Methods and Materials in the Teaching of Agriculture in the Secondary School*. (3) 3 + 0 A study of the problems of teaching based upon the planning for participation in teaching. Consideration is given to the organization of content of Agricultural courses in secondary schools based on needs of community as revealed by a community survey. Such problems as classroom, laboratory and shop equipment, field trips, making annual and long-time plans, lesson plans, problem and project methods of classroom instruction, measurement of achievement and project supervision are considered.

A Ed 422. (424) *Apprentice Teaching*. (6) 0 + 6 This course involves apprentice teaching in departments of Vocational Agriculture by the trainee. This is done under supervision of teach-trainer and critic teacher.

Teaching all-day classes, organizing and teaching part-time and evening school classes are a part of this course. Open only to students majoring in Agricultural Education.

A Ed 504. (501) *Workshop in Vocational Agriculture*. (4½) 4½ + 0 This workshop is for in-service and prospective teachers of Smith-Hughes Vocational Agriculture and for Agriculture Extension.

Agricultural Workers Engineering

A E 201. *An Introduction to Agricultural Engineering*. (3) 1 + 4 A study of the field of agricultural engineering, power in agriculture, power transmission, belts, gears, mechanisms bearings, gauges and measurements and laboratory techniques Prerequisite: Permission of the Directors of the Division and the Head of the Department.

A E 202. (152) *Farm Mechanics*. (3) 1 + 4 A general course in farm shop work to develop skill, judgement and resourcefulness in the selection, care, and use of tools and materials for farm construction and repair work.

A E 203. (351) *Farm Machinery and Equipment*. (3) 1 + 4 A general course in farm mechanics dealing with the care, operation, maintenance and repair of farm machinery and equipment. These may include wood, iron, soldering and adjustment problems as they apply to the areas of agriculture.

A E 301. *Farm Buildings, Materials and Methods*. (3) 1 + 4 A study of farm building materials, concrete, lumber, roofing, insulation, ventilation, points, and finishes including use, methods of application, cost estimates from drawings, blueprints and quantity surveys, within the area.

A E 302. (352) *Rural Electrification*. (3) 1 + 4 A study of the use of electricity as it may be applied to the farm and farmstead. This course includes simple wiring systems, operation of motors, brooders, electric fences, and safety applications in the use of electricity. Time will be spent on the cost, selection and general repairs of electrical appliances.

A E 303. *Farm Mechanics*. (3) 1 + 4 An advanced course in farm shop work to further develop skill, judgement and resourcefulness in the selection, care and use of tools and materials for farm construction and repair work.

A E 400. *Special Problems*. (3) 1 + 4 A student chooses a special problem for design, laboratory or field work with special library research. Offered during any quarter. Prerequisite: Approval of Directors of the Division and Head of the Department.

A E 401. *Farm Power and Machinery*. (3) 1 + 4 This course includes the repair, operation and construction of tillage, seeding and harvesting machinery, and such service implements as wagons, manure spreaders, and fertilizer distributors. A part of this course will include a study of the construction operation and servicing of gas engines and tractors, supplemented with the performance tests of gas engines and tractors in the laboratory.

A E 402. *Rural Electrification*. (3) 1 + 4 An advanced course in-

cluding the application of electricity to farm structures, farm power transmission, water supply, poultry husbandry and the animal industry.

A E 403. (332) *Farm Buildings and Utilities*. (3) 1 + 4 A study of farm buildings and farmstead utilities, including farm water supply, sewage disposal, lighting, heating, ventilation, kitchen, bathroom, storage space and simple plumbing.

*Required of all Agricultural Engineering minors.

**Required of all Agricultural students.

Minors in Agricultural Engineering are required to have at least one course in Physics.

Agronomy

Agr 201. (231) *Field Crops*. (3) 2 + 2 A survey of the different uses of land, crop characteristics, adaptation, culture and use of the more important field crops plants. Prerequisites: Zoology 101 or Botany 111.

Agr 202. (232) *Soils*. (3) 2 + 2 An introduction to the study of the principles of soil formation, the nature and properties of soils and their relation to plants. Prerequisites: Chemistry 101-2-3.

Agr 203. (233) *Fertilizers*. (3) 2 + 2 The sources, manufacture and properties of fertilizer materials; formulation and preparation of mixed fertilizers; the principles of fertilizer application.

Agr 301. (234) *Sorghums and Small Grains*. (3) 2 + 2 The distribution, culture and uses of the cereal grains and their climatic adaptation.

Agr 302. (235) *Cotton and Tobacco*. (3) 2 + 2 The principles of cotton and tobacco culture, fertilizers, production, grading, classing and marketing.

Agr 303. (336) *Forage Crops*. (3) 2 + 2 The characteristics, cultural requirements, uses and distribution of the important forage crops.

Agr 311-12-13. *Technical Skills in Agronomy*. (3) 0 + 4 Required course for all majors and minors in Agronomy. The main purpose of the course is to develop and improve the technical skills necessary for the successful production of field, pasture, forage and soil improvement crops, and for the conservation and improvement of the soil resources. The course runs throughout the year.

Agr 401. *Legumes and Pastures*. (3) 2 + 2 Characteristics and use of the important pasture legumes. Permanent pastures, their fertilization and management, temporary and rotation pastures.

Agr 402. *Soil Conservation and Management*. (3) 0 + 6 A study of tillage, drainage, fertilization and rotation practices as they affect the productive capacity of field soil.

Agr 403. *Soil Analysis*. (3) 0 + 6 Procedures and methods of soil analysis. Prerequisites: 402, Chemistry 211-12.

Agr 501. *Plant Breeding*. (3) 3 + 0 A study of the methods, principles and results of plant improvement work. Hereditary variation, and the general principles of plant breeding. Prerequisites: 201, Botany 111.

Agr 502. (*Fiber other than Cotton*), *Sugar and Root Crops*. (3) 2 + 2 The distribution, characteristics and cultural requirements of flax, hemp, sugar cane and sugar beets. Prerequisite: 202.

Agr 503. *Soil Classification*. (3) 2 + 2 The basis of soil classification; genesis and morphology of zonal soils of the United States; the important soil series of Tennessee. Prerequisites: 202, 402.

Agr 511. (504) *Plant Analysis*. (3) 0 + 6 Adapted procedures and methods of plant analysis. Prerequisites: 402, Chemistry 211-12.

Agr 512 (505). *Special Problems*. (3) 3 + 0 Seniors and Graduate students.

Agr 513. (506)...*Thesis*. (3-9) Graduate students only.

Agr 521-22-23. (507) *Seminar*. (3) 1 + 0 Discussions of current literature in Agronomy. Prerequisites: 201-2 and permission of the instructor. 1 hour credit each quarter.

Other courses that may be required and from which the Graduate students' program may be taken in addition to courses in Agronomy are: Biology 213, 231-32, 311, 322-23; Agricultural Economics 411; Chemistry 311, 324.

Animal Industry

A I 102. (141) *Introductory Animal Husbandry*. (3) 1 + 4 Course includes the market classifications of livestock and general survey of the feeding, care and management practices.

A I 103. (142-241) *Livestock Management*. (3) 1 + 4 Primarily a laboratory course to teach the student basic principles in the training and fitting of livestock for show or market.

A I 201. (242) *Elements of Dairying*. (3) 2 + 2 Introductory course surveying the general field of Dairy Husbandry. Economic importance, breeds of dairy cattle, their care and management, the composition and care of milk.

A I 301. *Purebred Livestock Production (Horses, Sheep and Swine)*. (3) 2 + 2 A study of the origin, development and characteristics of the major breeds of horses, sheep and swine. Care and management of purebred stock.

A I 302. *Purebred Livestock Production (Beef and Dairy Cattle)*. (3) 2 + 2 Same as A I 301 except that this course deals with beef and dairy cattle.

A I 303. *Feeds and Feeding*. (3) 2 + 2 The basic principles of feeding livestock. Study of feeding standards, balancing rations, composition and nutritive value of feeds. Prerequisites: Chemistry 321 and 322.

A I 311. *Dairy Farming*. (3) 2 + 2 Care and management of the dairy herd; study of buildings and equipment; clean milk production and sanitary regulations.

A I 312. *Livestock Judging*. (3) 0 + 6 Course designed to give the principles of judging and classifying livestock and the development of judging skills.

A I 313. *Diseases and Parasites*. (3) 3 + 0 Course includes study of the causes, symptoms and treatment of the major diseases and parasites of livestock. Prerequisite: Bacteriology 241.

A I 321-22-23. *Technical Skills in Animal Industry*. (3) 0 + 4 Required course for all majors and minors in Animal Industry. The main purpose of the course is to develop and improve the technical skills necessary for the successful production of farm animals and animal products.

A I 401. *Creamery Practice*. (3) 1 + 4 The care and operation of dairy equipment. Production and storage of dairy products.

A I 402. *Meats and Meat Products*. (3) 2 + 2 The butchering, cutting and processing of farm meats.

A I 403. *Animal Breeding*. (3) 3 + 0 The basic principles of breeding and breeding systems. Prerequisite: Zoology 211.

A I 411-12-13. *Technical Skills in Animal Industry*. (3) 0 + 4 Required course for all majors and minors in Animal Industry. The main purpose of the course is to develop and improve the technical skills necessary for successful production of farm animals and animal products.

A I 501. *Animal Feeding*. (3) 2 + 2 Study of the developments in animal feeding; experimental procedures and applications in commercial feeding.

A I 502. *Animal Feeding Problems*. (3) 1 + 4 Student is expected to set up and carry for at least 60 days a feeding trial with one kind of animal (choice of animal left with student).

A I 503. *Animal Health*. (3) 3 + 0 Study of the health maintenance and sanitary practices in livestock production.

A I 511. *Animal Improvement*. (3) 2 + 2 Study of the work being done by the Department of Agriculture and other agencies in animal improvement.

A I 512. *Dairy Management*. (3) 0 + 6 This course provides an opportunity for the graduate student to supervise and operate the college dairy.

A I 513. *Thesis*. (3-9)

A I 521-22-23. *Animal Industry Seminar*. (3) 1 + 0 Discussion of current Animal Industry literature.

Horticulture

General

H 101. (262) *Principles of Fruit Growing*. (3) 2 + 2 A study of the principles, practices and culture of orchard plants.

H 102. *Landscape Gardening*. (3) 2 + 2 Plant materials suitable for home and school beautification.

H 103. (162) *Vegetable Gardening*. (3) 2 + 2 A basic study of the principles and practices of home gardening.

Minor in Ornamental Horticulture

H 301. (461). *Landscape Plants*. (3) 1 + 4 A study of form, habit, texture, and adaptation of trees, shrubs, vines and herbaceous plants used in ornamental planting.

H 302. (264) *Plant Propagation*. (3) 2 + 2 A study of the methods of propagating horticultural plants which includes seedage cutting, grafting of both economic and ornamental plants.

H 303. (462) *Landscape Design*. (3) 1 + 4 A study of the principles of landscape design.

H 322. (163) *Principles of Pruning*. (3) 2 + 2 A study of the physiological plant processes as related to the growth and flowering of ornamental plants.

H (0) 401-2-3. *Technical Skills in Horticulture*. (3) 0 + 4 The main purpose of the course is to develop the technical skills needed in the practice of landscape art and floriculture. It runs throughout the year. Required of all minors in this area.

H 411. *Greenhouse Management*. (3) 0 + 6 Fundamental principles of greenhouse management.

H 412. *Floriculture*. (3) 2 + 2 A study of greenhouse and open culture of flowers.

H 413. *Landscape Design*. (3) 1 + 4 Advanced landscape design.

H 423. *Commercial Floriculture*. (3) 1 + 4 Advanced floriculture with practices of commercial production.

Minor in Economic Horticulture

H 311-12-13. *Commercial Vegetable Production*. (9) 2 + 2 A course dealing with the principles and practices of commercial vegetable production. A study will be made of varieties, cultural practices, insect and disease control, grading, packing, storing and marketing.

H (E) 401-2-3. *Technical Skills in Horticulture*. (3) 0 + 4 This course runs throughout the year. It is required of all students minoring in vegetable gardening and orcharding. The main purpose is to develop the technical skills necessary for the production of vegetables, nuts, orchard and small fruits.

H 404. *Processing of Fruits and Vegetables*. (3) 1 + 4 A study of current practices in the processing of fruits and vegetables. In addition to laboratory work, the course will include visits to freezing and dehydrating plants, and canning factories.

H 432-33. *Orchard and Small Fruit Culture*. (6) 2 + 2 Study and practice in propagating, planting, pruning, cultivating, fertilizing, spraying, thinning harvesting, grading, storing, and marketing orchard and small fruits.

Poultry Husbandry

P H 101-2. *Principles of Poultry Production*. (6) 3 + 0 The principles and practices underlying reproduction and growth of the domestic fowl. It includes the study of breeds, varieties and types of poultry.

P H 301. *Poultry Physiology and Nutrition*. (3) 2 + 2 The nutritive requirements of the fowl are considered together with metabolism of nutrients, respiration, digestion and excretion. The feeding of chicks on deficient diets, influence of hormone administration on primary and secondary characters and surgical techniques.

P H 302. *Poultry Management*. (3) 2 + 2 A detailed study of all phases of farm and commercial poultry including buying chicks, incubation, brooding, managing the growing flock and handling the layers. Includes cost of production.

P H 303. *Processing and Marketing Poultry Products*. (3) 3 + 0 Care, grading, dressing and packing poultry products for market. Market movement of poultry and eggs, marketing agencies including poultry cooperatives, trends in refrigeration and preservation of poultry and eggs, and imports and exports of poultry products.

P H 312. *Poultry Feeds and Feeding*. (3) 2 + 2 A study of feed-stuff, compounding rations and feeding practices for chickens, turkeys and other avian species.

P H 313. *Management of Family Flock*. (3) 2 + 2 For home economic majors. Starting the flock, selecting breeds, natural and artificial incubation. Natural and artificial brooding, feeding and rearing. Grading, processing, storing, preserving and marketing.

P H 321-22-23. *Technical Skills in Poultry Husbandry*. (3) 0 + 4 The course runs throughout the year and is required of all minors and majors in poultry husbandry. Its main purpose is to improve and develop the skills necessary for successful poultry production.

P H 331-32-33. *Poultry Seminar*. (3) 1 + 0 Required of all Juniors majoring in poultry husbandry and continued into the Senior year.

P H 401. *Poultry Hygiene and Sanitation*. (3) 2 + 2 The principles underlying sanitation and disease prevention as applied to the poultry farm.

P H 402. *Poultry Genetics*. (3) 3 + 0 Inheritance of viability, egg production and other characteristics of economic importance, breeding records and progeny testing.

P H 411-12-13. *Special Problems in Poultry Husbandry*. (3) 0 + 2 Each student will be required to make an exhaustive study of some particular phase of poultry husbandry and write a report of his study and research. The work must comprise in part original investigation.

P H 422-23. *Principles and Practices of Incubation and Brooding*. (6) 2 + 2 The environmental factors affecting incubation, embryo development, operation of incubators, and methods of brooding.

Agriculture

Ag 101-2-3. *Technical Skills in Agriculture*. (3) 0 + 4 This course runs throughout the year and is required of all Freshman students. It aims to improve and develop those technical skills necessary for the successful production of the home garden, orchard, and poultry flock.

Ag 201-2-3. *Technical Skills in Agriculture*. (3) 0 + 4 Required course for all Sophomores. Its main purpose is to improve and develop technical skills in Animal Industry and Agronomy. Extends through Fall, Winter, and Spring Quarters.

Joint Courses in Agriculture and Home Economics

Ag 303. (371). *Family Food Supply*. (3) 2 + 2 This course deals with the production and preservation of the farm family food supply. It involves the production of vegetables, fruits, dairy products, and the farm meat supply. Consideration is also given to the preservation, storage and use of foods produced on Tennessee farms, the principal foods being vegetables, fruits, meats, dairy products and certain edible field crops. Practical human nutritional problems are also treated. Special consideration is given to functional program.

Ag 401. (473) *Family Problems and Consumer Education*. (3) 3 + 0 The course deals with the problems of human behavior as applied to the farm and urban family; marriage, and problems of marital life are also dealt with; consideration is given to wholesome family relationship.

Ag 403. (372) *Rural Home Improvement*. (3) 2 + 2 A study of home ground improvement, home conveniences, painting, white-washing, screening, and repairing dwellings. Repairing and building out-buildings, including sanitary toilets, etc. Consideration is also given to interior decoration, construction and repair of furniture and household appliances as applied to the Farm home.

Agricultural Seminar

Agricultural Seminar—*Special Problems* 201-2-3; 301-2-3; and 401-2-3. (9) 1 + 0 Discussions, lectures, demonstrations and movies covering the more general subjects in the field of Agriculture that should be of common interest to agricultural students. Required of all Sophomores, Juniors and Seniors. Class meets once per week.

DIVISION OF BUSINESS

LEWIS R. HOLLAND, *Acting Director and Associate Professor of Economics and Business Administration*.

*ADOLPH T. SCOTT, *Associate Professor of Economics and Business Administration*.

CECILLE V. CRUMP, *Associate Professor of Business Education*.

JULIA V. HENDERSON, *Assistant Professor of Business Education*.

JOHN H. LEWIS, *Assistant Professor of Insurance Underwriting*.

EVELYN F. CARTER, *Instructor in Business Education*.

MILDRED K. GAINES, *Instructor in Business Administration*.

MARY L. JACKSON, *Instructor in Office Administration*.

LOUIS L. WILLIE, JR., *Instructor of Business Administration*.

*HELEN L. GLOVER, *Assistant Instructor in Business Education*.

MATTIE L. GORDON, *Assistant Instructor in Office Administration*.

OBJECTIVES AND FACILITIES

The Division of Business Administration and Education is one of the largest divisions of the College. Among its aims are: to provide training in the methods, techniques, and principles underlying modern business as a foundation for careers in these fields, to provide students with a knowledge and understanding of the changing and developing character of economic society and the responsibility incumbent upon educated men and women engaged in economic activity, to provide training in those phases of business that concern every member of organized society, to train students for the teaching of business subjects in secondary schools, and to provide specialized instructions for those who wish to engage in specific occupations which include promotional, or in-service training for office and distributive occupations.

The division occupies most of the second floor of the modern and well equipped Women's Building. The teaching facilities include one large lecture room, one large room for the teaching of typing, a room equipped for teaching shorthand and accounting and a room equipped for teaching the operation and care of office machinery.

The teaching equipment includes typewriters and varitype machines, multi-graph and multilith machines, calculating and adding machines, addressograph, ditto, mimeoscope and graphotype machines. The typing room is well equipped with metal typist tables and modern steel frame typist chairs.

BUSINESS EDUCATION

FRESHMAN YEAR				SOPHOMORE YEAR			
Name of Courses:	Quarter			Name of Courses:	Quarter		
	Hours	Credit			Hours	Credit	
English 101-2-3	3	3	3	English 201-2-3	3	3	3
*Science 111-12-13	3	3	3	Economics 211-12-13	3	3	3
History 121-22-23	3	3	3	Accounting 211-12-13	3	3	3
Geography 271-72-73	3	3	3	Office Administration 204-5-6	3	3	3
Mathematics 171-72-73	3	3	3	Office Administration 221-22-23	2	2	2
Business Education	1	1	1	Office Administration 201 or Psychology 211 or Education 243	3	3	3
Office Administration 211-12-13	1	1	1	Physical Education 201			
Physical Education 101-2-3	1	1	1	2-3	1	1	1
	18	18	18		18	18	18

*Biology or Physics may be elected.

JUNIOR YEAR				SENIOR YEAR			
Name of Courses:	Quarter			Name of Courses:	Quarter		
	Hours	Credit			Hours	Credit	
Office Administration 304-5-6	3	3	3	Office Administration 401	3	3	3
Sociology 211-12-13	3	3	3	Business Education 411-12-13	3	3	3
Education 341-42	3	3		Business Education 450	3		
Education 381			3	Statistics 321	3		
Business Law 211-12-13	3	3	3	English 301	3		
English 321	3			Office Administration 434	3		
Finance 331	3			Electives	3	3	6
Education 313	3				15	15	12
Business Education 400			3				
Electives	3	3					
	18	18	18				

BUSINESS ADMINISTRATION

This curriculum is identical in the Freshman year with the curriculum in Business Education. The Sophomore, Junior and Senior years are indicated below.

SOPHOMORE YEAR				JUNIOR YEAR				SENIOR YEAR			
Name of Courses	Quarter			Name of Courses:	Quarter			Name of Courses	Quarter		
	Hours	Credit			Hours	Credit			Hours	Credit	
English 201-2-3	3	3	3	Accounting 311-12-13	3	3	3	Office Management 433-4	3	3	
Economics 211-12-13	3	3	3	Political Science 313		3		Marketing 311-12		3	3
Accounting 211-12-13	3	3	3	Psychology 211-12-451	3	3	3	Accounting 421-22-23	3	3	3
Sociology 311-12-13				English 321-01	3		3	Finance 422-23-33	3	3	3
Political Science 221-22-23	3	3	3	Finance 331-2	3	3		Salesmanship 313	3		
Business Law 211-12-13	3	3	3	Statistics 321-2	3	3		Advertising 431-2		3	3
Physical Education 201-02-03	1	1	1	Electives:				Electives:			
	16	16	16	Economics 313-323;				Economics 431-2;			
				Marketing 311; Finance 311; Economics 301-2	3	3	6	Economics 331	6		3
					15	18	15	Senior Thesis 401		3	
									18	18	15

GRADUATE WORK

SUGGESTED PROGRAM LEADING TO THE MASTER'S DEGREE
FOR THOSE INTERESTED IN BUSINESS EDUCATION

A total credit of forty-five quarter hours is required for a Master's degree. These forty-five quarter hours may be offered in one major subject and two minors, or one major and one minor. Credit in the major subject, including the thesis, shall not be less than twenty-seven quarter hours, and in a minor subject not less than nine nor more than eighteen hours. The prerequisite for a graduate major usually amounts to an undergraduate major or its equivalent, and in no case may this prerequisite be less than two courses of full collegiate grade extending through the year in each instance.

At least nine quarter hours of credit in the major subject (exclusive of the thesis) must be from courses in the 500 group. None of the hours for graduate credit may be for courses that are numbered less than 300.

Students interested in Business Education should register in the following courses:

Business Education 501-2-3. Thesis (Business Education).....	9 hours
Business Education 521-2-3. Graduate Seminar (Business Education).....	9 hours
If methods courses in the student's specific field of teaching interests, that is, Secretarial, Accounting, or Merchandising, have not been previously taken, it is necessary that such a course be included in his major	3 hours
Business Education 412. Teaching the Social-Business Subjects.....	3 hours
Business Education 413. Curriculum Construction in Business Education	3 hours

should be taken unless they, or their equivalent, have previously been included for credit.

Remaining courses, to complete a total of twenty-seven quarter hours, necessary for a major, should be selected from the offerings in the School of Business Administration.

BUSINESS EDUCATION

Description of Courses

101-2-3. *Orientation to Business.* (1) Designed to give the student essential familiarity with the business environment in which he or she lives and works. Information received will help the student make an intelligent choice of the particular field of business in which to specialize. One hour credit each quarter.

400. *Principles of Business Education.* (3) A study of the basic principles and trends in business education. Topics include the purpose of business education, its relation to education in general, pupil problems, attitudes of business and labor toward education, the development of courses of study, curriculum evaluation and current problems in business education. Three hours credit.

411. *The Teaching of Typewriting and Shorthand.* (3) For experienced and prospective teachers of typewriting, shorthand, and related office practice. Materials of instruction available to teachers are presented and methods of developing materials are considered and applied through lectures, demonstrations, readings, and reports. Prerequisites: Office Administration 223 and 206, or the equivalent. Three hours credit.

412. *Teaching the Social-Business Subjects.* (3) Methods of classroom procedure in the teaching of general business, business law, business organization, elementary economics, and other business subjects which have as their major objective the development of a better understanding of the basic principles of business and the ability to solve more intelligently the manifold business problems met by the individual in his personal, social, and civic activities. Three hours credit.

413. *Curriculum Construction in Business Education.* (3) Aims, principles, practices, and problems involved in the construction of business curricula for the various types of educational institutions in which business subjects are taught. Members of the class are encouraged to define and evaluate curricular problems which they have met or expect to meet in practical teaching situations. Three hours credit.

450. *Senior Project.* (3) A course designed to aid the senior student in writing the project required for graduation. Before enrolling in the course the student should have at least an outline of the subject on which he wishes to write. The project must be completed by the end of the quarter for the student to receive credit. Three hours credit.

OFFICE ADMINISTRATION

201. *Office Machinery.* (3) Instruction and training to develop reasonable skill in the operation of the calculating, duplicating, and other common office machines. Efficient operation of transcribing machines is required. Prerequisite: Office Administration 213. Offered each quarter. Three hours credit.

211-12-13. *Typewriting.* (3) For Office Administration majors, for prospective business teachers, and, so far as facilities permit, for other students who wish to acquire a working knowledge of typewriting. Special attention given to practice in preparing typewritten outlines, reports and letters in accordance with acceptable standards of form and appearance. One hour credit each quarter.

221-22-23. *Advanced Typewriting.* (6) The development of typewriting proficiency to meet vocational requirements. A minimum speed of 40 words a minute with not more than five errors is required of students before enrolling for this course. Upon completion of this course the student is expected to type 60 words a minute for at least 10 minutes with not more than five errors. Three hours credit each quarter.

204-5-6. *Secretarial Problems.* (9) The fundamentals of Gregg shorthand are presented and applied through problems and projects in simulated office

situations. Prerequisite: Office Administration 223 or the equivalent. Three hours credit each quarter.

304-5-6. *Advanced Secretarial Problems.* (9) Daily advanced dictation and transcription to increase shorthand writing speed to the stenographic standards of efficient business offices—100 to 120 words a minute—and to increase the ability to transcribe shorthand notes at 40 words a minute, giving special attention to punctuation, spelling, and arrangements. Three recitation periods, three laboratory periods for transcribing. Three hours credit each quarter.

401-2. *Secretarial Office Practice.* (6) Instruction in office procedures, performance of upper-level secretarial duties, filing, business ethics, and personality development. This course correlates the instruction in office administration received during the three previous years of training, and prepares the student for actual office work. Three hours credit each quarter.

403. *Applied Office Practice.* (3) This course is based on an activity program which provides opportunity for practical experience under actual business conditions. Development of skill in the operation of office machines, skill in transcribing, thorough knowledge of the routine in a modern business office, relation of the secretary to the employer, job analyses, and supervision of correspondence. One hundred hours of actual office experience are required during the spring quarter. Three hours credit.

404. *Office Management.* (3) Problems involved in planning and directing the functions of business and professional offices; executive duties and responsibilities of the office workers of the office manager, private secretary, and supervising stenographer; selection and training of office worker; selection and care of office equipment and supplies; office plans and specifications; routine procedures, such as, interviewing callers, reporting conferences, and the handling of office mail. Three hours credit.

BUSINESS ADMINISTRATION

Accounting

211-12-13. *Elements of Accounting.* (9) A basic course in bookkeeping and accounting theory and practice, requiring no previous knowledge of bookkeeping. The bookkeeping process, statements, revenue accounts, controlling accounts, accruals, depreciation, bad debts, and various phases of partnership and corporation accounting are treated. A prerequisite to all other courses in Accounting. Two laboratory periods, one hour. Three hours credit, each quarter.

311-2. *Intermediate Accounting.* (6) Theory and practice relating to the theory of the various balance sheet accounts, working papers, statements, corporations, consignments, installment sales, funds and reserves, statement of application of funds. A basic course in accounting theory. 311, two laboratory periods, one hour. 312, three hours. Three hours credit, each quarter.

323. *Advanced Accounting Problems.* (3) Theory and problems in ad-

vanced topics, including partnership problems, insolvency, estates and trusts, and consolidated statements.

421-2. *Cost Accounting.* (6) Principles of factory and distributive cost accounting. Procedures and controls are emphasized through the medium of a wide variety of laboratory problems. Standard costs are included. 321, two laboratory periods, one hour. 322, three hours. Three hours credit, each quarter.

423. *Auditing Procedures.* (3) The purpose of the course is to ground the student in the principles of auditing and to develop the analytical knowledge necessary to critical examination of financial statements. The text material will be amplified by specific problems. Only advanced students in accounting are admitted.

Business Law

311-12-13. *Business Law.* (9) Fundamental principles of law most frequently involved in business transactions, including contracts, sales, partnerships, master and servant, principal and agent, corporations, negotiable instruments, property, bailments, and common carriers, with the view of enabling businessmen to avoid litigation. Three hours credit, each quarter.

Finance

311. *Banking.* (3) A general survey of credit and credit instruments and the activities and policies of financial institutions, such as commercial and savings banks, the Federal Reserve System, investment banks, and stock exchanges.

331-32. *Business Organization.* (6) A study of the various types of business organizations and management with special emphasis on their financing by means of stocks, bonds and other instruments of finance. The work of promotion, underwriting securities, internal financial management, reorganization, and receivership are also treated.

422. *Real Estate.* (3) Land economics; real estate contracts, deeds, and mortgages; values of leases and leaseholds; valuation of real estate; questions of title and title insurance; brokerage; Tennessee law. Field work.

423. *Life, Accident and Health Insurance.* (3) Social insurance, forms and kinds of policies, rate making, keeping of reserves and surplus, methods of settlement, government regulation.

433. *Property Insurance.* (3) Fire, burglary, automobile, fiduciary. Forms and kinds of policies, rate making, keeping of reserves and surplus, methods of settlement, government regulation.

Statistics

321 (311). *Elementary Statistics.* (3) A course in business statistics designed especially for students in Office Administration, Business Education, and Distributive Education. The course consists of a study of statistical sources and collection of data; the presentation of data in tables, charts, and reports; the computation of ratios and percentage, averages, dispersion, and sampling errors. Three hours credit.

322. *Business Statistics*. (3) This course covers statistical theory and methods directly applicable to the solution of business and economic problems. Major topics: Index numbers; analysis of time series; simple correlation. Prerequisite: Statistics 321. Three hours credit.

401. *Senior Project*. (3) A student in the School of Business Administration or the College of Liberal Arts having an average of B, or better, for the first three years, may write a thesis on some subject in his major field.

ECONOMICS

Marketing

211-12-13. *Principles of Economics*. (9) Principles and problems associated with the production, exchange, and use of wealth. 211 repeated during Winter and Spring. 213 repeated during Fall and Winter. Open to freshmen who have had Economics or Sociology in high school. Three hours credit, each quarter.

301. *Personnel Management*. (3) An examination of the principles and methods of efficient labor management used in the maintenance of harmonious relationships between management and employees. Personnel organizations and procedures, employee representation.

302. *Labor Problems*. (3) The problems of industrial employment from the standpoint of the *employee, employer, and society*.

313. *Government and Business*. (3) Designed to show how the government aids and assists business by the maintenance of fact-finding agencies, extension of loans and subsidies, etc. The growing importance of regulatory activities as represented by the Federal Trade Commission, Communications Commission, and Power Commission, and the development of government-owned corporations.

323. *Economics of Consumption*. (3) Designed to acquaint the student with the character and significance of the factors which determine and govern consumption, particularly as these are related to the prosperity and stability of the economic system. May be substituted for Economics 212 with the consent of the head of the department when 212 is not required as a prerequisite.

431. *Economic Development of the United States*. (3) A study of the progress in agriculture, industry, communication, transportation, banking and trade, and of developments in governmental economic policy.

432. *The Cooperative Movement*. (3) Analysis of the causes, development, and purposes of the movement. An examination of typical cooperatives to discover strength and weakness.

441. *Industrial Mobilization*. (3) A study of the relations of business to government in the mobilization of the productive capacity of the United States. Particular attention will be given to management with respect to bidding, purchasing, contracting, and sub-contracting, and to governmental legislation and administration with respect to priorities and price schedules.

COMMERCIAL LIFE UNDERWRITING

The courses in commercial life underwriting are designed to prepare students for entry into this field with a working knowledge of its basic principles and functions. They include a study of the various types of risk bearing organizations that have been developed and present a thorough analysis of various types of insurance contracts, risk measuring methods, techniques and specialized phases of different types of risks.

Representatives from the leading Negro insurance companies appear at regular intervals to develop and present parts of the course outlines bearing upon their respective specialties.

COURSES

211-A. *History of Life Insurance*. A survey of the chronological and historical development of life insurance. From the crudest hit and miss stage to the scientific institution that it is today. (3 hours credit).

211-B. *Fundamentals of Life Insurance*. A study of the scientific basis of life insurance with particular emphasis to its vocabulary, proper concepts, mortality tables and policies and contracts. (3 hours credit).

211-C. *Seminar in Life Insurance*. A course conducted on a discussion basis which aims at complete clarification of the materials offered in the other two courses. Outlines are used which differ from the outlines in the other courses but correlation is the paramount objective. (3 hours credit).

212-A. *Salesmanship and Marketing*. This course is concerned with marketing and merchandising the services of life insurance. It includes the psychology of selling, the place of the salesman in society, the client, dress, voice, the approach and professional ethics. (3 hours credit).

212-B. *Contract Analysis and Programming*. A study of contracts, property features and legal aspects. This course is also concerned with planned selling, settlement options, social security and the employment of visual materials. (3 hours credit).

212-C. See 211-C.

213-A. *Personnel Management and Public Relations*. This course is a study of the various techniques, devices and programs employed to stimulate field production. It is also concerned with problems of management. Emphasis is also given to advertising, community services and health advice. (3 hours credit).

213-B. *Administration*. A study of organization structure, investment policies, budgets, reserves, mortality and insurance accounting. (3 hours credit).

213-C. *Seminar*. See 211-C.

Note: 211-C, 212-C and 213-C are Seminar courses and will be used in discussions of the materials presented in the other courses. These courses are restricted to students enrolled in one or more of the other courses.

DIVISION OF EDUCATION

GEORGE W. GORE, JR., *Dean of the College, Director of the Division and Professor of Education.*

HENRY A. KEAN, *Head of the Department and Professor of Health and Physical Education.*

FRANCES A. SANDERS, *Head of the Department and Associate Professor of Elementary Education.*

JOHN HENRY SHARPE, *Chairman and Professor of Music.*

FRANCES E. THOMPSON, *Professor of Art.*

LILLIAN G. DABNEY, *Professor of Education.*

EUNICE S. MATTHEW, *Serving as Consultant in State Educational Program.*

ROBERTA O. PEDDY, *Serving as Consultant in State Educational Program.*

*LUA S. BARTLEY, *Associate Professor of Health and Physical Education.*

DOROTHY N. CAMPBELL, *Associate Professor of Music.*

JORDAN D. CHAVIS, *Associate Professor of Music.*

MONTRAVILLE I. CLAIBORNE, *Associate Professor of Psychology.*

CLINTON D. CROOKS, *Associate Professor of Health and Physical Education.*

LOIS H. DANIEL, *Head of the Department and Associate Professor of Library Service.*

JEAN PAUL HUBBARD, *Associate Professor of Art.*

THOMAS E. HUGHES, *Associate Professor of Health and Physical Education.*

CHARITY M. MANCE, *Associate Professor of Education and Psychology.*

CHARLIE F. TILLMAN, *Associate Professor of Education.*

THOS. HARRIS, *Assistant Professor of Health and Physical Education.*

COLLYE L. RILEY, *Assistant Professor of Library Service.*

DOROTHY L. STEVENS, *Assistant Professor of Library Service.*

MARIE B. STRANGE, *Assistant Professor of Music.*

VELMA V. WATTERS, *Assistant Professor of Education.*

BARBARA L. BRYANT, *Instructor in Health and Physical Education.*

EDDIE MOZELL JENKINS, *Instructor in Health and Physical Education.*

VELMA SINGLETON LOWE, *Instructor in Library Service.*

VERNON E. MCCAIN, *Instructor in Health and Physical Education.*

PEGGY J. WILLIAMS, *Instructor in Health and Physical Education.*

LAWRENCE SIMMONS, *Instructor in Health and Physical Education.*

CARR A. TREHERNE, *Part-time Instructor in Health.*

**DONLEY H. TURPIN, *Part-time Instructor in Health.*

CLYDE J. KINCAID, *Director of Athletic Publicity and Business Manager of Athletics.*

MAE ETTA MCCAIN, *Assistant Instructor in Elementary Education.*

*On leave.

**Deceased.

OBJECTIVES AND FACILITIES

The Division of Education has as its principal objective the training of teachers, supervisors and administrators for the public schools of Tennessee. It also has the responsibility for research in the problems of education and for

field work for teachers and administrators in cooperation with the Division of Negro Education of the State Department of Education.

The Division of Education offers several curricula leading to the degree of bachelor of science in Education. These include curricula for training: (1) elementary teachers; (2) general and secondary education teachers; (3) psychologists; (4) graduate students; (5) art and music teachers; (6) school librarians; health and physical education teachers for high schools. In addition special curricula or programs of training are provided in agricultural education, business education, home economics education and industrial education in cooperation with the Division in which students in these subjects are enrolled.

The Division of Education uses all facilities available on the college campus. It depends upon the subject matter departments in the several divisions for the basic subject matter necessary as a background for professional courses in education.

In addition, the Division of Education has cooperative agreements with the county schools of Davidson County and the city schools of Nashville under which certain schools are made available for teacher training.

DEPARTMENT OF ELEMENTARY EDUCATION

The Department of Elementary Education has been set up by the College as its agency for the professional preparation of educational leaders in the elementary field. The following are its specific objectives:

1. To enable the prospective teacher to understand and appreciate the nature and purpose of education.
2. To understand the developmental life of the human being.
3. To use subject matter as a means of enriching this developmental life.
4. To learn to accept and discharge creditably the responsibility of teaching the way of democratic living.
5. To investigate the educational, social, and economic problems of the state and to assist local communities in the solution of these problems through education.
6. To train elementary principals, teachers, and supervisors for city and rural schools.

Elementary Education is one of the departments of the Division of Education of the college leading to the degree of bachelor of science in Education. All students enrolled in the Elementary Education Curriculum are required to take tests during the Fall quarter of their Freshman year. All students enrolled in this department are required to meet a standard of achievement set up by the Division of Education at the close of the Sophomore year. Until these standards are met, students will not be admitted in the upper Division.

Facilities

Inasmuch as a large majority of our graduates go into the open country and small towns to teach, it is considered more advisable to have them do observation, and participation in teaching situations which will more nearly

resemble those which they will meet on the field. The Department of Elementary Education has cooperative agreements with local school systems for teacher training.

Students in this curriculum are given opportunity to observe and work with children at various age and grade levels. They are given opportunity to participate in various forms of community activities such as they would be expected to do as teachers in: church and Sunday school work, P.T.A. programs, community club work, home visitations and the like.

Activities

The Departmental organization is the Elementary Education Club. Each student in the Elementary Curriculum may become a member and is encouraged to take an intelligent and active part in all its activities. Such participation affords invaluable training for prospective teachers in providing opportunity for leadership, cooperation, fellowship, and practical application of education. The club serves as a laboratory for its members. In addition to this departmental organization, students may participate in other campus clubs and organizations should they so desire.

ELEMENTARY EDUCATION CURRICULUM

FRESHMAN YEAR	Quarter			SOPHOMORE YEAR	Quarter		
	Hours Credit				Hours Credit		
Name of Courses	I	II	III	Name of Courses	I	II	III
English 101-2-3	3	3	3	English 261			3
History 101-2-3	3	3	3	English 201-2	3	3	
Science 101-2-3	3	3	3	Education 231-2-3	3	3	3
Geography 171-2-3	3	3	3	Psychology 253			3
Art 101			3	Psychology 211			3
Music 101			3	Health 211-2-3	3	3	3
Art 100	1			Art 201			3
Education 101-2-3			3	Music 223			3
Mathematics 101			3	Physical Ed 243 (401)			3
Physical Education 101-2-3	1	1	1	Physical Ed 201-2-3	1	1	1
	—	—	—	Art 243			3
	17	16	18		—	—	—
					16	16	16

JUNIOR YEAR	Quarter			SENIOR YEAR	Quarter		
	Hours Credit				Hours Credit		
Name of Courses	I	II	III	Name of Courses	I	II	III
Education 333	3			Political Science 222-23		3	3
Sociology 211-12-13	3	3	3	World Geography	3	3	
Test and Measurements				Education 443	3	3	
313			3	Education 431-2-3	3	4	1
Educational Psy for Elementary Teachers 243			3	History 411			3
Education 362			3	Art 401		3	
Education 385	3			Electives	3	3	6
History 201-2	3	3		Ed 450	3	3	3
Speech 201-2	3	3			—	—	—
Music 301			3				
Geog. 371-2-3	3	3	3				
Ed. 481			3				
	—	—	—				
	15	15	18				

CERTIFICATION REQUIREMENTS FOR ELEMENTARY TEACHERS

Professional Certificates.

A permanent professional certificate shall be issued to the applicant for the position of teacher in elementary schools who has completed a two-year curriculum for elementary teachers in a State Teacher College or State Normal School or an equivalent curriculum in the University of Tennessee, or other college or university approved by the State Commissioner and State Board of Education, who has had at least 18 quarter hours in education.

The two-year curriculum requiring 72 weeks in college, completion of a minimum of 90 quarter hours of credit, 18 of which are in education, is as follows:

- | | <i>Qt. Hrs.</i> |
|---|-----------------|
| 1. Arts—Fine and Practical, Appreciation and Applied | 6 |
| 2. Education— | |
| a. Psychology—General and Child | 6 |
| (Schools on semester plan may make these 2 semester hours each) | |
| b. Materials and methods in the various elementary school subjects, including supervised observation. (Should include such subjects, as the teaching of reading, arithmetic, spelling, penmanship, language, geography, health, etc., or in the new type curriculum, large units, activities for various grades, citizenship, local and state history | 3 |
| c. Directed observation, participation and teaching | 3 18 |

3. English—		
a. Composition, oral and written.....	9	
b. Survey, American and English Literature.....	6	
c. Children's Literature. (Should include world literature suitable for children)	3	18
4. Health. (May include such subjects as personal, child, and community hygiene; child care; nutrition; children's diseases).....	9	
5. Music—Appreciation and Public School Music.....	6	
6. Physical Education. This should be plays and games for Elementary schools	3	
7. Science—		
a. Science for the grades, or nature study, or general science.....	9	
b. or Biology	9	9
8. Social Science—		
a. Problems of Civilization	9	
or American History and Civics.....	9	
b. Geography	9	18
9. Electives	From 3 to 21	
Total range for the two-year curriculum—from 90 to 108 Quarter Hours		

Applicants who entered college before the fall term of 1938 are not required to conform to the two-year curriculum, but all credits to be earned for elementary certification since 1938 should be selected from the areas set up in the above two-year program.

COLLEGE GRADUATES WHO DESIRE AN ADDITIONAL CERTIFICATE

(To change from high school certificate to elementary certificate after graduation and vice versa.)

The holder of a permanent professional high school certificate may obtain the permanent professional elementary certificate upon completion of the following courses:

1. Methods:		
a. Teaching the social studies in grades.....	3	
b. Teaching the language arts.....	3	
2. Public school music for elementary grades.....	3	
4. Health for elementary grades.....	3	
5. Student teachings on the elementary school level.....	3	
Total	18	Qr. Hrs.

The holder may change from a permanent professional elementary certificate based on four-year curriculum to high school:

1. Meet the quarter hour requirements in high school subjects.....	6
2. Materials and methods courses in two fields of secondary subjects in which the applicant will become certified.....	6
3. Principles of secondary education	3
4. Student teaching on the secondary level in a certified area ...	3
Total	18 Qr. Hrs.

The above was approved by the State Board of Education on May 8, 1942, and applies to those who enter college with the fall term of 1938 or since and wish to change from the area of teaching to the other.

ELEMENTARY EDUCATION

101-2-3. *Introduction to Education.* (1) Fall, Winter and Spring. This course is designed to present an overview of the field of teaching. An introductory survey of the American educational system, qualifications for teaching with emphasis on qualifications for teaching in Tennessee and the South, and teaching procedures are discussed. Special supplementary study is made of educational publications, and educational and school laws of Tennessee and the South.

Each student is required to make a personal inventory to ascertain his qualifications and aptitudes for the teaching profession. These findings and the results of the standardized test, administered at the beginning of the course, will supply the profile chart for each student.

Opportunities are provided for educational tours, observation in both city and county schools. Also, films, showing the modern school equipment, teacher and the child will be presented by the Psychology Club.

**Not counted for certification. May be counted as education.

Education 211. *General Psychology* Acq. For description see Psychology 211. This course may be counted as three hours toward an Elementary or Secondary Certificate.

231. *The Teaching of Arithmetic in the Elementary School.* (3) Fall Quarter. An inquiry into methods of teaching arithmetic in the elementary grades, the principles upon which they are based, and the influence of scientific studies upon the courses of study and methods. Not open to students who are not pursuing the curriculum for Elementary teachers except by special permission of the Department Adviser.

232. *The Teaching of Language Arts in the Elementary School.* (3) Winter Quarter. Prerequisite, Education 231. A consideration of modern trends in teaching the Language Arts: reading, spelling, literature, composition, and writing. The materials in this course purpose to give the student a fundamental knowledge of the uses of language which will best enable the

student to communicate with others. It deals with the adequate training in both the subject matter and methods of teaching the Language Arts subjects.

233. *Teaching the Social Studies in the Elementary School.* (3) Spring Quarter. Prerequisite, Education 231-232. This course considers the educational clauses of the social studies, reasons for, and ways and means of integrating history, geography, and civics, and the development of pupils in appropriate emotional and thought reactions to social problems and issues. Opportunity is afforded for observation in the elementary schools.

313. *Tests and Measurements in the Improved of Learning.* 3 hours credit. For prospective elementary and high school teachers who desire first-hand experience in the use, construction, and benefits of diagnostic procedures. An understanding of and an appreciation for statistical concepts as they relate to general education. Prerequisite: Successful completion of one year of college work.

332. *History of Education in the United States* (3) A survey course of the evolution of Public Education in the United States.

Education 333. *Seminar.* (3) This course is open to Junior and Seniors only in the field of education. It includes the study of objective, principles and philosophy of Education in the public school system; dealing with the collection, classification and use of curriculum materials.

362. *School and Community Relations.* (3) This course includes the following topics: the control of schools by boards of education, pressure groups, and parents; the study of educational institutions other than the school; the attitude of the community toward teachers; responsibility of teachers for exerting leadership in the community and ways in which they can exert this leadership; adult education projects; and relation of social backgrounds and school progress. Materials in this consist of a standard reference in educational sociology, such as Cook's *Background of Education*, and also pamphlet material from community agencies. It is recommended that students in the course actually participate in community projects.

Education 263. *Procedures of Curriculum Improvement for Early Childhood Education.* (3) The growth of understanding and personality and the concepts, attitudes, interests, social and emotional adjustments characteristic of children at various stages of development; utilization of the resources of science, art, music language and other fields for the development of children. Open only to third year students.

363. *Educational Guidance and Extra Curricular Activities.* (3) Permission of instructor required. This course covers the principles and procedures involved in guidance programs which meet the educational, social, vocational and personal needs of the elementary and high school pupils. Special emphasis is made to show the place of assembly programs, student civic organizations, academic clubs, music organizations, hobby clubs, and athletics, in the total development of the pupils.

385-386. *The Curriculum.* (6) Fall and Winter Quarters. A critical study of the reorganization, construction, and administration of the elementary and high school curriculum in the light of modern education principles and objectives; overview of the subjects now included in the curriculum and the forces that cause them; the construction of units and other curriculum materials.

431-2-3. *Observation and Participation Teaching in the Elementary School.* (9) Fall, Winter, Spring Quarters. A three part course consisting of directed observation and participation in instructions in elementary grades; open only to seniors and teachers with some experience. It proposes to offer situations which the student will meet in actual work and give him the benefit of skilled and experienced teacher's solution of school problems. Conferences for interpreting school activities in the light of the observation and parallel readings are held frequently. Students must earn at least 90 clock hours credit in this course. Prerequisites: Education 253, 211, 231-2-3. Applications for Education 431-2-3 must be filed not later than second week in May prior to the school year in which the applicant desires student teaching privileges.

443. *Principles of Learning in the Elementary School.* (3) An advanced course in methods and materials in the elementary school; designed for students who have had the equivalent of Education 243, 231-2-3. Must be taken along with Education 431-2, Student Teaching.

481. *Early Childhood Education.* (3) A course designed to improve and work for the education and well-being of children (particularly the beginners), by promoting desirable educational conditions, programs and practices; raising the standards of preparation and encouraging continued professional growth of teachers in this field.

GENERAL AND SECONDARY EDUCATION

CURRICULUM FOR TEACHING IN HIGH SCHOOLS

FRESHMAN YEAR	Quarter			SOPHOMORE YEAR	Quarter		
	Hours Credit				Hours Credit		
Name of Courses	I	II	III	Name of Courses	I	II	III
English 101-2-3	3	3	3	English 201-2-3	3	3	3
History 121-2-3	3	3	3	Political Science or Sociology	3	3	3
Science (Biology, Chemistry or Physics)	4	4	4	Psychology 211-12	3	3	
Education 101-2-3	1	1	1	Education 243			3
Major	4	4	4	Science or Health	3	3	3
Physical Education 101-2-3	1	1	1	Major	3	3	3
	—	—	—	Physical Education 201-2-3	1	1	1
	16	16	16		—	—	—
					16	16	16

JUNIOR YEAR	Quarter			SENIOR YEAR	Quarter		
	Hours Credit				Hours Credit		
Name of Courses	I	II	III	Name of Courses	I	II	III
Education 341	3			Education 471-2		6	
Education 362		3		Education 342	3		
Education 385			3	Education 381		3	
Political Science	3			History 411			3
Major	4	4	4	Electives	6		9
Minor	3	3	3	Major	3	3	3
Electives	3	6	6	Minor	3	3	3
	<hr/>				<hr/>		
	16	16	16		15	15	18

Majors may be selected in the teaching of the following subjects: English, History, Mathematics, Science, Social Science.

Minors may be selected from the following subjects: Agriculture, Biology, Typewriting, Accounting, Shorthand, Speech, Geography, Mechanical Drawing, Woodwork, Library Service, Mathematics, Music, Chemistry, Biology, Physics, Physical Education and Health, Political Science, Sociology, Economics, French, Spanish.

CHANGES IN CERTIFICATION REQUIREMENTS FOR HIGH SCHOOL TEACHERS

Effective July 1, 1949

Approved by the State Board of Education, November 8, 1946

I. *French, German or Spanish.* The applicant shall offer a minimum of 27 quarter hour credits for certification in each modern language.

II. *Library Science.*

A. Librarian (whole-time). 45 quarter hours credits. Graduation from a library school accredited by the American Library Association or from an institution accredited by the State Board of Education with 45 quarter hours in library science.

B. Teacher-Librarian. 18 quarter hours credits. Bachelor's Degree from a college approved by the State Board of Education for teacher training with a minimum of 18 quarter hours in library science. This training shall include:

1. Administration
2. Bibliographic or Reference
3. Practice Work

Any teacher-training institution, approved by the State Board of Education, which plans to train teacher-librarians should apply for inspection of its library facilities to the State Department before beginning the training.

III. *Education.* The professional requirements for high school teachers are:

- A. Education, Psychology 3 quarter or 3 semester hour credit

B. Principles of Secondary Education	3 quarter or	3 semester hour credit
C. Materials and methods of or	6 quarter or	3 semester hour credit
Teaching Methods in Certified Teaching Areas and Materials and Methods or Teaching Methods in Certified Areas	3 quarter or	3 semester hour credit
or		
Directed and Practice Teaching in Certified Areas and Materials and Methods or Teaching Methods in Certified Areas	3 quarter or	3 semester hour credit
	<hr/>	
TOTAL	15 quarter or	12 semester hour credit

Note: The materials, methods and teaching courses or practice teaching courses will be limited to those areas of study in which the students will become certificated. The practice teaching credits must show on the application for certification the areas in which the teaching is done. Practice teaching credits will be limited to a maximum of 6 quarter hours unless an inspection by the State Board of Education indicates the facilities are adequate for additional credits.

D. The remaining 12 quarter hours or 6 semester hours of the 27 quarter hours or 18 semester hours required for certification are elective and will be selected from the list of courses as now outlined on page 7 of the certification bulletin.

IV. *Public School Music.* The applicant shall offer a minimum of 36 quarter hour credits in music as follows:

A. Theory	9 quarter hour credits
B. Applied Voice	
1. Voice	6 quarter hour credits
2. Piano	3 quarter hour credits
3. Winds and Percussion	3 quarter hour credits
C. Appreciation and History	3 quarter hour credits
D. Conducting	3 quarter hour credits
E. Instrumentation or Arrangement of Music	3 quarter hour credits
F. Teaching Public School Music—High School	3 quarter hour credits
G. Teaching Band and Orchestra in High School	3 quarter hour credits

The above changes will become effective July 1, 1949.

GENERAL AND SECONDARY EDUCATION

101-2-3. *Introduction to Education.* (1) Fall, Winter and Spring. This course is designed to present an overview of the field of teaching. An introductory survey of the American educational system, qualifications for teaching with emphasis on qualifications for teaching in Tennessee and the South, and teaching procedures are discussed. Special supplementary study is made of educational publications, and educational and school laws of Tennessee and the South.

Each student is required to make a personal inventory to ascertain his qualifications and aptitudes for the teaching profession. These findings and the results of the standardized test, administered at the beginning of the course, will supply the profile chart for each student.

Opportunities are provided for educational tours, observation in both city and county schools. Also, films, showing the modern school equipment, teacher and the child will be presented by the Psychology Club.

**Not required for certification. May be counted as education.

231. *The Teaching of Arithmetic in the Elementary School.* (3) Fall Quarter. An inquiry into methods of teaching arithmetic in the elementary grades, the principles upon which they are based, and the influence of scientific studies upon the courses of study and methods. Not open to students who are not pursuing the curriculum for Elementary teachers except by special permission of the Department Adviser.

232. *The Teaching of Language Arts in the Elementary School.* (3) Winter Quarter. Prerequisite, Education 231. A consideration of modern trends in teaching the Language Arts: reading, spelling, literature, composition and writing. The materials in this course purpose to give the student a fundamental knowledge of the uses of language which will best enable the student to communicate with others. It deals with the adequate training in both the subject matter and methods of teaching the Language Arts subjects.

232. *Training the Social Studies in the Elementary School.* (3) Spring Quarter. Prerequisite, Education 231-232. This course considers the educational causes of the social studies, reasons for, and ways and means of integrating history, geography, and civics, and the development of pupils in appropriate emotional and thought reactions to social problems and issues. Opportunity is afforded for observation in the elementary schools.

263. *Observation and Participation in the Elementary School.* (3) Two-year level. May be offered any quarter. A course in Observation and Participation designed primarily for persons planning to qualify for the Permanent Professional Elementary certificate as required in the Two-Year Curriculum. It aims to give the prospective teacher an opportunity to observe be school in all its activities and the best methods of teaching.

313. *Tests and Measurements in the Improvement of Learning.* 3 hours credit. For prospective elementary and high school teachers who desire first-hand experience in the use, constructions, and benefits of diagnostic procedures. An understanding of and an appreciation for statistical concepts as they relate

to general education. Prerequisite: Successful completion of one year of college work.

333. *Reading Clinic.* (3) A practical study of the correction of the reading difficulties of pupils of normal intelligence. Methods and materials will be demonstrated with actual case study. A limited number of properly qualified students will be given opportunity for practice work in intensive remedial instruction. Prerequisites; Education 231-2-3 and Education 253.

341. *Principles and Organization of Secondary Education.* (3) This is a required course for all teachers of the high school. It includes the principles underlying the evolution of the present American high school, types of organization, the high school pupil, curricular offerings and present-day problems with special reference to the Negro high schools of Tennessee.

342. *General Methods and Class Management in Secondary Schools.* (3) This course is a prerequisite for student teaching. Topics covered are classroom management, unit and lesson planning, direction of the various learning activities, selection and use of instructional materials and evaluation of the teaching-learning process.

352. *Measurement and Evaluation in the Secondary Schools.* (3) A study of the construction, administration, scoring and interpretation of standardized tests, scales, and inventories used in the measurement and evaluation of pupil progress in the high school. Prerequisite: Education 243.

362. *School and Community Relations.* (3) This course includes the following topics: the control of schools by boards of education, pressure groups, and parents; the study of educational institutions other than the school; the attitude of the community toward teachers; responsibility of teachers for exerting leadership in the community and ways in which they can exert this leadership; adult education projects; and relation of social backgrounds and school progress. Materials in this consist of a standard reference in educational sociology, such as Cook's *Background of Education*, and also pamphlet material from community agencies. It is recommended that students in the course actually participate in community projects.

363. *Library Resources for Elementary Schools.* (3) Spring. A study of problems and principles of selecting books and related materials for elementary schools, with special attention given to reading interests of children, reading guidance, and the instructional program as bases for developing library collections.

363. *Extra-Curricular Activities and Guidance.* (3) Registration limited to thirty. Permission of instructor required. This course covers the principles and procedures involved in the supervision of assembly programs, student civic organizations, academic clubs, musical organizations, hobby clubs, athletics, etc. A special area is the study of the essentials of guidance programs which meet the educational, social, vocational, and personal needs of high school pupils.

385. *The Curriculum.* (3) Fall and Spring Quarters. A critical study of the reorganization, construction, and administration of the elementary and

high school curriculum in the light of modern educational principles and objectives; overview of the subjects now included in the curriculum and the forces that caused them; the construction of units and other curriculum materials.

431-2-3. *Observation and Participation Teaching in the Elementary School.* (9) Fall, Winter, Spring Quarters. A three part course consisting of directed observation and participation in instructions in elementary grades; open only to seniors and teachers with some experience. It proposes to offer situations which the students will meet in actual work and give him the benefit of skilled and experienced teacher's solution of school problems. Conferences for interpreting school activities in the light of the observation and parallel readings are held frequently. Students must earn at least 90 clock hours credit in this course. Prerequisites: Education 253, 211, 231-2-3. Applications for Education 431-2-3 must be filed not later than second week in May prior to the school year in which the applicant desires student teaching privileges.

442. *Educational Sociology.* (3) This course deals with an application of education in the solution of Sociological problems.

426. *Philosophy of Education.* (3) A consideration of the function or or purpose of education in our elementary and secondary schools and the bearing of this purpose on problems of organization and administration; the selection of the subject matter to classroom practice. Prerequisites: Psychology 241-2; Education 243 and 3 hours sociology, or permission of instructor.

443. *Directing Learning in the Elementary School.* (3) An advanced course in methods and materials in the elementary school; designed for students who have had the equivalent of Education 243, 231-2-3. Must be taken along with Education 431-2, Student Teaching.

471-2. *Student Teaching in High School.* (6) Students teach either their major or minor subject. Open only to seniors and graduates. Prerequisite: 15 hours of Education, including 243, 341, and 342. Parallel: 463 must be taken with this course and not more than two additional courses may be taken in the same quarter.

473. *Audiovisual Aids in Education.* 4 credit hours. Recommended for students preparing to teach in elementary and secondary schools. A course designed to instruct students in the proper use of visual aids as necessary tools in an economy of time in learning. Lecture demonstrations. Special instruction (by way of laboratory) in the use of projection machines: (a) 16 mm projector (b) 35mm projector (c) lantern slide (d) opaque projector (e) eriscope (f) microprojector. Open to all prospective teachers with one year of college training.

482. *Educational Diagnosis and Treatment for the Exceptional Child.* Prerequisites: Senior or graduate standing; nine hours of Psychology; three hours of sociology. Three hours credit.

Graduate Courses in Education

501. *Advanced Educational Statistics.* 3 hours credit. Prerequisite, a beginning course in statistics. This course is designed for those who plan to do

research work in psychology and education. It deals with statistical treatment and interpretation of data.

502. *School Administration.* (3) A course designed for high school and elementary principals who desire to do advanced work in school administration.

503. *School Supervision.* (3) An introductory course for school supervisors with special reference to the work of Jeanes supervisors.

521. *Educational Statistics.* (3) This course studies the application of statistical techniques to educational problems.

511-12-13. *Research and Thesis Writing in Education.* (9) A course is required of all students who are working for the master's degree in education.

521. *Educational Statistics.* (3) This course studies the application of statistical techniques to educational problems.

522. *History of Education in the United States.* (3) A survey of the evolution of education in the United States.

523. *Curriculum Construction.* (3) A practical course dealing with the collection, classification and use of curriculum materials.

524. *History of Education.* (3) This course offers a critical examination of the social and educational experiences which have greatest significance in explaining present educational policies, practices and institutions.

525. *Problems in Secondary Education Instruction.* (3) This course considers secondary school problems in the fields of curriculum materials and patterns, general technique of teaching and the special techniques and evaluation of the outcome of instruction.

531. *Negro Education in the United States.* (3) This course surveys the evolution and present status of the education of Negroes in the United States.

533. *The High School Principal.* (3) This course is designed primarily for high school principals or those who are planning to become principals. Such topics as evolution of the principalship, nature and organization of the principal's work, program making, selection of the high school faculty, administration of a school and supervision of instruction will be covered. Open only to graduate students and qualified graduating seniors.

553. *Curriculum Laboratory.* (3) A practical course dealing with the collection, classification and use of curriculum materials.

591-2-3. *Problems and Projects in Education.* (9) Students may register for one to three special projects in education under the direction of an appropriate member of the Division.

DEPARTMENT OF PSYCHOLOGY

The courses in the Psychology Department are designed to meet the needs of two groups of students: First, students who desire a psychological background for classroom teaching, school administration and school supervision; and second, students who desire to major in psychology or who desire more intensive training in psychology as a background for social work, personnel work, medicine, psychistry, etc.

REQUIREMENTS FOR A MAJOR AND MINOR IN PSYCHOLOGY

Requirements for a major in psychology are Psychology 221-22-23 (the basic course in general psychology) and twenty-seven additional hours in psychology courses on the 300 and 400 level. Requirements for a minor in psychology are Psychology 221, 22, 23 and eighteen hours on the 300 and 400 level.

Requirements in other divisions for majors in psychology are: Zoology 211 and 212, Mathematics 161 (College algebra), Sociology 101-2-3, and two years of one foreign language. Students who present two high school years of a foreign language for admission may satisfy the language requirement by completing an additional year of this language in college.

Recommended electives in other divisions for psychology majors are: human physiology, music 101, art 101, philosophy, and advanced courses in sociology, science or English.

CURRICULUM FOR PSYCHOLOGY MAJORS

FRESHMEN			SOPHOMORE				
	I	II	III	I	II	III	
English 101-2-3	3	3	3	Psychology 221-2-3	3	3	3
Zoology 101-2	4	4		Sociology 211-12-13	3	3	3
Mathematics 161			5	French, Spanish or			
French, Spanish or				German 202-3-4	3	3	3
German 101-2-3	3	3	3	Music 101	3		
Phy Ed 101-2-3	1	1	1	Art 101		3	
Education 101-2-3	1	1	1	Electives	3	3	3
History 121-2-3	3	3	3	Electives	3	3	3
	15	15	15		15	or 18	18
Junior				Senior Year			
Psychology: 18 hours, 300 or 400 level				Psychology: 9 hours, 300 or 400 level			
Electives				Electives			
				Senior Project			

SEQUENCE OF COURSES

Courses in Psychology Department for Students of Education: These courses carry education credit only; and will not count towards a major or a minor in psychology.

- 211 General Psychology for Teachers (Tennessee State requirement for elementary school majors; accepted as education credit on secondary school certificate).
- 243 Educational Psychology (Required for secondary school certificate)
- 253 Child Psychology (Education credit for elementary school majors)

- 263 Adolescent Psychology (Education credit for secondary school).
- 312 Measurement and Evaluation in Elementary School.
- 313 Measurement and Evaluation in Secondary School.

Courses in Psychology Department which carry either Education or Psychology Credit: These courses will count as education credit towards a certificate or as psychology credit towards a major or minor in psychology.

- 311 Elementary Statistics for Students of Education or Psychology.
- 323 Mental Hygiene.
- 401 Machine Scoring of Tests.
- 462 Psychometrics.
- 463 Educational and Vocational Guidance.

Psychology Courses: These courses do not carry credit in education and will not count towards certificate requirements.

- 221-22-23 General Psychology (Required of all psychology majors or minors and a prerequisite for all advanced courses in psychology).
- 321 Abnormal Psychology.
- 341 Social Psychology.
- 351 Genetic Psychology.
- 411-12 Experimental Psychology.
- 421 Comparative Psychology.
- 431 Physiological Psychology.
- 443 Psychology of Learning and Memory.
- 451 Vocational and Industrial Psychology.
- 461 Psychology of Business.
- 471 Psychology Seminar.

Graduate Courses

- 511 Advanced Statistics for Research Students in Psychology and Education.
- 523 Advanced Mental Hygiene and Personality Development.
- 531-32 Mental Testing.
- 533 Diagnosis and Correction of Subject Disability.
- 553 Advanced Educational Psychology.

DESCRIPTION OF COURSES

Courses for Students of Education

211. *General Psychology for Teachers.* (3) This course is required of all elementary school majors, and carries education credit towards a teaching certificate for both elementary and secondary school majors. The course is designed to give the student a psychological background for applying psychological principles to school work; and to aid the student in understanding his own behavior and the behavior of others.

243. *Educational Psychology*. (3) Prerequisite Psychology 211. This course deals primarily with learning in the school situation. It is designed to trace the physical, emotional, social and mental growth of the individual from infancy through adolescence, emphasizing the relationship between growth and learning. The course further presents the general principles of learning and those psychological principles which may effectively be applied to learning in the school situation.

253. *Child Psychology*. (3) Prerequisite Psychology 211. The emphasis in this course is upon the physical emotional, social and mental development of the child from infancy to puberty, with an application of this knowledge to dealing with children in the elementary school.

263. *Adolescent Psychology* (3) Prerequisite Psychology 211. The emphasis in this course is on the development and problem of adolescents in the home, school and community environment. Attention is given to guidance of adolescents.

312. *Measurement and Evaluation in the Elementary School*. Prerequisite Psy. 243. Course designed for elementary school majors. This course offers training in administering, scoring, processing and using the results of standardized tests and other measures of progress in the elementary school; also training is offered in the construction of objective tests. There is a laboratory fee of \$1.00 for test material.

313. *Measurement and Evaluation of the Secondary School*. (3) Prerequisite Psychology 243. Designed for secondary school majors. Offers training described above except that the tests and other measures used are designed for secondary school subjects. There is a fee of \$1.00 for test materials.

Courses Which May Carry Either Psychology or Education Credit

311. *Elementary Statistics for Students of Psychology and Education*. (3) This course is the beginning course in statistics. It offers training in tabulating and processing scores and other data. The work covers measures of central tendency, measures of variability, the normal curve and simple correlation. Recommended for all students who plan to teach and required of all psychology majors.

323. *Mental Hygiene*. (3) Prerequisite Psychology 211 or Psychology 221-23. This course is primarily concerned with examining and interpreting procedures for protecting and preserving the mental health of the individual through wholesome adjustment to the environment. Attention is given to practicing mental hygiene in the classroom. Recommended for students who plan to teach and required of psychology majors.

401. *Machine Scoring of Tests*. (1) The course offers practice in scoring tests on an I. B. M. machine. One hour practice per day is required. Open to Juniors and Seniors on approval of Director of Testing Bureau.

462. *Psychometrics*. (3) Prerequisite Psychology 211 or 221-23, Psychology 243, and either 312 or 313. This course deals with the theory and practice of psychological measurement. Training and practice is offered in the

use of individual and group tests of intelligence, and measures of achievement, aptitude, and personality. Open to seniors.

463. *Educational and Vocational Guidance*. (3) Prerequisite 312 or 313. The course is designed for principals, supervisors, teachers, social and personnel workers concerned with guidance. Course offers training in giving guidance to the individual and in setting up guidance programs based on measuring intelligence, diagnosing disabilities and problems, and discovery of interests and aptitudes. Training includes conducting a persona l interview and making case study. Open to seniors who are psychology majors or education majors.

Courses Which Carry Psychology Credit Only

221, 22-23. *General Psychology*. (9) This is the basic course in general psychology; it is required of all students majoring or minoring in psychology; and is a prerequisite for all advanced courses in psychology. The course is recommended for pre-medical, pre-dental, pre-nursing, sociology and business administration majors. The course is designed to acquaint the student with the fundamental principles of human experience the scope of psychology, and the methods of psychological research.

321-322. *Abnormal Psychology*. (6) Prerequisite Psychology 221-223. Concerned with abnormal and pathological behavior. Psy. 321 deals with deficient and superior mental development, and with minor mental disorders: their nature, cause and treatment. Psy 322 deals with the psychoneurosis and the psychosis: their nature, cause and treatment. Observation trips will be made to institutions for the care and treatment of mental patients.

341. *Social Psychology*. (3) Lectures and discussions of social behavior the application of the principles of sociology to social behavior.

351. *Genetic Psychology*. (3) The origin and development of behavior in the individual, giving special attention to differentiating between the effect of heredity, maturation and learning on the development of behavior.

411-12. *Experimental Psychology*. (6) Offers training in applying the scientific procedure of experimentation to the study of psychological phenomena in the various fields of psychology. Limited to psychology majors and minors who have had 9 hours of advanced psychology.

421. *Comparative Psychology*. (3) The study of animal behavior with special attention to learning; and the application of the data of animal psychology to behavior and learning in men.

431. *Physiological Psychology*. (3) A study of the sensory, motor and adjustor (brain) mechanisms as they relate to behavior.

443. *Psychology of Learning and Memory*. (3) This course examines and interprets the data from experiments on learning and memory; and summarizes the principles of learning that have evolved from this data.

451. *Vocational and Industrial Psychology*. (3) This course applies the principles of Psychology to personnel relationships in industry. Emphasis is on choosing employees, employer-employee relations, and adjustment of employees.

461. *Psychology of Business*. This course applies the principles of Psychology to Business. Advertising and Salesmanship, as well as personnel relationship constitute a part of the course. Course designed for Business Administration majors.

Graduate Courses

511. *Advanced Statistics for Research in Education and Psychology*. (3) This application of statistics to research in education and psychology. Reliability, prediction and multiple and partial correlation are covered in detail. (Open to undergraduate seniors; however 311 or an equivalent in elementary statistics is a prerequisite).

523. *Advanced Mental Hygiene and Personality Development* (3). Prerequisite Psy 321-22 and 23. Technical discussions of protection and preservation of mental health, and personality development; includes a discussion of procedures for measuring personality, and detecting the degree of adjustment and maladjustment.

531-32. *Mental Testing*. (6) Prerequisite, psychometrics or a basic knowledge of testing. Offers training and practice in mental testing by use of individual verbal and non-verbal tests. The student is required to become familiar with the administration and scoring and interpreting of the better tests of intelligence; and to acquire skill in administering the Stanford Binet Test.

533. *Diagnosis and Correction of Subject Disabilities*. (3) Prerequisite psychometrics. The course emphasizes the diagnosis and correction of difficulties in learning school subjects. Special emphasis is given to reading and language difficulties.

543. *Advanced Educational Psychology* (3) Prerequisite Psy 243. Examines and interprets psychological principles involved in educational theory and practice. Emphasis is placed on experimental investigations in educational psychology.

Psychological Clinic

How to Study. A service course in how to study. Open to freshmen and other students interested in developing correct study habits.

Educational Clinic

Adult Level: Diagnosis of academic failure on the college level; and counseling relative to removing disabilities.

Children's Level: (A service for public schools). Mental testing and diagnosis of learning disabilities.

Reading Clinic

Diagnosis and correction of reading disabilities on both children and adult level.

Advanced psychology majors and graduate students in education may receive credit for supervised work in the psychological clinic.

DEPARTMENT OF MUSIC

History Courses

101. *History and Appreciation*. (3) A general survey of the great movements in the art of music from the Greek period to the beginning of polyphony.

223. *Introduction to the Study of Public School Music*. (3) Materials and methods involved in teaching of music to children.

241. *Advanced History of Music*. (3) Begins with the Greek period and traces from origins the evolution of musical theories, form, and styles to the end of the 14th century.

242. *Advanced History of Music*. (3) Deals with the particular effects of the general renaissance movement on music and an art as shown in the development of national schools and the culmination of new musical resources.

301. *Music for the Elementary Schools*. (3) The aim of this course is to acquaint the student with materials, methods, problems, procedure, and development of music in the elementary grades. The development of independent sight-singing, rhythmic problems, grade school orchestra, instrumental class work are discussed and suitable materials are considered. A particularly good course for teachers in small rural schools.

302. *Music for Secondary Schools*. (3) A study of the methods of organizing classes and presenting school music in Junior and High Schools. A study is made of the changing voice, voice testing, glee clubs, suitable materials, musical contests, operettas, etc.

303. *Choral Conducting*. (3) Use of the baton, directing from both quartet and full score, interpretation; seating for various types of choral groups; actual training of a choral group.

341-2-3. *Counterpoint*. (9) The study of contrapuntal technique as practiced by composers of the 18th and 19th centuries. Written exercises and analysis in 2-3 and 4 part counterpoint through the fifth.

401. *Form and Analysis*. (3) Study and analysis of works from Bach to Wagner, including the sonata and symphony.

402. *Composition*. (3) Composition of pieces in small forms.

403. *Advanced Composition*. (3) Continuation of Composition 402. Composition of a set of variations, first movement of a sonata and choral compositions. One composition for public presentation.

Theory Courses

202. *Harmony I*. (3) This course will introduce students to the basic elements of the harmonic vocabulary by means of analysis discussion, drill and written exercises.

203. *Harmony II*. (3) A continuation of harmony I with emphasis on the inversion of both seventh and secondary seventh chords, chromatic harmony and enharmonic notation. A prerequisite to music 402 and 403.

411. *Psychology of Music Education.* (3) This course aims to develop in the student an objective point of view toward the study of the individual child in musical groups-activity. A psychological attitude is developed in the student through such musical activities that would exemplify the human values in music education and through a carefully planned musical-activity program in the school curriculum.

201. *Theory.* The course includes the principles of notation, terminology, scale building intervals, rhythm, eartraining, sight-seeing, and the phrase and period structure.

412. *Seminar for applied Music Majors.* (3) This course acquaints the student with the vast field of musical literature either through teacher-demonstrations or by artist of the highest calibre through recordings.

Musical Organizations

211-12-13. *Concert Band and Orchestra.* (3) Open to all students who play an instrument. Rehearsals three hours per week.

214. *Instruction of Band Instruments.* (2) Class meets twice weekly. Required of all Public School Majors.

121-2-3. *Glee Club.* (3) Open to all who sing. Rehearsals twice weekly throughout the year.

161-2-3. *College Choir.* (1-3) Prerequisite: Must be able to play instrument. Rehearsals twice weekly throughout the year.

261-2-3. *Concert Singers.* (1-3) All Quarters. Good knowledge of piano, sight singing, ear training and ability to sing an entire recital of classics required. This is the concert group and represents the school throughout the country. All members are required to take private lessons. Rehearsals five times weekly throughout the year. All students are required to attend lessons regularly and on time. No student may make a public appearance without consent of the department of music.

Applied Music

Private piano, organ, and voice lessons will be arranged for those who desire special work along these lines. Both beginners and advanced students are accepted.

DEPARTMENT OF ART COURSE OUTLINES

CURRICULUM FOR ART EDUCATION MAJORS AND MINORS

FRESHMAN YEAR				SOPHOMORE YEAR			
Courses	Credits			Courses	Credits		
	I	II	III		I	II	III
English 101-2-3	3	3	3	English 201-2, 261	3	3	3
Math 101	3			Art Crafts 241, 202	3		3
Music 101, 242		3	3	Music 241			3
Intro. to Ed. 101-2-3	1	1	1	Psychology 211, 243	3		3
Science 111-2-3	3	3	3	Soc. 211-12-13	3	3	3
Art Ed. 101-2-3	3	3	3	Art Crafts 200, 200B	3		3
History, 121-2-3	3	3	3	Art Education 201			3
Phy. Ed. 101-2-3	1	1	1	Speech 202			3
	—	—	—	Phy. Ed 201-2-3	1	1	1
	17	17	17		—	—	—
					16	16	16
JUNIOR YEAR				SENIOR YEAR			
Courses	Credits			Courses	Credits		
	I	II	III		I	II	III
English 203, 312	3	3		Art 401-2-3	3	3	3
Economics 211-12-13	3	3	3	Re. Art 201-2, 241	3	3	3
Education 342			3	Education 450			3
Soc. 322	3			Spanish or French	3	3	3
Stage Craft 311-12		3	3	Art in El. Ed. 404			3
Psychology 381	3	3	3	Art in Sec. Ed. 405			3
Pottery 301			3	Electives	3	3	3
Costume Design 313	3				—	—	—
Gov. & Bus. 313		3			15	15	15
Art Hist. 301-2		3	3				
Spanish or French	3	3	3				
	—	—	—				
	18	18	18				

Note: Fine Arts Courses carry laboratory periods for experience in drawing, painting and modeling—2 periods per week—two hours each.

101-2-3. *Introduction to Public School Art.* (9) An overview of the field of art. Elementary study of design color and handcrafts. Talks and assigned reading about Art Education and its application in daily living. Laboratory work with such materials as metal, clay, plastics, wood, paper, cardboard and string gives opportunity for the application of design and color principles. Experience in stenciling, block printing and simple weaving.

200. *Crafts Laboratory.* (3) A course in handcrafts. Prerequisite Art 101.

201-2. *Manuscript Writing, Design, Color and Representation.* (6) Study of design, color and drawing. Devices to aid in the release of creative impulses

of elementary school children. Classroom experiences to encourage prospective teachers to allow all children to work creatively and to properly evaluate work done by them at various age levels. Prerequisite Art 101.

203. *Lettering and Poster Design.* (3) Free brush and pen lettering, drawing, design and color.

241. *Hobbycraft.* (3) A craft program suitable for recreation centers, summer camps, scouts, girl reserves and individuals interested in finding a hobby. Appreciation for possibilities and limitations of tools and materials. Creative development of worthwhile used materials is encouraged, such as salvaged leather, (from old hand bags) stockings, string, grass sacks, acorns, nuts grasses etc. Prerequisite Art 101.

301. *Pottery Craft and Modeling.* (3) A beginner's course in clay construction hand built pottery; piece and coil methods. Low relief, intaglio and round modeling. Simple problems in plaster casting.

311-12. *Stage Design.* (6) Design and construction of miniature stage sets for modern and period plays. Experience in the making of actual stage sets for plays produced on the college stage. Study of color; pigment and light.

401. *Art History.* (3) A survey course of the History of Art from primitive man to the decline of the Roman Empire.

402. *Art History.* (3) A survey course of Christian Art and the Art of the Renaissance. Prerequisite Art 401.

403. *Art History.* (3) The transition from the Renaissance to the Modern World. Prerequisites Art 401 and 402.

Related Art

200. *Related Art Clinic.* (0) Clarification of problems not clearly understood in regular classes, or personal problems concerning dress, home furnishing or house planning. Meetings will be held at student's and teacher's convenience.

201. *Color and Design.* (3) This is a course in personal costuming. It has to do with problems of color and design as they are related to the person and the home as a background, that is, the study of Art principles and certain accepted rules governing their application to personal costuming with regard to size, complexion, personality, function, occasion, and other areas of importance.

202. *Color and Design.* (3) This is a course in simple home furnishing in which the aim is to acquaint the student with art principles for appreciation for those things of aesthetic value already on hand, and further, to apply these principles in the home so as to derive a high degree of satisfaction and comfort from the environment regardless of economic status.

203. *Costume Design.* (3) This is a course in which students study historic costume as a background and inspiration for modern costume. The course does not emphasize original designing and draughting although individual ideas in keeping with good taste are encouraged. The emphasis is placed on the application of design principles to garment selection with reference to the figure: size, form, age, good points, points not so good, function occasion.

Problems of dress of the average wage or below-average wage consumer with suggestions for ways to be well dressed on a limited budget. Prerequisite Related Art 201.

204. *Costume Design.* (3) Continued experience in color with the use of pigments and colored cloth. Color schemes for various complexions. Experiment with complexion color charts. Guidance in appreciation for and understanding of design principles applied in the creation of the best commercial dress designs. Prerequisite Related Art 201-203.

421. *House Planning.* (3) Usually offered in the spring and summer quarters. Specific attention is given to planning the small house for comfort and convenience. Appreciation for aesthetic qualities in home planning through the understanding of art principles and how to apply them. Fundamentals of blue print reading. Study of many architectural plans of low cost houses. Brief study of American contribution in domestic architecture and interior decorative fixtures; dados panels, stairways, cornices, cabinets.

DEPARTMENT OF HEALTH AND PHYSICAL EDUCATION

Departmental Aims:

1. To prepare the prospective teacher in the field of health and physical education for positions as:
 - a. Teachers of Health and Physical Education on the elementary, high school and college levels.
 - b. Athletic coaches.
 - c. Playground and community center directors, recreation assistants, instructors, and supervisors.
2. To provide an adequate Health Service set-up which entitles students to the privileges of the service of this program for the promotion, maintenance, and conservation of the health of the student in terms of the scope of health education.
3. To provide opportunities for all students, faculty members, and personnel of the college to engage in activities that are physically wholesome, mentally stimulating and satisfying, and socially sound through the provision of indoor and outdoor facilities for both curricular and co-curricular participation.

STUDENT HEALTH SERVICE

The Student Health Service is under the supervision of the Director of Health and Physical Education, School Physician and School Dentist. Nursing care is rendered by three full-time Nurses.

All new students enrolled in this college are required to have a complete physical examination which is given by the "University Health Service" at the Meharry Medical College through the School Student Health Service. This examination is a part of the registration program and no student is com-

pletely registered until it has been completed. Failure to keep physical examination appointments means that another time must be assigned and this can be obtained only upon payment of Two Dollars penalty to the Business Office.

Any student is entitled to all privileges of the Student Health Service Program, such as:

- a. Physical Examination.
- b. Diagnosis.
- c. Counseling—which may include counseling with parents.
- d. Temporary hospitalization for *campus* students.
- e. Limited medicines.
- f. Diagnosis, consultation, and limited dental treatment.
- g. Limited medical treatment.
- h. Follow-ups—which may include transportation to and from hospital.

Students suffering from minor illnesses are hospitalized in the campus infirmaries:

Female—located in Hale Hall

Male—located in East Dormitory.

Students may be sent, at their own expense, to Hubbard Hospital for illnesses or emergencies where facilities of the campus infirmaries are inadequate for necessary treatment.

Special clinic sessions are held each evening from 6 to 8 in the campus clinic. During these sessions, students may receive medical care for minor ailments and advice on problems.

COLLEGE ATHLETICS

Athletics at A. & I. State College are an integral and fundamental part of the total physical education program, contributing very generously to the realization of the aims set up within the Department of Health and Physical Education. Thus responsibility for the development, maintenance, and administration of the athletic program is vested in the Head of this Department of specialization. The program of athletics here, like the program in most institutions of higher learning, form two major areas of student participation: Intercollegiate and intramural competition.

A. *Intercollegiate Athletics.* The college sponsors its intercollegiate athletic program through the agency of an athletic committee, whose function it is to establish, administer, and supervise all athletic policies pertaining to inter-school competition, expenditures, scheduling of games, setting up of standards for governing the issuance of awards, and the selection of coaches and athletic aids.

Although the trend points toward a broader program of intercollegiate participation, at present the inter-school competition is confined to football, basketball, track and field, boxing, swimming and tennis, for men; and basketball, track and field, tennis, and play days for women.

B. *Intramural Athletics.* Intramural athletics at the college are primarily activities of the students. The students own and control all intramural activities through the agency of Intramural managers and officials. The policy making body of the organization is the Intramural Council, composed of student managers, one or two faculty members from the Department of Health and Physical Education, and the Head of the Department as an ex-officio member.

Intramural activities for men students are organized on the league style of play wherein one, two or three sports or activities may be promoted during any season. Activities for men include touch football, volleyball, softball, swimming, tennis, basketball, horse shoes, table tennis, flag football, and badminton.

Intramural activities for women students are organized on the tournament basis and are held during the season in which basketball volleyball, badminton, tennis, and soft-ball are played.

STUDENT RECREATION

The College Recreation Hall, located on the North side of the campus, provides ample space and facilities for social and recreational activities, including ping pong, checkers, darts, shuffle board, card playing and dancing. Properly supervised recreational hours are provided from 12-1 p. m. and 6-7 p. m. Monday through Friday.

Facilities for recreational swimming, diving, and water sports include an indoor and one large outdoor pool. Students may also find pleasure in canoeing, boating and water pageantry on the college's two artificial lakes, as well as on the lake area.

Other facilities provided for recreational use are six well conditioned tennis courts, and athletic field where softball or similar team games may be played.

THE REQUIRED PHYSICAL EDUCATION PROGRAM

All students except those who are officially excused by the college physician* and veterans**, must take six quarters of physical education distributed in the following manner:

- Two (2) Individual activities—one of which must be swimming
 - Two (2) Team sports
 - One (1) Rhythmic or combative activity
 - One (1) Free elective from either group
-
- Six (6) quarters

Freshman Year

Required Physical Education Activity for Girls and Boys.		
Fall Quarter	Winter Quarter	Spring Quarter
(101)	(102)	(103)
Swimming	Body Conditioning	Volleyball
Body Conditioning	Volleyball	Swimming
Volleyball	Swimming	Body Conditioning

*Students whose physical conditions will not permit them to pursue the regular activity courses in physical education must fulfill a requirement in general health courses. (See Description of Health 101-2-3 and Health 201-2-3.)

**Veterans will receive credit in physical education in proportion to their time spent in the Armed Services.

Sophomore Year

Elective Physical Education Activity for Girls.		
Fall Quarter	Winter Quarter	Spring Quarter
(201)	(202)	(203)
Folk Dancing	Basketball	Creative Dance
Basketball	Folk Dancing	Softball
Swimming	Tap Dancing	Tennis
	Swimming	Track and Field
		Tap Dancing

Sophomore Year

Elective Physical Education Activity for Boys.		
Fall Quarter	Winter Quarter	Spring Quarter
(201)	(202)	(203)
Basketball	Wrestling	Softball
Touch Football	Boxing	Swimming & Small Craft
	Basketball	
	Stunts and Tumbling	

Uniform Regulations

Students enrolled in physical education activity courses are required to provide themselves with the following equipment which may be purchased from the College Book Store.

Women

- One regulation gymnasium suit.
- One pair of gymnasium shoes and socks.
- One swimming suit
- One bathing cap.

Men

- One white "T" shirt.
- One pair of trunks.
- One jockey strap.
- One pair of gymnasium shoes and socks.
- One pair of swimming trunks.

Courses

Health 101-2-3. *General Health.* (1) These courses are designed for students who are not permitted to take the Required Freshman and Sophomore Physical Education courses because of a medical excuse from the college physician. They embody a survey of defects of all students in the class. Units of study are developed around each defect for the purpose of acquainting the student with his condition so that he may better appreciate his handicap in the light of his physical capabilities and limitations.

Health 201-2-3. *General Health.* (1) A continuation of Health 101-2-3. A follow-up study of the student's health. These courses aim to acquaint the student with the number of games and activities in which he may safely participate.

Program for Majors in Health and Physical Education

The Curriculum in Health and Physical Education is designed to prepare men and women to teach in the fields of health education, physical education, and recreation; and secondly, to meet state certification and departmental requirements. The degree of Bachelor of Science in Health and Physical Education is conferred upon the student who successfully fulfills the requirements for the college department.

FRESHMAN YEAR	Quarter			SOPHOMORE YEAR	Quarter		
	Hours	Credit			Hours	Credit	
Name of Course	I	II	III	Name of Course	I	II	III
English 101-2-3	3	3	3	English 201-2-3	3	3	3
History 121-2-3	3	3	3	Psychology 211-12-13	3	3	3
Geography 171-2-3	3	3	3	Sociology 211-12-13	3	3	3
Chemistry 101-2-3	4	4	4	Health 211-12-13	3	3	3
Education 101-2-3	1	1	1	Physical Ed. 211-12-13	3	3	3
Physical Ed. 101-2-3	1	1	1	Physical Ed. 201-2-3	1	1	1
	—	—	—		—	—	—
	15	15	15		16	16	16

JUNIOR YEAR	Quarter			SENIOR YEAR	Quarter		
	Hours Credit				Hours Credit		
Name of Course	I	II	III	Name of Course	I	II	III
Biology 101 or 201.....	4			Education 342-471-2			9
Biology 342-43.....	4	4		Education 381	3		
Education 385-341-362...	3	3	3	Health 401-2.....	3	3	
Health 301-2	3	3		Physical Education 401...	3		
Nutrition 211.....			3	Physical Education 412-13		3	3
Physical Education 332...	2			Physical 422		3	
Physical Education 333...		3		Electives	9	6	3
Physical Education 322...	2						
Physical Education 361...	2				18	15	15
Electives	6	3	3				
	18	17	16				

Major. A major in Health and Physical Education requires a minimum of forty-five (45) quarter hours which must include eighteen (18) hours in Health and twenty-seven (27) hours in Physical Education distributed in the following manner:

Health 211 Health Examination	3
Health 212 School Hygiene	3
Health 213 Health Instruction	3
Health 302 First Aid and Safety.....	3
Health 401 Health Seminar	3
Health 402 Organization and Administration of Health and Physical Education	3
	18
Phys. Educ. 101-2-3 Required P. Ed	
Phys. Educ. 201-2-3 Required P. Ed.	
Phys. Educ. 211 Folk Rhythms	3
Phys. Educ. 212 Tap Rhythms	3
Phys. Educ. 322 Intermediate Swimming	2
Phys. Educ. 322 Conditioning Exercises	2
Phys. Educ. 333 Prin. & Phil. of Health and Phys. Educ.....	3
Phys. Educ. 361 Adult Sports	2
Phys. Educ. 401 Play and Games	3
Phys. Educ. 412 Kinesiology	3
Phys. Educ. 413 Program Planning and Health and Physical Education	3
Phys. Educ. 422 Athletic Coaching	3
	27
Total	45

Minor A minor in Health and Physical Education requires a minimum of thirty (30) quarter hours which must include nine (9) hours in Health and twenty-one (21) hours in Physical Education distributed in the following manner:

Health 212 School Hygiene	3
Health 213 Health Instruction	3
Health 402 Org. & Adm. of H. & P. Ed.	3
	9

Phys. Educ. 101-2-3 Required P. Ed.	
Phys. Educ. 201-2-3 Required P. Ed.	
Phys. Educ. 211 Folk Rhythms	3
Phys. Educ. 322 Intermediate Swimming	2
Phys. Educ. 322 Conditioning Exercises	2
Phys. Educ. 333 Prin. & Phil. of H. & P. E.	3
Phys. Educ. 361 Adult Sports	2
Phys. Educ. 401 Play and Games	3
Phys. Educ. 422 Athletic Coaching	3
Phys. Educ. 413 Program Planning in Health and Health Education	3
	21

Total 30

Certification. Training for certification in Health and Physical Education for high schools of Tennessee effective with Fall Term, 1942.

The twenty-one quarter hours required for certification for the teaching of health and physical education in the high schools of Tennessee shall be distributed in the three areas below as shown:

I. *Physical Education.* (Content Selected from the following except that the first activity listed below is required: (9 quarter hours).

- Conditioning Exercises
- Stunts and Tumbling
- Boxing, Wrestling and, or Combat Activities
- Folk Rhythms
- Tap Rhythms
- Adult Sports
- Group Games or Athletic Coaching
- Restricted or Individual Activities.

II. *Health Education* (Content) Choice of any three. Minimum 9 quarter hours:

- Health Examination and Follow-up
- Health Instruction
- Nutrition
- Safety Education and First Aid.

III. Health and Physical Education. Choice of one (3 quarter hours):

- Administration of Health and Physical Education
- Principles and Philosophy of Health and Phys. Educ.
- Program Planning in Health and Physical Education.

DESCRIPTION OF COURSES IN HEALTH EDUCATION

211. *Health Examination.* (3) This course is designed to give a general knowledge of those procedures set up to determine the health status of the child. To relate ways and means of enlisting pupil, teacher, parent cooperation and health protection and maintenance with special emphasis on the teacher's function in the school-health Examination program. Required of all majors.

211. *Nutrition.* For description see Division of Home Economics—211 Nutrition). Required of all majors.

212. *School Hygiene.* (3) This course is concerned with giving general information of the total environment in which the child lives while at school. Stress is placed on classroom conditions that are conducive to healthful living; and the part the teacher, pupil and janitor must play in maintaining a healthful situation. Required of all majors and minors.

213. *Health Instruction.* (3) Emphasizes a knowledge of child nature, source of health information and materials, and ways of gathering such information. Suggests techniques and procedures for discovering health needs, with special stress on practice in methods of planning, preparing and presenting instructional units. Required of all majors and minors.

301. *Community Hygiene and Sanitation.* (3) This course is designed to acquaint students and teachers in practices and procedures in controlling the environment, especially such practices as are now used in the control of the communicable diseases, food, water, waste material and other sanitation problems arising in urban and suburban areas. Various methods of ventilation, heating and lighting in their relationship to health.

302. *First Aid and Safety.* (3) This course is designed for students, teachers, and athletic coaches who most apt are to be faced with common emergencies that may arise in the home, the school, and on the athletic field, gymnasium, or playground. Special emphasis is placed on safety procedures to prevent common accidents that arise in these areas. Major consideration in the course is given to demonstration and practice of general first aid care of emergencies; with specific stress placed on bandaging, the controlling of bleeding, artificial respiration, and the treatment of strains, bruises, sprains, wounds, and shock. Red Cross certification is given. Required of all majors.

401. *Health Seminar.* (3) Required of all majors.

402. *Administration in Health and Physical Education.* (3) A study of the more common problems of organization and administration of Health and Physical Education. Course includes selection, purchase, care of equipment and facilities, office management, class management, budget and finances, and education publicity. Required of all majors and minors.

DESCRIPTION OF COURSES IN PHYSICAL EDUCATION

211. *Folk Rhythms.* (3) Dances that are peculiar to foreign countries such as Hungary, Germany, Sweden and Russia, are taught with emphasis placed upon the relationship of movements to customs and habits of each particular country. Opportunity for participating in mixtures, round and square dance with stress on Western Cowboy type. Suitable for use at upper elementary and high school levels. Required of all majors and minors.

212. *Tap Rhythms.* (3) Materials which serve a functional basis both in school and outside school activities. Modern music is used, to develop routine in slow and fast for fox trot and waltz-time. Required of all majors.

213. *The Modern Dance.* (3) Experimentation in the application of the basic laws of movement to contemporary dance and fundamental principles governing the development of dance movement into an art form. For Junior High School and College level.

322. *Intermediate Swimming.* (2) Prerequisite: Students who are able to swim with at least one stroke at a distance of sixty feet. Instruction in the fundamental arm and leg stroke techniques, plain diving and elementary forms of rescue leading to the Red Cross certification. Required of all majors and minors.

Phy. Educ. 323. *Life Savings and Water Safety.* (3) A professional course for training teachers. Prerequisite: Ability to swim 220 yards. Practice in all coordinated styles of swimming. Instruction in life saving and water safety skills and techniques leading to American Red Cross Senior Life Saving and Water Safety Instructor Certificates.

332. *Conditioning Exercises.* (2) Intensive practice and practice teaching of: Tennessee Ten on different grade levels; additional formal calisthenic conditioning and hand apparatus exercises. Explanation of physiology emphasis of each exercise. Formal organization of class procedures. Estimates of physical activity leads for various groups. Required of all majors and minors, and of those seeking state certification.

333. *Principles and Philosophy of Health and Physical Education.* (3) Application of the sciences of Anatomy, Bacteriology, Chemistry, Nutrition, Physiology, Psychology to Health and Physical Education methods and procedures. Estimates of Physical activity leads for various age groups. Required of all majors and minors.

361. *Adult Sports.* (2) Instruction in practice of fundamental rules and techniques of adult sports adaptable to Junior and Senior High School facilities. The course shall include procedures for adapting class organization to different available facilities and for making inexpensive equipment. Opportunities for participation in the various sports taught is allowed. Required of all majors and minors.

243-401. *Play and Games for Elementary Schools.* (3) Acquaints students and teachers with a working knowledge of the theory and practice of rhythmic activities, mimetic activities, hunting games, story plays,

games and sports, athletic games and others as they are related to the elementary schools. The course considers and explains the best methods of teaching these activities at the various age-grade levels. It also provides a careful study of all the factors that make up a well rounded physical education program in the elementary schools including objectives of the program, organization of the program, and activities of the program. Included also is a discussion of play areas, equipment and supplies. Required of all majors and minors.

402. *Organization of Playground and Recreation.* (3) This course deals with the historic influences affecting the development and status of the current movement for the provision of the public facilities for play and recreation. The course presents types, organization and administration of play activities suitable for the pre-school and school child and the adult. Opportunities are given to the students for surveying local playgrounds, community, and recreation centers as a means of gaining experience in the practice of organizing recreation departments, and programs.

412. *Kinesiology.* (3) A study of the bones joints, ligaments, muscles and their functions in the various movements involved in games, sports and general activity of daily living. Required of all majors.

413. *Program Planning in Health and Physical Education.* (3) Acquaints students with the state and recommended programs of Health and Physical Education. Stresses ways of incorporating Health and Physical Activities into the total school program. Emphasis is placed on plans and procedures of adapting programs to local conditions. Required of all majors.

422. *Athletic Coaching and Officiating.* (3) A survey of the coaching fields of football, basketball, and track and field. Stresses the various methods used in teaching fundamentals in these sports with analysis of offensive and defensive techniques. Required of all majors and minors.

GRADUATE WORK IN HEALTH AND PHYSICAL EDUCATION

500. *Techniques of Football and Basketball.* (4) Summer only. A three weeks course for coaches involving an intensive study of various techniques in teaching boys the fundamentals of football and basketball. Ample opportunity is allowed for the practical application of techniques and fundamentals in learning situations. Emphasis is placed on acquainting the coaches with the essentials of winning football and basketball; including the importance of conditioning and training, care of equipment, duties of trainers and managers, correct placement of players, fitting the offense and defense to abilities and capabilities of players and player-coach relationship.

501. *Seminar in Administration.* (3) Considers the structure and operation of physical education activities in the public schools from the standpoint of administration. It includes a study of objectives, principles and philosophy of physical education in secondary schools. Emphasis is placed on a knowledge and understanding of the methods and procedures for selecting and embodying physical education activities in a program. Ample consideration is given to the Modern Trends in the area of administration.

501. *Methods and Materials in Health Education.* (3) A course concerned with the progressive methods and use of teaching aids and materials in health education on the junior and senior high school levels. Especially designed to acquaint the prospective teacher with the fundamentals necessary for discovering health needs of the pupils. Emphasis is placed on the methods and techniques for incorporating health activities into the school curriculum.

502. *School Health Problems.* (3) This course is organized to acquaint the prospective teacher, the in-service teacher, and the administrator with the prominent health problems in the school. Special attention is given to the health significance of the school environment and pupil progress. Discusses the protective and corrective service in the school health program, with emphasis on the teacher's contribution including health teaching materials, health inspection, testing instruments, charts and techniques, first aid and safety supplies, and school sanitation.

503. *Playground and Camp Supervision.* (3) The course discusses the theory of play, the place of play in education and the organization and supervision of playground and camp activities. Special attention is given to recreational activities for various age groups in accordance with their physical, mental and social characteristics. Selecting, planning, and equipping the playground and camp site are emphasized. Covers program planning for playgrounds and camping in nature study, first aid, camp cooking, water safety, and recreational activities.

511. *Methods of Instruction and Supervision in Physical Education.* Practical suggestions are included for teaching play activities, fundamental skills, and athletic games. Special attention is given to in-service training of personnel; program evaluation and improvement; adequacy of facilities and equipment; association with principal and administrators; and community relationships.

513. *Tests and Measurements.* (3) This course is designed to acquaint the prospective teacher with the important part that testing plays in the field of physical education. It covers a study in anthropometric measurements, strength index, cardiac functional tests, and statistical methods used to determine motor ability achievements in physical education activities.

521. *Current Problems in Physical Education.* A course designed to help teachers, supervisors, and administrators to solve problems of physical education facing America today in light of social and economic reconstruction. A study of philosophy and policies in the classification of students, the staff, teaching load, marking (grading), time schedule, graduation of activities and finance.

523. *Community Recreation.* This course deals with the nature, significance, and extent of recreation. A study is made of city, county, state, and national organizations along with principles and techniques for organizing and promoting leisure time activities for home, school and community. Consideration is given to the essential elements in community recreation program—leadership, areas and facilities, and distinct programs features. Vari-

ous methods of recruiting and training volunteer workers are discussed to the extent that the student is able to adapt the most suitable ones to his particular needs. Opportunity is given to students to organize and lead in recreational activities.

553a. *Playground Supervision and Recreation.* (1½) First six weeks of Spring Quarter. A course especially designed for the in-service teacher giving particular attention to the problems growing out of the extension of the school's responsibility beyond the regular school day. Particular emphasis is placed on the importance of organized intramural and extramural activities on the realization of health and character outcomes. Reference is made to the carry over program in recess, noon, after-school, and play, and recreation periods. Covers the organization and supervision of playground activities and recreation.

533b. *Playground Supervision and Recreation.* (1½) Last six weeks of Spring Quarter (same as 533a).

534. *Festivals and Demonstration.* (3) The course is open to men and women. It is organized to acquaint students with the methods, materials, and techniques of working up and presenting pageants, festivals, exhibitions, carnivals, circuses, athletic events special celebrations and events of similar nature. Includes a study and discussion of activities calling for large numbers of participants, and methods of combining a number of areas, such as dancing, dramatics, crafts and athletics.

535s. *Athletic Coaching and Officiating.* (3) A survey of the coaching fields of football, basketball, and track and field. Stresses the various methods in teaching fundamentals in these sports with analysis of offensive and defensive techniques.

DEPARTMENT OF LIBRARY SERVICE

The Department of Library Service is in the Division of Education. The 18 quarter hours required for teacher-librarians or a minor in the department meet the standards set by the Tennessee State Department of Education and the Southern Association of Colleges and Secondary Schools.

The Library Service courses are planned for: (1) students who wish to prepare for positions as teacher-librarians; (2) teachers or prospective teachers seeking information on library materials related to their teaching needs; (3) students enrolled in any division of the college who desire general information and guidance in using library resources; (4) Principals and Jeanes Teachers confronted with problems of developing library service in their schools or counties. The following courses are recommended for these groups:

1. Teacher-Librarians: 351, 361, 362, 363, 451, 452, and 473.
2. Teachers or prospective teachers: 361, 362, and 363.
3. Students in general: 211.
4. Principals and Jeanes Teachers: 501.

The 300 and 400 courses are open to students of junior and senior standing in the college. The 500 course is planned primarily for Principals, Jeanes Teachers or persons holding administrative positions in the school and is offered only in the summer quarter.

CURRICULUM

Name of Course	Hours Credit		
	Quarter		
	I	II	III
SOPHOMORE YEAR			
Library Service 211			
(Either Quarter)	3	3	3
JUNIOR YEAR			
Library Service 351	3		
Library Service 361	3		
Library Service 362		3	
Library Service 363			3
SENIOR YEAR			
Library Service 451	3		
Library Service 452		3	
Library Service 473			
(Either Quarter)	3	3	3

211. *Use of Library Resources.* (3) Fall, Winter, Spring. A general course designed to aid students in a systematic approach to locating educational information. Special attention is given to problems confronted by students in their use of library resources particularly as these problems relate to preparation of class reports, term papers or projects assigned in classes other than Library Service 211. An elective course open to students enrolled in any Division of the College. ✓ W

351. *Library as a Service Agency.* (3) Fall. A study of the school library, its development and general problems involved in providing adequate services to meet the needs of the total educational program of the school and the community. ✓

361. *School Library as an Information Laboratory.* (3) Fall. This course is a study of basic tools used in administering reference services in the school library. It also includes formal and informal methods of teaching use of library resources as related to the total instructional program of the school. ✓

362. *Library Resources for Junior and Senior High Schools.* (3) Winter. A study of problems and principles involved in selecting and developing the book and related materials collections for use of students in grades seven through twelve. Special emphasis is placed on the instructional program of the school, reading interests of ~~children~~ *young people*, and reading guidance as bases for developing library collections. ✓ W

363. *Library Resources for Elementary Schools.* (3) Spring. A study of problems and principles of selecting books and related materials for elementary schools with special attention given to reading interests of children, ✓

reading guidance, and the instructional program of the school as bases for developing library collections.

451. *Organization of Library Materials.* (3) Fall. A course planned to give instruction and practice in simplified procedures for acquisition, mechanical preparation and organization of books and related materials such as pamphlets, pictures, periodicals and audio-visual aids. It also includes instruction in mending, binding, compilation and use of shelf list, accession and inventory records.

452. *School Library Administration.* (3) Winter. This course is designed to acquaint students with problems and simple procedures of administering the school library. It includes a study of standards and evaluation, staff, housing and equipment, finance, use of library and its resources, loan system, statistical records, reports and other details involved in administering a school library program.

473. *Practice Work.* (3) Fall Winter, Spring. This course aims to provide opportunity for prospective teacher-librarians to receive some experience in types of library work that may be adapted to their school needs. A total of six clock hours per week must be spent in actual library work or observation. A student may register for this course upon completion of the following Library Service courses: 351, 361, 362, 451, 452.

501. *School Library Problems.* (3) Summer. A study of problems confronted by principals, Jeanes Supervisors and other administrators concerned with the development of library service in schools.

Children's Literature. This course is given in the Division of Humanities. See English 261.

DIVISION OF ENGINEERING AND INDUSTRIAL EDUCATION

WILLIAM V. HARPER, *Itinerant Teacher Trainer of Trade and Industrial Education, Acting Director of the Division of Engineering and Industrial Education.*

PRESTON E. STEWART, *Head Department of Building Trades, Associate Professor of Industrial Education.*

BENSON L. DUTTON, *Head, Civil Engineering Department, Professor of Civil Engineering*

FURMAN F. WILLIAM, *Head, Department of Metal Trades, Associate Professor and Instructor of Machine Shop*

L. WINTER MCKISSACK, *Acting Head, Department of Engineering, Associate Professor of Engineering.*

CECIL M. RYAN, *Acting Head, Department of Mechanics and Aviation, Assistant Professor of Aviation Education*

JAMES E. TAYLOR, JR., *Visiting Professor (Part-time), Aviation Education*

ELLIOTT H. GRAY, *Instructor of Aero Mechanics*

MARSHALL L. FIELDS, *Associate Professor of Industrial Education, Instructor of Sheet Metal*

JAMES M. BELLE, *Assistant Civil Engineer, Instructor of Surveying*

HARRY E. LASH, *Assistant Instructor of Mechanical Drawing*

JOHN G. SANDERS, *Instructor of Radio*

ERNEST M. MABINS, *Instructor of Welding*

JOSEPH R. MARKS, *Instructor of Pipe Trades*

LEON C. FARBES, *Technician in Woodwork*

W. ELBERT JOHNSTON, *Technician in Masonry*

WILLIAM K. BROWN, *Assistant Technician in Auto Mechanics*

EDWARDS D. HARRIS, *Assistant Technician in Electricity*

EARL L. GRAY, *Technician in Shoe Repairing*

JAMES A. GRANT, *Laboratory Assistant in Machine Shop*

ARTHUR J. WELCH, *Secretary of the Division*

**WILLIAM C. McNEILL, JR., *Associate Professor of Building Construction Engineering*

** (From the Division of Science)

DEPARTMENT OF ENGINEERING

The Department of Engineering offers three curricula in Engineering. The freshman and sophomore years are identical in all courses, giving the students an opportunity to choose more wisely the field of specialization they wish to follow.

The degree of Bachelor of Science in engineering is offered in Civil, Building Construction and General Engineering respectively. The curriculum in Building Construction Engineering provides what is believed to be a well balanced group of courses which will enable the students to get essential specialized training necessary to engage in the successful planning and execution of light con-

struction jobs; and the curriculum in General Engineering is designed to meet the needs of those students who intend to enter into Industrial, Commercial, or Financial enterprizes essentially technical, whether public utilities or manufacturing plants, and who desire to go into the administrative departments where a scientific and engineering background is necessary.

ENGINEERING CURRICULA

All freshmen and sophomores of the Department of Engineering will pursue the curriculum tabulated below.

Freshmen and sophomores are required to attend a series of six laboratory courses provided for by the department in which they are enrolled. Each student should therefore indicate the curriculum of his choice at the time of his registration, and he should enroll in the corresponding departmental section of Engineering for his laboratory exercises.

FRESHMAN YEAR	Quarter			SOPHOMORE YEAR	Quarter		
	Hours Credit				Hours Credit		
Name of Course	I	II	III	Name of Course	I	II	III
English 101-2-3	3	3	3	English 201	3		
Mathematics 161-2-3	5	5	5	Speech 202-3		3	3
Chemistry 111-12-13	4	4	4	Mathematics 261-2-3	3	3	3
Mechanical Drawing 111-12-13	3	3	3	Physics 211-12-13	4	4	4
*Shop Practice 101	3	3	3	Mechanical Drawing 211-212-13	3	3	3
Survey of Engineering	1	1	1	*Shop Practice 101	3	3	3
Physical Ed. 101-2-3	1	1	1	Economics 211-301-302	3	3	3
	—	—	—	Physical Ed. 201-2-3	1	1	1
	20	20	20		—	—	—
					20	20	20

*All freshmen and sophomores are required to pursue the series according to their curriculum choice as designated:

Group A—Building Construction Engineering and Civil Engineering: Carpentry, Masonry, Sheet Metal, Welding, Pipe Trades, Electricity. Civils take Surveying (Sophomore).

Group B—General Engineering in Metal Trades: Sheet Metal, Welding, Auto Mechanics, Electricity, Machine Shop, Pipe Trades.

Group C—General Engineering in Engine Mechanics: Auto Mechanics, Welding, Sheet Metal, Machine Shop, Carpentry Aviation Mechanic.

Group D—General Engineering in Service Trades: Machine Shop, Carpentry, Auto Mechanics, Sheet Metal, Household Appliances, Electricity.

Option I

BUILDING CONSTRUCTION ENGINEERING

JUNIOR YEAR	Quarter			SENIOR YEAR	Quarter		
	Hours Credit				Hours Credit		
Name of Course	I	II	III	Name of Course	I	II	III
Building Construction Engineering 321-22-23	3	3	3	Industrial Education 311			3
Building Construction Engineering 311-12-13	3	3	3	Industrial Education 411-412	3		3
Building Construction Engineering 301-2-3	6	6	6	Building Construction Engineering 401-2-3	6	6	6
General Engineering 311-312	3		3	Building Construction Engineering 411-12-13	3	3	3
General Engineering 332			3	General Engineering 411			3
Accounting 211-421			3	General Engineering 412			3
Electives	3			Building Construction Engineering 450			3
	—	—	—	Business Law 312	3		
	18	18	18	Electives		3	3
					—	—	—
					18	18	18

Option II

GENERAL ENGINEERING

JUNIOR YEAR	Quarter			SENIOR YEAR	Quarter		
	Hours Credit				Hours Credit		
Name of Course	I	II	III	Name of Course	I	II	III
General Engineering 321-22-23	3	3	3	Industrial Education 311			3
General Engineering 311-332-333	3	3	3	Industrial Education 411			3
General Engineering 301-302-3	6	6	6	General Engineering 401-2-3	6	6	6
Geography 463	3			Building Construction Engineering 411			3
History 371			3	Business Law 312			3
Accounting 211-421			3	General Engineering 411			3
Psychology 211	3			General Engineering 412			3
Industrial Education 412			3	Political Science 313			3
	—	—	—	General Engineering 450			3
	18	18	18	Electives		6	6
					—	—	—
					18	18	18

DEPARTMENT OF AVIATION EDUCATION

The curriculum in Aviation Education is designed to meet requirements of the Tennessee State Department of Education for certification as a Public School Teacher of Air Age Education. It covers material in the four basic areas as follows:

1. Theory of Flight—Why the airplane flies.
2. Flight Techniques—How the airplane is flown.
3. Meteorology—The problem of weather.
4. Navigation—How to get there.

Curricula

FRESHMAN YEAR			SOPHOMORE YEAR				
Name of Course	Quarter Hours Credit			Name of Course	Quarter Hours Credit		
	I	II	III		I	II	III
English 101-2-3	3	3	3	English 201	3		
Mathematics 161-2-3	5	5	5	Speech 202-3		3	3
Chemistry 111-12-13	4	4	4	Mathematics 261-2-3	3	3	3
Mechanical Drawing 111-12-13	3	3	3	Physics 211-12-13	4	4	4
*Shop Practice 101	3	3	3	Mechanical Drawing 211-12-13	3	3	3
Aviation Ed. 101-2-3	1	1	1	*Shop Practice 101	3	3	3
Physical Ed. 101-2-3	1	1	1	Economics 211-301-302	3	3	3
	—	—	—	Physical Ed. 201-2-3	1	1	1
	20	20	20		—	—	—
					20	20	20

*All freshman and sophomores are required to pursue the following series: Model Building, Electricity, Radio, Machine Shop, Auto Mechanics, Sheet Metal.

JUNIOR YEAR			SENIOR YEAR				
Name of Course	Quarter Hours Credit			Name of Course	Quarter Hours Credit		
	I	II	III		I	II	III
Aero Mechanics 301-2-3	6	6	6	Education 352-473	3		3
Education 381-385		3	3	Industrial Ed. 421-441-2	3	6	
Education 341-243		3	3	Aviation Education 450			3
Psychology 211	3			Aviation Ed. 401-2-3	3	3	3
Aviation Ed. 301-302	3	3		Aviation Ed. 421-2	3	3	
Aviation Ed. 321-322	3	3		Industrial Education 431	3		
Industrial Education 312			3	Aviation Ed. 411-12		2	3
Electives	3		3	Electives	3	3	3
	—	—	—		—	—	—
	18	18	18		18	17	15

INDUSTRIAL EDUCATION CURRICULA

The Department of Industrial Education, operating as an official agent of the State Department of Education, extends teacher-education services to: In-service teachers of all-day trade, part-time and evening school programs; and prospective teachers of these programs.

FRESHMAN YEAR			SOPHOMORE YEAR				
Name of Course	Quarter Hours Credit			Name of Course	Quarter Hours Credit		
	I	II	III		I	II	III
English 101-2-3	3	3	3	English 201	3		
Mathematics 161-2-3	5	5	5	Speech 202-3		3	3
Chemistry 111-12-13	4	4	4	Mathematics 261-2-3	3	3	3
Mechanical Drawing 111-12-13	3	3	3	Physics 211-12-13	4	4	4
*Shop Practice 101	3	3	3	Mechanical Drawing 211-12-13	3	3	3
Industrial Ed. 101-2-3	1	1	1	*Shop Practice 101	3	3	3
Physical Ed. 101-2-3	1	1	1	Economics 211-301-302	3	3	3
	—	—	—	Physical Ed. 201-2-3	1	1	1
	20	20	20		—	—	—
					20	20	20

*All freshmen and sophomores are required to pursue the series according to their curriculum choice as designated:

Group A—Building Construction Trades: Carpentry, Masonry, Sheet Metal, Welding, Auto Mechanics, Electricity.

Group B—Metal Trades: Sheet Metal, Welding, Auto Mechanics, Electricity, Machine Shop, Plumbing.

Group C—Engine Mechanics: Auto Mechanics, Aero Mechanics, Welding, Sheet Metal, Machine Shop, Carpentry.

Group D—General Service Trades: Machine Shop, Auto Mechanics, Sheet Metal, Shoe Repair, Electricity, Household Appliances.

JUNIOR YEAR			SENIOR YEAR				
Name of Course	Quarter Hours Credit			Name of Course	Quarter Hours Credit		
	I	II	III		I	II	III
Industrial Ed. 311-12	3	3		Industrial Ed. 421-441-42	3	6	
Industrial Ed. 411-12	3		3	Industrial Ed. 431-331-321	3	3	3
Education 381		3		Industrial Education 450			3
Education 341-243		3	3	Education 352-473	3		3
Psychology 211	3			Major (Shop Practice and Theory) 401-2-3	6	6	6
Major (Shop Practice and Theory) 301-2-3	6	6	6	Electives	3		3
Electives	3	3	3		—	—	—
	—	—	—		18	15	18
	18	18	15				

AVIATION EDUCATION

- 101-2-3. *Aviation Education. Survey of Aviation.* A series of lecture and study about aviation in general and of such a character as will inspire young aviation students, familiarize them with the requirements of the field; assist them in determining their ability to meet these requirements, and assist them in selecting the particular branch of the field of aviation they wish to follow. Required of all aviation majors. One hour per week. One hour credit, per quarter.
101. *Aviation. Model Building.* This course is especially designed for Public School Teachers of Air Age Education. 6 hours of laboratory per week. Deals with structure and design of various aircraft and Model Assembly. Three hours credit. Fee \$3.00.
301. *Aviation Education. Aviation and its History.* Deals fundamentally with the beginning of Aviation and proceeds up to the present day. Three lectures per week. Three hours credit.
302. *Implications of Aviation.* Three lectures per week; deals with the social geographic, economic and political implications of the air age. Three hours credit.
321. *Theory of Flight.* Three lectures per week. The laws of nature as applied to aviation. Three hours credit.
322. *Aerial Navigation.* Three lectures per week. Deals with the basic principles of navigation and offers practical experience in Aerial Navigation. Three hours credit.
323. *Aviation Education. Airport Construction and Layout.* Three lectures per week. Deals with problems, sites and locations, construction of facilities runway planning, drainage, etc. Three hours credit.
331. *Aviation Education. Airline and Fixed Base Management and Operation.* Three lectures per week. Administrative problems; personal problems; relations with civil aeronautics administration; interline agreements; promotion and publicity. Three hours credit.
332. *Government Regulation and Aviation.* Three lectures per week. Deals with the Government regulatory body in making and enforcing laws concerning aviation in general. Three hours credit.
333. *Aviation Education. Air traffic and cargo.* Three lectures per week Deals with dispatching, scheduling of air traffic, packaging, proper loading of aircraft. Plane to consumer problems. Three hours credit.
401. *Elementary Flight and Flight Techniques.* One lecture and two experience and instruction period per week minimum requirement. How to fly with actual flight experience and instruction. Ten clock hours dual instruction. Three hours credit. Fee \$111.00.
402. *Aviation Education. Meteorology.* Three lectures per week. General effects of weather phenomena. Special study of relation to aviation. Three hours credit.

403. *Aviation Education. Fundamentals of Flight.* One lecture and two laboratory periods per week. Dealing fundamentally with the basic principles
411. *Aviation Education. Communications.* Two lectures per week. The development of methods of communication and application to aviation. Two credit hours. (313). Prerequisite.
412. *Aviation Education. Aerodynamics.* Three lectures per week. A general course intended for those taking only one course in aerodynamics. Properties of air, air flow principles, airfoil characteristics, elementary wing theory, parasite drag, engine and propeller characteristics. Introduction to stability and control. Three hours credit.
421. *Aviation Education. Aircraft and Engines.* Familiarization and operation. Two lectures and one laboratory period per week deals with types, structures, and general service of aircraft and engines. Three hours credit. Fee \$3.00.
422. *Aviation Education. Civil Air Regulations.* Three lectures per week. Federal, State and individual safety regulations as applied to aviation. Three hours credit.
- 431-A. *Aviation Education. Intermediate Flight and Flight Techniques.* One lecture and two experience or instruction periods per week minimum requirement. Supervised solo practice with dual instruction and experience. 2½ clock hour dual and seven and one-half hours solo. Prerequisite 401. 1½ hours credit. Fee \$85.00.
- 431-B. Same as 431-A. 1½ hours credit. Prerequisite 431-A.
432. *Aviation Education. Advanced Flight and Flight Techniques.* One lecture and two experience or instruction periods per week, minimum requirement supervised solo practice with dual instruction and experience. Five clocks hours dual instruction with minimum of two clocks hours cross country flight. Fifteen clock hours solo practice with minimum of three lock hours cross country flight. Successful completion of Aviation 401, 431-A and B, and 432 will meet flight requirements for the private pilot's certificate. Three hours credit. Fee \$170.00.
433. *Aviation Education.— Airport Operation and Control.* Three lectures per week. Deals with traffic problems of small and large airports, traffic control; control tower operation. Three hours credit.
450. *Senior Project.* The design of an advanced structural problem selected by the student with the approval of the department staff. Required: working drawings; complete construction details; and a report setting forth a description and analysis of the structural system selected, the specific conditions assumed, the justification of the solution proposed, complete computations, detailed specifications, and a cost estimate. The candidate will defend the thesis orally before the staff and guest specialists. Three hours credit.

BUILDING CONSTRUCTION ENGINEERING

101. *Survey of Engineerings. Elements of Engineering.* Required of all engineering majors. A course of lectures relating to engineering in general and of such character as will inspire young engineering students and assist them first to make sure that they are fitted to become engineers and second, to assist in selecting the particular field of engineering which they should follow. One hour credit.

301. *Building Construction.* Structural and finish materials and assembly systems used in non-resistant building; construction details of foundations, walls, floors, roofs, stairs, partitions, windows. Lectures, reports, readings, drawings. Required 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$3.00.

302. *Building Construction.* Continuation of 301, dealing with fire-resistant buildings; exits; thermal and sound insulation. Lectures, reports, readings, drawings. Required 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$3.00.

303. *Building Construction.* Continuation of 302, dealing with industrial construction; prefabrication; modular dimensioning; wide-spand structures. Lectures reports, reading, drawings. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$3.00.

311. *History of Architecture.* A description and analysis of the development of architecture, town planning, landscape architecture, painting, and sculpture related to the cultural setting. Ancient through early Medieval times. Illustrated lectures, readings, drawings, and reports. Three hours credit.

312. *History of Architecture.* Continuation of 311, through the later Medieval, Renaissance, and Baroque periods. Three hours credit.

313. *History of Architecture.* Continuation of 312, from the Industrial Revolution to the present day. Three hours credit.

321-2-3. *Architectural Design.* Analysis and solution of simple buildings; principles of spatial and structural organization, study of space and mass, structural details; outline specifications. Research, discussions, drawings, models. Three hours credit, each quarter. Fee \$1.00.

401. *Construction Methods and Problems.* Problems involving the structural design of the mechanical equipment of buildings; heating, air conditioning, wiring, and illumination. Discussions, research, computations, drawings. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$3.00.

402. *Construction Methods and Problems.* Problems involving the structural design and detailing of timber, steel, and concrete buildings. Discussions, research, computations, drawings. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$3.00.

403. *Construction Methods and Problems.* Material quantities; estimating; builder's organization and procedure; job records; builders' liability; labor relations; safety precautions. Lectures, problems. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$3.00.

411. *Structures.* Theory of simple determinate structures with special emphasis on the design of beams, columns, struts, and ties; internal forces; bending, shear, and deflection. Lectures, problems. Three hours credit.

412. *Reinforced Concrete.* Theory and design of simple beams, slabs, columns, and footings; formwork; construction procedure; mixes; placing; curing. Lectures problems. Three hours credit.

413. *Foundation and Geology.. Geology as related to design of foundations* for engineering structures; design of foundations; use of concrete, steel, wood piling, caissons, cofferdams, grillages, and spread footings, reports on current articles in technical publications. Three hours credit.

GENERAL ENGINEERING

101. *Survey of Engineering.* Elements of engineering. Required of all engineering majors. A course of lectures relating to engineering in general and of such character as will inspire young engineering students and assist them first to make sure that they are fitted to become engineers and second, to assist in selecting the particular field of engineering which they should follow. One hours credit.

311. *Elementary Surveying.* This course, an elementary one for all engineering students, is designed as the first course in surveying for those students who later elect to take Civil Engineering, and also as an elementary and basic course for non-civils. It is devoted to the theory of and the practice with ordinary instruments of surveying—the level, transit, compass, and tape—and the application to field exercise. The purpose is to teach the student how to use and care for these instruments, and what may be done with them. Two field periods and one lecture. Three hours credit. Fee \$2.00.

312. *Elementary Surveying.* This course is a continuation of 111, taking up land surveying, closure of traverses, latitudes and departures, and area problems, theory of the stadia and methods of locating details, and the fundamental principles of topographic mapping. Two field periods and one lecture. Prerequisite: 111. Three hours credit. Free \$2.00.

313. *Topographic Surveying.* A continuation of 112, dealing in more detail with problems of topographic mapping, involving horizontal control by traverse, location of details, contours, methods of plotting. The theory of the plane table. Review of and particular stress on proper use, care, and adjustment of instruments. Two field periods and one lecture. Prerequisite: 112. Three hours credit. Fee \$1.00.

321. *Engineering Drawing.* Prerequisite: Drawing 211. One lecture and three two hour laboratory periods each week. Working drawings, technical sketching, dimensioning, limits and tolerances, gears, piping, structural practice and welding. Three hours credit. Fee \$1.00.

322. *Machine Drawing.* Prerequisite: Engineering Drawing 321. One lecture and three two hours laboratory periods each week. Advanced machine design and drawing, drafting room methods and procedure. Three hours credit. Fee \$1.00.

323. *Metallurgy*. Two hours and one laboratory period. A study of the metallic elements and their properties, structure of metals and alloys, the working and annealing of metals, the phase rule and its application to alloys. Three hours credit. Fee \$2.00.

332. *Strength of Materials*. Prerequisite: General Engineering 213. Stress and strain; direct and shearing stress; torsion and bending. Problems in design of riveted and welding joints. Short columns, tension members, shafts and beams parallel the classwork. Three hours credit.

333. *Kinetics*. Prerequisite: Graphic Statics 213. Rectilinear, curvilinear, and rotary motion, D'Alembert's principle; principle of work and energy; impulse and momentum; impact; applications to engineering problems. Three hours credit.

411. *Mechanical Equipment of Building*. (General Engineering 411). Description and analysis of heating, air conditioning, water supply, plumbing, electrical wiring, motors, elevators, illumination, and acoustical treatment as related to buildings. Lectures, demonstrations, readings, problems. Three hours credit.

412. *Contracts and Specifications*. Office procedure and methods; professional ethics; the technique and execution of working drawings; specifications. Discussions, drawings, inspections, reports. Three hours credit.

450. *Senior Project*. Prerequisite: Senior standing in department. An original and special investigation or design, based upon the work of the course. Each student is required to select a subject for investigation, with approval of the head of department, and to develop methods of research for this subject and carry it to completion. Three hours credit.

INDUSTRIAL EDUCATION

311. *Industrial Education*. History and development of Industrial Education; social and economic reasons for present educational movements; types of modern industrial schools and courses; apprenticeship systems and training of workers in modern industry. Juniors. Three hours credit.

312. *Industrial Education Legislation*. Continuation of 311. Federal legislation which has affected the growth of industrial education. A study of the National Vocational Acts as they apply to trade and industry, and the various schools and classes authorized under these acts. The Tennessee State Plan for Vocational Education and other state legislation affecting trade and industrial classes. Apprenticeship and its regulations. Juniors. Three hours credit.

313. *Principles and Methods of Part-time Education*. The organization and administration of a part-time general continuation school. The special problems of administration peculiar to this type of school, its aims and purposes; special methods necessary and the development of helpful instructional materials. Cooperative apprentice training under the State plan. Juniors. Three hours credit.

321-2-3. *Part-time Programs in Diversified Occupations*. Principles of organizing and promoting such programs, analyzing needs, preparing schedules of

processes, selecting materials for related-subjects teaching, and carrying on supervised study and coordination. Juniors. Three hours credit, each quarter.

331. *Shop Organization and Class Management*. Basic principles of shop organization and class management. Systematic, orderly and democratic procedure of starting a class, routinizing details, selecting and developing group leader, managing the class, business procedure, pupil movement, checking, securing suitable work, developing proper community relation. Juniors and seniors. Three hours credit.

411. *Foremanship Training by the Conference Method*. The use of the conference as an instructional device; special methods, techniques, and procedures to be used in foreman training; duties and responsibilities of the typical industrial foreman. How to follow up foremen conferences by means of foremen's clubs, plant educational programs. Seniors. Three hours credit.

412. *Job Analysis*. The principles of job analysis for the purpose of listing teaching content in trade in industrial education. Practice in analyzing trade jobs for production, auxiliary, and related technical content; instructional difficulties and progression factors. Seniors. Three hours credit.

413. *Job Analysis*. A continuation of 412. Analytical study of the related knowledge necessary for certain type jobs and typical industries. Emphasis on development of the best instructional method of teaching industrial subjects. Seniors. Three hours credit.

431-2. *Curriculum Building in Trade and Industrial Subjects*. Arranging course material trade subjects, following up results of job analyses, preparing checking sheets and individual job sheets in both trade and related subjects. Prerequisite or parallel: 412. Seniors. Three hours credit, each quarter.

441-2. *Directed Teaching*. Observation of trade and industrial classes of all types: all-day trade, part-time general continuation, and evening trade extension. Preparation of lesson plans and directed teaching in at least two of the three types. Seniors. Two laboratory periods and one hour. Three hours credit, each quarter.

450. *Senior Project*. All seniors are required to select and execute a project under the supervision of their major adviser to be approved by the director of the division. It may involve the designing and making of a project complete with drawings, pictures, specifications and detail data involved in its construction; or, a research and compilation of a subject within the field of the student's interest. Three hours credit.

INDUSTRIAL EDUCATION

Graduate Courses Offered During Fourth Quarter

501-2-3. *Thesis*. Graduate students only.

511-2-3. *Administration and Supervision of Industrial Education*. Fundamental principles of vocational education and their application, objectives, methods, and policies. Special emphasis on the relationship between public vocational education and general education; the methods of securing coopera-

tion of trade and labor organizations; modern apprentice programs and the administration and supervision of various types of schools and classes under the Federal Vocational Education Acts. Three hours credit, each quarter.

521-2-3. *Special Problems in Industrial Education*. Study of approved problems on an individual research basis under the direction of major professor. Typical problems—development of detailed instructional material, community surveys, apprentice training manuals, etc. Three hours credit, each quarter.

531-2. *Methods of Research in Industrial Education*. The special technique and methods necessary for carrying on various types of surveys to ascertain needs for vocational training in the trades and industries; forms for questionnaires and outlines for interviews and conferences. Approved efficiency factors for evaluating the effectiveness of vocational trade and industrial classes; methods of scoring and securing weighted ratings; graphic representations of findings. Three hours credit, each quarter.

541. *Special Problems in Industrial Education*. Study on seminar basis of problems in Industrial Education. Study on seminar basis of problems of improving teachers in service; problems of coordination of part-time and apprentice training programs. Three hours credit.

542. *Special Problems in Industrial Education*. The organization and functions of advisory committees and the organization of course outlines for apprentices and students in diversified occupations programs. Three hours credit.

543. *Special Problems in Industrial Education*. The preparation and use of records, reports, and rating sheets. Planning shop layouts and providing for equipment and maintenance for vocational classes. Three hours credit.

AERO MECHANICS

The curriculum in Aero Mechanics is designed to meet C.A.A. standards for both the Aircraft and Aircraft Engine licenses. A college student can qualify for only one of these if he devotes full time to that phase. The student desiring both phases will have to supplement his training to obtain licenses.

101. *Aero Repair Introductory*. Lectures and Shop work in all phases of Aero Repair. Theory of flight, regulations pertaining to mechanics. 3 hours credit. Fee \$3.00.

301. *Elementary Aircraft*. Regulations, airplane types, aviation history, fuel-gauge construction; drafting layouts of wing and tail sections, constructions $\frac{1}{2}$ scale, metal fabrication, welding. 6 hours credit. Fee \$3.00.

302. *Elementary Engines*. Principles of internal combustion, Diesels; lubrication, oil, fuel, electrical and carburetion systems, dissection of all types engines, propellers, carburetors and magnetos. 6 hours credit. Fee \$3.00.

303. *Advanced Fuselage*. Analysis and estimation of repairs; structural repair alignment and priming; interior finish; glass, seat, instrument and control installation. All work on "live" equipment. 6 hour scredit. Fee \$3.00. Prerequisite 301.

401. *Advanced Engines*. Disassembly; micrometer, microscopic and Magnaflux inspection; assembly; timing; running-in of Continental, Lycoming, Pratt and Whitney, Kinnerm Wright, and other engines; trouble shooting; labor and parts cost estimation. 6 hours credit. Fee \$3.00. Prerequisite 302.

402. *Advanced Wing*. Inspection and analysis of repair work; repair methods wood and metal; had adn spray doping, fabric covering and repairs; lettering; assembly, rigging and inspections; weight and balance procedure; C.A.A. Forms. 6 hours credit. Fee \$3.00. Prerequisites 301 and 303.

403. *Field Work* Assignment to line duty at airport, practice teaching C.A.A. Practical and Written examinations. 6 hours credit. Fee \$3.00. Prerequisites 101 through 402.

402. *Fuselage Repair and Overhaul*. Rebuilding of "live" fuselages, hydraulics, electrical systems, instrument installation, upholstery, frame alignment, truss repairs, priming, assembly, landing gear and shock strut overhauling. Civil Air Regulations. Prerequisite: 401. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$3.00.

403. *Advanced Engine Overhaul*. Disassembly and assembly of "live" engines, installation, operation, trouble shooting, magneto overhaul and test, carburetor overhaul and test, electric, constant-speed, controllable and variable speed propellar overhaul, Civil Air Regulations. Prerequisite: 402. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$3.00.

AUTO MECHANICS

101. *Elementary Auto Repairs and Servicing*. Study of the function and operation of the automobile. Minor and emergency trouble shooting, repair and maintenance. 6 hours laboratory per week. Three hours credit. Fee \$3.00.

301. *Bench Work and Engines*. Familiarization of tools and equipment, care and operation of tools and equipment. Study of bolts, nuts, screws and threads. Engine design and principles, disassembly, cleaning and inspecting engine parts. Mechanical principles, assembly of engines. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$3.00.

302. *Engine Accessories, Carburetion, and Lubrication*. Study of functions, repairs and of starters, generators, ignition devices, and engine accessories. Study of combustion and fuels. Study of function, repair and maintenance of carburetors, fuel pumps, fuel lines. Study of function, repair and maintenance of lubrication system. 8 hours laboratory, 2 hours lecture. Prerequisite: 301. Six hours credit. Fee \$3.00.

303. *Engine Overhaul*. Fitting and installing piston rings, inspecting and grinding valves, adjusting valve stem clearance, cleaning and adjusting spark plugs; inspecting, cleaning and adjusting ignition points. Inspecting and testing secondary wiring. Fitting and installing bearings. Inspection and testing crank shafts; valve timing, ignition timing, motor analysis. Prerequisite: 302. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$3.00.

401. *Chassis Maintenance, Gas and Electric Welding.* Maintenance processes, disassembly and construction; assembly and repairs of clutches, transmissions, free wheeling, over drive, and fluid drive unit. Repairs and maintenance of universal joints, drive shafts and final drives. Principles and practice of gas and electric welding as applied to auto mechanics. Prerequisite: 303. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$3.00.

402. *Advanced Accessories and Electrical Appliances.* Starters, generators, magnetos, battery ignition systems, wiring. Relays and voltage regulators. Prerequisite: 401. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$3.00.

403. *Body, Fender Work and Spray Painting.* Metal bumping, shrinkage, filling and sanding; leading and glacing, priming, surfacing and finishing. Color tinting, lacquers and synthetic enamels. Prerequisite: 402. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$3.00.

CARPENTRY

101. *Carpentry. General Woodwork.* A study of materials and methods of construction. Care and use of hand tools and machines; fundamental wood-working operations. Three hours credit.

301. *Tools, Machines and Materials.* History study of development of tools and materials in woodworking. Care and use of tools and materials. Classification of lumber, fundamental operations in carpentry work. Methods of construction involving the selection of building materials on the basis of their structural and aesthetic merits and the broad application of the principles of modern wood frame construction according to approved practices. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$2.00.

302. *Woodworking Processes.* Sizing, joining, panel construction, kerfing, routing, introduction to cabinet construction and carpentry construction. Prerequisite: 301. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$2.00.

303. *Framing.* Study of types and methods of house framing. Construction of foundations, wall and roof. Prerequisite: 302. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$2.00.

401. *Exterior Carpentry.* Methods and applying of sheathing and siding, cornices, water tables. Construction of window and door frames, screens, blinds, porches and steps. Prerequisite: 303. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$2.00.

402. *Interior Carpentry.* Methods and applying of standard trims, flooring, ceiling, wainscotings and wallboards. Fitting doors and windows. Installing hardware. Prerequisite: 401. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$2.00.

403. *Estimating and Specifications.* Methods used in making of estimates of costs as applied to buildings. Study of specifications as ordinarily prepared by architects. Prerequisite: 402. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$2.00.

ELECTRICITY

101. *General Electricity.* Course to cover general knowledge of electricity. types of electrical currents and relationship of electricity to industry and domestic life. 6 hours laboratory. Three hours credit. Fee \$2.00.

301. *Theory of Circuits.* Practice in house wiring, switches, fuses, line leads. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$2.00.

302, 303. *Theory and Practice* in power transmission, transformers, meters, line wiring, advanced house wiring. Installation and repairs of stoves, water heaters, etc. Prerequisite: 301. 8 hours laboratory, 2 hours lecture. Six hours credit, each quarter. Fee \$2.00.

401, 402. *Generator and Motor Rewinding and Repairing.* Theory and practice in the design, maintenance and repair of distribution loads. Prerequisite: 303. 8 hours laboratory, 2 hours lecture. Six hours credit, each quarter. Fee \$2.00.

403. *Illumination,* estimating, national electrical code, power generation, motor design. Prerequisite: 402. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$2.00.

MASONRY

101. *Fundamentals of Bricklaying.* The study of materials; care and use of tools. Mortar making and spreading; laying bricks between vertical points, building piers. 6 hours laboratory. Three hours credit. Fee \$2.00.

301. *Brick Construction.* The construction of walls, steps and flues. Excavating 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$2.00.

302. *Foundations.* The study and construction of simple, spread and stepped footings; foundation walls and under-pinning. 8 hours laboratory, 2 hours lecture. Prerequisite: 301. Six hours credit. Fee \$2.00.

303. *Advanced Brick Construction.* The study and construction of chimneys, mantles, special wall designs, arches, and bonds. Prerequisite: 302. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$2.00.

401. *Fundamental Concrete Work, Cement Finishing.* The study of materials; care and use of tools. Application of concrete mixtures, form building. Construction of foundations walls, walks and floors. Prerequisite: 303. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$2.00.

402. *Fundamentals of Plastering.* The study of common materials; care and use of tools. Mixtures and application. Prerequisite: 401. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$2.00.

403. *Estimating and Specification.* Methods used in and making of estimates of costs as applied to buildings. Study of specifications as ordinarily prepared by architects. Prerequisite: 402. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$2.00.

MACHINE SHOP PRACTICE

101. *Shop Practice.* Six hours lecture and laboratory each week. Practice in the use of hand tools and semi-precision instruments on bench work and layout jobs. The basic principles of the power saw, drill press and pedestal grinding. Three hours credit. Fee \$3.00.

301. *Machine Shop Lathe Practice.* Ten hours lecture and laboratory each week. Laboratory practice on the lathe. Includes the fundamental operations of straight, shoulder and taper turning; screw cutting, chuck and face plate work, boring, reaming, filing and polishing. Tool and cutter grinding. Six hours credit. Fee \$3.00.

302. *Machine Shop Shaper and Planer Practice.* Ten hours lecture and laboratory each week. Prerequisite 301. Laboratory practice on the shaper and planer. Includes the fundamental operations of machining flat, square, shoulders, V-Grooves, tapered, T-Slots, Dove Tails, concave and convex surfaces; key ways. Six hours credit. Fee \$3.00.

303. *Machine Shop Milling Machine Practice.* Ten hours lecture and laboratory each week. Prerequisite 302. Laboratory practice on the milling machine includes the operation of milling, plain, slotting, sawing, angle, counter-bore, index, straddle, uses of various milling attachments. Six hours credit. Fee \$3.00.

401. *Machine Shop Surface and Cylindrical Grinding, Boring Mill.* Ten hours lecture and laboratory each week. Prerequisite 303. Laboratory practice on the surface and cylindrical grinders also boring mill operation. Includes the operations of grinding—flat, bevel, contour, flutes and grooves, and tapering surfaces. The operations of internal—straight, taper, bevel grinding boring internal and external facing, grooving and bevel turning. Six hours credit. Fee \$3.00.

402. *Advance Machine Shop Operations.* Ten hours lecture and laboratory each week. Prerequisite 401. More advanced practice on machine tools, gears and gear cutting. Heat treatment of steel. Work organized and carried out on a production basis, with standard time, work limits, inspection and assembly. Six hours credit. Fee \$3.00.

403. *Tool Making.* Ten hours lecture and laboratory each week. Prerequisite 402. Jigs and Fixtures. Tool making, selection, tooling and set-up of machine tools. Estimating machinery time and preparation of operating instructions for complete units. Six hours credit. Fee \$3.00.

PIPE TRADES

101. *Pipe Trades. Tools and materials.* Plumbing defined—develop tool handling technique, duties and responsibilities, classification and selection of materials. Six hours lecture and laboratory each week. Three hours credit. Fee \$3.00.

301. *Pipe Trades. Plumbing.* Ten hours lecture and laboratory each week.

Pipe forming, threading, yarning cast iron joints, leading, sweating and making pipe joints. Six hours credit. Fee \$3.00.

302. *Plumbing Operations.* Ten hours lecture and laboratory each week. Development of skills involving measurements, installations of regulators, tapping mains, plumbing laws and regulations, blueprint reading. Prerequisite: 301. Six hours credit. Fee \$3.00.

303. *Plumbing Make Up—Testing.* Ten hours lecture and laboratory each week. Prerequisite: 302. The assembly of drainage, ventilation, main vents, continuous vents. The roughing in of water services, the application of water, smoke and air tests. Water treatment method and purification. Six hours credit. Fee \$3.00.

401. *Pipe Trades. Plumbing Estimating and Installation.* Ten hours lecture and laboratory each week. Prerequisite: 303. Determining cost of labor and materials for installations. The assembly and study of fixtures, pumps, technique and practical soldering, wiping lead joints. Welding and Brazing. Six hours credit. Fee \$3.00.

402-403. *Plumbing layouts and Heating.* Ten hours lecture and laboratory each week. Prerequisite: 401. Calculating heat, gas and water requirements for buildings, making layouts for actual jobs, checking installations. Steam and hot water heating systems. Copper tubing and fittings. Six hours credit, each quarter. Fee \$3.00.

RADIO

101. *General Radio.* Fundamentals of radio and electronics. Course will orientate student with radio principles. Will give him its connection with industry. 6 hours laboratory. Three hours credit. Fee \$2.00.

301. *Principles of Radio.* Principles and practices of radio communication. The transmission procedures of both phone and code in communications. Lectures, demonstrations, and laboratory experiments. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$2.00.

302. *Maintenance and Repair.* Maintenance and repair of radio, sound equipment and electronic equipment. Adjusting and servicing of radio transmitters. 8 hours laboratory, 2 hours lecture. Prerequisite: 301. Six hours credit. Fee \$2.00.

303. *Frequency Modulation Receivers.* Theory of frequency modulation receivers. Lectures, demonstrations and laboratory experiments. 8 hours laboratory, 2 hours lecture. Prerequisite: 302. Six hours credit. Fee \$2.00.

401. *Servicing of F. M. Receivers.* Familiarity with the equipment used for high frequency measurement is afforded together with a survey of the various techniques employed in the repair of F. M. receivers. 8 hours laboratory 2 hours lecture. Prerequisite: 303. Six hours credit. Fee \$2.00.

402. *Transmitter Theory and Practice.* A review and application of the theory underlying the operation of F. M. transmitters. Lectures, demonstrations and experiments. 8 hours laboratory, 2 hours lecture. Prerequisite: 401. Six hours credit. Fee \$2.00.

403. *Electronics*. The study of the characteristics of electron tubes and their function as detectors, amplifiers, and generators. Electronics. The study of the principle of radio construction and repair. 8 hours laboratory, 2 hours lecture. Prerequisite: 403. Six hours credit. Fee \$2.00.

SHEET METAL TRADES

101. *Sheet Metal Tools and Materials*. Six hours laboratory each week. The fundamental operations of sheet metal practice; developing patterns and laying out work, hand and machine operations. Three hours credit. Fee \$3.00.

301. *Sheet Metal. Pattern Work and Development*. Ten hours lecture and laboratory each week. Seaming, jointing, forming sheet metal work from patterns. Pattern drafting and template work from sketches and designs. Six hours credit. Fee \$3.00.

302. *Sheet Metal. Aircraft*. Ten hours lecture and laboratory each week. Prerequisite: 301. Hand forming and stretching, bulk head sections, cowling, stabilizer section, metal fuselage and riveting. Six hours credit. Fee \$3.00.

303. *Sheet Metal. Materials and Methods*. Ten hours lecture and laboratory each week. Prerequisite: 302. The study of technical information, markets and supplies, job requirements and material selection in accordance with same construction methods. Six hours credit. Fee \$3.00.

401. *Sheet Metal. Heating and Ventilation*. Ten hours lecture and laboratory each week. Heat transmission and the design of heating, ventilation and air conditioning systems. Six hours credit. Fee \$3.00.

SHOE REPAIRING AND LEATHER

101. *Shoe Repairing. Tools and Materials*. The study of tools, their names, classification and care; simple preparation and use of leather. Use of hand tools and care of machines. Practical shop keeping and simple hand work. Three hours credit. Fee \$2.00.

301. *Shoe Repair. Fundamental Shop Practice*. Pattern cutting sole and heel fitting, edge finishing, machine adjustment and use, plain soling and heeling, machine patching, shoe cleaning and shining. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$2.00.

302. *Shoe Repair. Miscellaneous Shop Practice and Methods*. Study of different types of machine parts and operations. Shoe dyeing and leather finishing. Terminology, classification, selection and source of leather. Shoe rebuilding, fitting shanks and insoles. Counter making, welt sewing. General machine operation and simple cementing. Prerequisite: 301. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$2.00.

303. *Shoe Repair. General Leather Work*. Making articles of leather. Tooling, pattern cutting and simple shoe construction. Prerequisite: 302. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$2.00.

401-402. *Shoe Repair. Orthopedic and Advanced Leather Work*. The theory of orthopedic heels; making orthopedic uppers, making arch supports. Shoe fitting and correction. Prerequisite: 303. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$2.00.

403. *Shop Repair. Advanced Shop Keeping*. Record keeping, order making. Profits and methods. Prerequisite: 401-2. 8 hours laboratory, 2 hours lecture. Six hours credit. Fee \$2.00.

METALLIC ARC WELDING

101. *Metallic Arc Welding*. Instruction in the D.C. and A.C. Electric Arc Welding machine. How to connect and care for equipment, safety precautions, utility of the arc for welding purposes. Current to be used for rod of different diameters. Striking and manipulating the arc . . . position of the electrode. Bending, tacking, weaving, padding, and filling sequence. A study of the nomenclature of arc welding will be given partly in 101, the other will follow in 301 and 302. Six hours laboratory each week. Three hours credit. Fee \$3.00.

301. This course will be a continuation of 101. Preparation of material for welding. Alignment, beveling, butt weld, caulking weld, fillet weld, strength weld using both bare and coated rods on mild steel in all positions and testing same. Ten hours lecture and laboratory each week. Six hours credit. Fee \$3.00.

302. This course shall consist of a study of the welding symbols, their use and application. A study of blue print reading and designing. Metals and their response to welding in terms of their physical and chemical properties. Advance laboratory practices and project making, testing of the many weld specimen. Ten hours lecture and laboratory each week. Six hours credit. Fee \$3.00.

303. (Alternate 311 or 312) *Carbon Arc Welding*. Instruction in welding using carbon arc with and without filler rod on D.C. sets. Use of double carbon arc on A.C. welding machines, welding non-ferrous metals—copper, brone, brass, monel and aluminum. Welding galvanized steel. Reclaiming castings. Building up bronze bearing on steel and cast iron. Cutting by carbon arc. Ten hours lecture and laboratory each week. Six hours credit. Fee \$3.00.

311. *Alloy Steels and Cast Iron*. (1) Welding of chrome, stainless, and chrome-moly steels. Welding of other alloy steels. Welding of manganese steels. Arc manipulation and selection of proper electrodes, also a study of the chemical composition of the varied alloys and their uses. (2) Welding of cast iron and moly-nickel cast iron. Ten hours lecture and laboratory each week. Six hours credit. Fee \$3.00.

312. *Hard-Facing, Tool Welding*. Building up worn parts using high carbon manganese steel, hard-facing classification. Metallurgical characteristics of different hard-facing materials. Deposit characteristics. Building up cutting edges on tools, plow points, rod graders, etc. Use of both metallic and carbon arc methods. Ten hours lecture and laboratory each week. Six hours credit. Fee \$3.00.

401. *Spots or Resistance Welding*. Instruction in the resistance welding process. Study of heat, pressure, and timing necessary to make resistance welds on all gauges of mild steel, alloy steel, copper and aluminum. Study of the

weldability of different metals by the resistance process. Ten hours lecture and laboratory each week. Six hours credit. Fee \$3.00.

402-403. *Oxy-Acetylene Welding and Cutting*. (1) Setting-up apparatus, safety lighting and adjusting the torch flame. Condition required for perfect combustion. Carburizing, oxidizing and neutral flame and their effects while welding. (2) *Methods of Welding with Oxy-Acetylene*. Running beads and making joints without filler rods. Sies on tips used for different thickness of metals. Running beads and making joints using filler rods, oxy-acetylene welding of cast iron, bronze, aluminum and silver soldering. (3) *Oxy-Acetylene Cutting*. Instruction in use and care of the equipment, both manual and automatic. (4) *Oxy-Acetylene Welding of Pipe and Tubing (Alloy Steel)*. Instruction in welding small and large pipes. Cutting, fitting and welding all pipe joints. Making of templates for cutting angles. Instruction in the welding of steel and alloy tubing. Ten hour slecture and laboratory each week. Six hours credit. Fee \$3.00.

Note:—There will be given a theory and laboratory examination at the end of each course which must satisfactorily passed before entering the next course.

WELDING

101. *History and Elementary Principles of Electrical Household Appliance*. General repair of small household appliance. Six hours laboratory each week. Three hours credit. Fee \$3.00.

301. *Processes and Uses of Tools and Equipment in Soldering, Bending Flaring and Swedging*. Ten hours laboratory and lecture each week. Six hours credit. Fee \$3.00.

302. *Transferring, Removing and Charging a System with Refrigerant*. Converting from one system to another. Ten hours laboratory and lecture each week. Six hours credit. Fee \$3.00.

303. *Testing and Overhauling Refrigerant Control Valves*. Ten hours laboratory and lecture each. Six hours credit. Fee \$3.00.

401. *Installation, Testing, Replacing of Heating Elements, Insulation, Thermo-Switches, etc. in Domestic and Commercial Appliances*. Ten hours laboratory and lecture each week. Six hours credit. Fee \$3.00.

402. *Installation, Testing, Replacing, Repairing, Adjusting Parts of Mechanical, Domestic and Commercial Appliances*. Ten hours laboratory and lecture each week. Six hours credit. Fee \$3.00.

403. *Motor and Compressor Testing and Rebuilding*. Ten hours laboratory and lecture each week. Six hour scredit. Fee \$3.00.

MECHANICAL DRAWING

111. *Drawing Practice*. Instruction in the use of instruments, embracing geometrical constructions, orthographic projection, special and auxiliary views, and sections. Freehand lettering. Freshmen. Two three-hour and three two-

hour laboratory periods. Required of all Engineering students. Three hours Credit. Fee \$1.00.

112. *Pictorial Representation. Technical Sketching*. The last half of the quarter's work is devoted to a project in engineering drawing, involving preliminary sketches, working drawings, tracing, and blueprints of a complete machine. Two three-hour or three two-hours laboratory periods. Required of all Engineering students. Spring. Three hours credit. Fee \$1.00.

113. *Continuation of Orthographic Projection, Dimensioning*. Representation of bolts, rivets, springs, pipe. Working drawings of machine parts. Freehand lettering. Freshmen. Two three-hour or three two-hour laboratory periods. Required of all Engineering students. Winter. Three hours credit. Fee \$1.00.

211. *Descriptive Geometry*. An elementary study of the point, line, and plane, with theoretical and practical problems. Sophomore. Required of all Engineering students. Three hours credit.

212. *Descriptive Geometry (continued)*. Curved surfaces, their tangent lines and planes and intersections. The development of surfaces; shades and shadows; perspective. Sophomore. Required of all Engineering students.

213. *Graphic Statics*. Elementary graphic principles; use of force and funicular polygons; determination of stresses in trusses and beams; the graphics of machinery, including the effect of friction on the forces transmitted. Sophomore. Required of all Mechanical, General and Electrical Engineering students. Three hours credit.

SPECIALIZED TRADE TRAINING COURSES

In addition to the regular college curricula offerings, specialized training is given in certain areas of instruction, the completion of which qualifies one for a special certificate. It is the primary purpose of these courses to prepare one for successful participation in our present and future basis economy in the shortest possible time.

Qualifications for Admission:

1. The applicant must be a high school graduate, a veteran of World War II or at least 21 years of age.
2. It is not necessary that one should meet the regular college entrance requirements, however, he must give sufficient evidence of training and experience which would enable him to pursue satisfactorily the course desired.
3. Eligibility for admission shall be determined by the Committee on Admissions.

Scope

The trade curriculum of the Division of Engineering and Industrial Education is offered primarily for the development of skills and acquisition of related information in the several trades.

It is the aim of the specialized trade curriculum to meet the training demand of persons who are not eligible or do not desire college credit, but who want to prepare themselves with the basic skills necessary to enter directly into industry as a workman. Upon the satisfactory completion of the prescribed course as outlined below: A certificate will be awarded.

Trades Curriculum

FIRST YEAR

*Shop (4 hours per day, 5 days per week)

Related (2 hours per day, 5 days per week)

1. Math
2. Blueprint Reading
3. English
4. Industrial Relations.

*Trades Offered:

1. Auto Mechanics
2. Aero Mechanics
3. Carpentry
4. Drafting
5. Electricity
6. Machine Shop Practice

13. Electrical Household Appliances

SECOND YEAR

*Shop (4 hours per day, 5 days per week)

Related (2 hours per day, 5 days per week)

1. Estimating
2. Drawing
3. English
4. Everyday Business Problems

7. Masonry
8. Plumbing and Steam Fitting
9. Radio
10. Shoe Repairing
11. Sheet Metal
12. Welding.

RELATED STUDY

Related English I. A study of English for everyday living. Fundamentals of speech and grammar, pronunciation, spelling, writing and defining technical words and terms. Writing of short sentences. Required of all first year students. Three quarters. 5 one-hour lecture per week. 60 clock hours credit each quarter.

Related English II. Written and oral description of jobs performed in the related shop classes; reading and interpreting technical literature, writing job specifications and business letters. Required of all second year trade students. Three quarters. 5 one-hour lecture per week. 60 clock hours credit each quarter.

Related Mathematics I. Study of fundamental principles necessary as a background for estimating, calculating of wages, materials and supplies. Required of all trade students one quarter. 5 one-hour lecture per week. 60 clock hours credit per quarter.

Related Mathematics II. Estimating and calculating of job cost based upon labor and materials. Required of all trade students one quarter. 5 one-hour lecture per week. 60 clock hours credit per quarter.

Related Drawing I. Reading of blueprints of ordinary working drawings and interpretation of symbols, etc. Required of all trade students one quarter. 5 one-hour lecture per week. 60 clock hours credit per quarter.

Related Drawing II. Fundamentals of making ordinary working drawings and detail sketches. Required of all trade students one quarter. 5 one-hour lecture per week. 60 clock hours credit per quarter.

Industrial Relations I. Everyday business problems; fundamental principles of laws most needed in everyday business transactions. Required of all trade students one quarter. 5 one-hour lecture per week. 60 clock hours credit per quarter.

Industrial Relations II. A study of employer-employee relations, labor unions, etc. Required of all trade students one quarter. 5 one-hour lecture per week. 60 clock hours credit per quarter.

TRADES

Aero Mechanics

The curriculum in Aero Mechanics is designed to meet C.A.A. standards for both the Aircraft and Aircraft Engine licenses.

Unit 1. *Elementary Aircraft.* Regulations; airplane types; aviation history; fuselage construction; drafting layouts of wing and tail sections; constructions $\frac{1}{2}$ scale; metal fabrication; welding.

Unit 2. *Elementary Engines.* Principles of internal combustion, Diesels; lubrication; oil, fuel, electrical and carburetion systems; dissection of all types engines, propellers, carburetors and magnetos.

Unit 3. *Advanced Fuseage.* Analysis and estimation of repairs; structural repair, alignment and priming; interior finish; glass, seat, instrument and control installation. All work on "live" equipment.

Unit 4. *Advanced Engines.* Disassembly; micrometer, microscopic and Magnaflux inspection; assembly; timing; running-in of Continental, Lycoming, Pratt and Whitney, Kinner, Wright, and other engines; trouble shooting; labor and parts cost estimation.

Unit 5. *Advanced Wing.* Inspection and analysis of repair work; repair methods, wood and metal; hand and spray doping, fabric covering and repairs; lettering; assembly, rigging and inspections; weight and balance procedure; C.A.A. forms.

Unit 6. *Field Work.* Assignment to line duty at airport, practice teaching, C.A.A. practical and written examinations.

Auto Mechanics

Unit 1. *Bench Work and Engines.* Familiarization of tools and equipment, care and operation of tools and equipment. Study of bolts, nuts, screws and threads. Engine design and principles, disassembly, cleaning and inspecting engine parts. Mechanical principles, assembly of engines.

Unit 2. *Engine Accessories, Carburetion, and Lubrication.* Study of functions and repairs of starters, generators, ignition devices, and engine accessories. Study of combustion and fuel. Study of function, repair and maintenance of

carburetors, fuel pumps, fuel lines. Study of functions, repair and maintenance of lubrication system.

Unit 3. *Engine Overhaul*. Fitting and installing piston rings, inspecting and grinding valves, adjusting valve stem clearance, cleaning and adjusting spark plugs; inspecting, cleaning and adjusting ignition points. Inspecting and testing secondary wiring. Fitting and installing bearings. Inspecting and testing crank shafts; valve timing, ignition timing, motor analysis.

Unit 4. *Chassis Maintenance, Gas and Electric Welding*. Maintenance processes, disassembly and construction; assembly and repairs of clutches, transmissions, free wheeling, over drive, and fluid drive units. Repairs and maintenance of universal joints, drive shafts and final drives. Principles and practice of gas and electric welding as applied to auto mechanics.

Unit 5. *Advanced Accessories and Electrical Appliances*. Starters, generators, magnetos, battery ignition systems, wiring. Relays and voltage regulators.

Unit 6. *Body, Fender Work and Spray Painting*. Metal bumping, shrinking, filling and sanding; leading and glacing, priming, surfacing and finishing. Color tinting, lacquers and synthetic enamels.

Carpentry

Unit 1. *Tools, Machines and Materials*. Historical study of development of tools and materials in woodworking. Care and use of tools and materials. Classification of lumber, fundamental operations in carpentry work. Methods of construction involving the selection of building materials on the basis of their structural and aesthetic merits and the broad application of the principles of modern wood frame construction, according to approved practices.

Unit 2. *Woodworking Processes*. Sizing, joining, panel construction, kerfing, routing, introduction to cabinet construction and carpentry construction.

Unit 3. *Framing*. Study of types and methods of house framing. Construction of foundations, wall and roof.

Unit 4. *Exterior Carpentry*. Methods and applying of sheathing and siding, cornices, water tables. Construction of window and door frames, screens, blinds, porches and steps.

Unit 5. *Interior Carpentry*. Methods and applying of standard trims, flooring, ceiling, wainscotings and wall boards. Fitting doors and windows. Installing hardware.

Unit 6. *Estimating and Specifications*. Methods used in and making of estimates of costs as applied to buildings. Study of specifications as ordinarily prepared by architects.

Drafting

Unit 1. *Introduction to Architecture*. Survey of the building industry; architects procedure; use of drawing tools; lettering; planning indication; simple design problems.

Unit 2. *Analysis and Solution of Simple Buildings*. Study of space and mass; structural details; outline specifications.

Unit 3. *Analysis of Simple Interiors*, color, furnishings.

Unit 4. *Analysis and Solution of Buildings of Moderate Complexity*, with emphasis on domestic, civic and recreational problems.

Unit 5. *Description and Analysis of Heating*. Airconditioning, water supply, plumbing electrical wiring, illumination, and accoustical treatment.

Unit 6. *Material Quantities*: estimating; builders organization and procedure job records.

Electricity

Unit 1. *Electricity*. Theory of circuits. Practice in house wiring, switches, fuses, line leads.

Unit 2 and 3. *Theory and practice* in power transmission transformers, meters, line wiring, advanced house wiring. Installation and repairs of stoves, water heaters, etc.

Unit 4 and 5. *Generator and Motor Rewinding and Repairing*. Theory and practice in the design, maintenance and repair of distribution loads.

Unit 6. *Illumination*, estimating, national electrical code, power generation, motor design.

Masonry

Unit 1. *Fundamentals of Bricklaying*. The study of materials; care and use of tools. Mortar making and spreading; laying bricks between vertical points, building piers, plumbing and leveling.

Unit 2. *Foundations and Brick Construction*. The study and construction of simple, spread and stepped footings; foundation walls and under-pinning. Excavating and construction of walls, steps and flues.

Unit 3. *Advanced Brick Construction*. The study and construction of chimneys, mantles, special wall designs, arches, and bonds.

Unit 4. *Fundamental Concrete Work and Cement Finishing*. The study of materials; care and use of tools. Application of concrete mixtures, form building. Construction of foundation walls, walks and floors.

Unit 5. *Fundamentals of Plastering*. The study of common materials; care and use of tools. Mixtures and application.

Unit 6. *Estimating and Specification*. Methods used in and making of estimates of costs as applied to buildings. Study of specifications as ordinarily prepared by architects.

Machine Shop Practice

Unit 1. *Machine Shop Lathe Practice*. Laboratory practice on the lathe. Includes the fundamental operations of straight, shoulder and taper turning; screw cutting, chucking and face plate work, boring, reaming, filing and polishing. Tool and cutter grinding.

Unit 2. *Machine Shop Shaper and Planer Practice*. Laboratory practice on the shaper and planer. Includes the fundamental operations of machining flat,

square, shoulders, V-Grooves, tapered, T-Slots, Dove Tails, concave and convex surfaces; key ways.

Unit 3. *Machine Shop Milling Machine Practice.* Laboratory practice on the milling machine includes the operation of milling, plain, slotting, sawing, angle, counterbore, index, straddle, uses of various milling attachments.

Unit 4. *Machine Shop Surface and Cylindrical Grinding, Boring Mill.* Laboratory practice on the surface and cylindrical grinders also boring mill operation. Includes the operations of grinding—flat, bevel, contour, flutes and grooves, and tapering surfaces. The operations of internal—straight, taper, bevel grinding internal and external facing, grooving and bevel turning.

Unit 5. *Advance Machine Shop Operations.* More advanced practice on machine tools, gears and gear cutting. Heat treatment of steel. Work organized and carried out on a production basis, with standard time, work limits, inspection and assembly.

Unit 6. *Tool Making. Jigs and Fixtures.* Tool making, selection, tooling and set-up of machine tools. Estimating machinery time and preparation of operating instructions for complete units.

Pipe Trades

Unit 1. *Pipe Trades. Tools and Materials.* Plumbing defined—develop tool handling technique, duties and responsibilities, classification and selection of materials.

Unit 2. *Pipe Trades. Plumbing.* Pipe forming, threading, yarning cast iron joints, leading, sweating and making pipe joints.

Unit 3. *Pipe Trades. Plumbing Operations.* Development of skills involving measurements, installations of regulators, tapping mains, plumbing laws and regulations, blue print reading.

Unit 4. *Pipe Trades. Plumbing Make Up—Testing.* The assembly of drainage, ventilation, main vents, continuous vents. The roughing in of water services, the application of water, smoke and air tests. Water treatment method and purification.

Unit 5. *Pipe Trades. Plumbing Estimating and Installation.* Determining cost of labor and materials for installations. The assembly and study of fixtures, pumps, technique and practical soldering, wiping lead joints. Welding and Brazing.

Unit 6. *Pipe Trades. Plumbing Layouts.* Calculating heat, gas and water requirements for buildings, making layouts for actual jobs, checking installations. Steam and hot water heating systems. Copper tubing and fittings.

Radio

Unit 1. *Principles of Radio.* Principles and practice of radio communication. Lectures, demonstrations and laboratory experiments.

Unit 2. *Maintenance and Repair.* Maintenance and repair of radio, sound equipment and electronic equipment. Adjusting and servicing of radio transmitters.

Unit 3. *Frequency Modulation Receivers.* Theory of frequency modulation receivers. Lectures, demonstrations and experiments.

Unit 4. *Servicing of F. M. Receivers.* Familiarity with the equipment used for high frequency measurement is afforded together with a survey of the various techniques employed in the repair of F. M. Receivers.

Unit 5. *Transmitter Theory and practice.* A review and application of the theory underlying the operation of F. M. transmitters. Lectures, demonstrations and experiments.

Unit 6. *Radio Communication and Codes.* The transmission procedures of both phone and code.

Sheet Metal

Unit 1. *Sheet Metal Tools and Materials.* The fundamental operations of sheet metal practice; developing patterns and laying out work, hand and machine operations.

Unit 2. *Sheet Metal. Pattern Work and Development.* Seaming, jointing, forming sheet metal work from patterns. Pattern drafting and template work from sketches and designs.

Unit 3. *Sheet Metal. Aircraft.* Hand forming and stretching, bulk head section, cowling, stabilizer section, metal fuselage and riveting.

Unit 4. *Sheet Metal. Materials and Methods.* The study of technical information, markets and supplies, job requirements and material section in accordance with same construction methods.

Unit 5 and 6. *Sheet Metal. Heating and ventilation.* Heat transmission and the design of heating, ventilation and air conditioning systems.

Shoe Repairing and Leather Work

Unit 1. *Tools and Materials.* The study of tools, their names, classification and care. Simple preparation and use of leather. Use of hand tools, care of machines. Practical shop keeping and simple hand work.

Unit 2. *Fundamental Shop Practice.* Pattern cutting, sole and heel fitting, edge finishing, machine adjustment and use. Plain soling and heeling; machine patching, shoe cleaning, and shining.

Unit 3. *Miscellaneous Shop Practice and Methods.* Study of different type of machine parts and operations. Shoe dyeing and leather refinishing. Terminology, classification, selection and source of leather. Shoe rebuilding—fitting shanks and insoles, counter making, welt sewing. General machine operations and simple cementing.

Unit 4. *General Leather Work.* Making articles of leather, tooling, pattern cutting and simple shoe construction.

Unit 5. *Advanced Leather Work.* Building orthopedic heels, making orthopedic uppers, making arch supports. Shoe fitting and correction.

Unit 6. *Advanced Shop Keeping.* Record keeping, order making. Profits and methods.

Welding

Unit 1. *Metallic Arc Welding.* Instruction in the D.C. and A.C. Electric Arc Welding machine. How to connect and care for equipment, safety precautions, utility of the arc for welding purposes. Current to be used for rod of different diameters. Striking and manipulating the arc . . . position of the electrode. Bending, tacking, weaving, padding, and filling sequence. A study of the nomenclature of arc welding will be given partly in Unit 1, the other will follow in Units 2 and 3.

Unit 2. *This course will be a continuation of Unit 1.* Preparation of material for welding. Alignment, beveling, butt weld, caulking weld, fillet weld, strength weld using both bare and coated rods on mild steel in all positions and testing same.

Unit 3. *This course shall consist of a study of the welding symbols, their use and appliance.* A study of blue print reading and designing. Metals and their response to welding in terms of their physical and chemical properties. Advance laboratory practices and project making, testing of the many weld specimen.

Unit 4. *Spot or Resistance Welding.* Instruction in the resistance welding process. Study of heat, pressure, and timing necessary to make resistance welds on all gauges of mild steel, alloy steel, copper and aluminum. Study of the Weldability of different metals by the resistance process.

Unit. 5-6. *Oxy-Acetylene Welding and Cutting.* (1) Setting-up apparatus safety lighting and adjusting the torch flame. Condition required for perfect combustion. Carburizing, oxidizing and neutral flame, and their effects while welding. (2) Methods of welding with oxy-acetylene. Running beads and making joints without filler rods. Sies on tips used for different thicknesses of metals. Running beads and making joints using filler rods, oxy-acetylene welding of cast iron, bronze, aluminum and silver soldering. (3) Oxy-Acetylene Cutting—Instruction in use and care of the equipment, both manual and automatic. (4) Oxy-Acetylene Welding of Pipe and Tubing (Alloy Steel) —Instruction in welding small and large pipes. Cutting, fitting and welding all pipe joints. Making of templates for cutting angles. Instruction in the welding of steel and alloy tubing.

Household Appliances

Unit 1. History and elementary principles of electrical household appliance Use of tools and equipment in soldering, bending, flaring and swedging.

Unit 2. Transferring, removing and charging a system with refrigerant. Converting from one type system to another.

Unit 3. Testing and overhauling refrigerant control valves.

Unit 4. Installation, testing, replacing of heating elements, insulation, thermo switches, etc. in domestic and commercial appliances.

Unit 5. Installation, testing, replacing, repairing, adjusting parts of mechanical, domestic and commercial appliances.

Unit 6. Motor and compressor testing and rebuilding.

DIVISION OF HISTORY AND GEOGRAPHY

- MERL R. EPPSE, *Director of Division and Professor of History.*
 JAMES K. ANTHONY, *Instructor of Geography.*
 WILLIAM F. BUTLER, *Associate Professor of History.*
 WILLIAM KAPPEN FOX, *Associate Professor of History.*
 KENNETH A. JOHNSON, *Associate Professor of History.*
 ELSIE M. LEWIS, *Professor of History, and Director of Graduate Department.*
 LOIS C. McDOUGALD, *Assistant Professor of History.*
 FREDERICK J. D. MCKINEY, *Assistant Professor of Geography.*
 MAZIE O. TYSON, *Associate Professor of Geography and Head of Department of Geography.*
 *RALEIGH A. WILSON, *Associate Professor of History.*
 ELZA E. BOGAN, *Graduate Assistant, Division of History.*
 NORMAN W. WALTSON, *Graduate Assistant, Division of History.*
 LAMARIS R. PATTON, *Secretary, Division of History and Geography.*

Lower Division

FRESHMAN YEAR	Quarter			SOPHOMORE YEAR	Quarter		
	Hours Credit				Hours Credit		
Name of Courses	I	II	III	Name of Courses	I	II	III
English 101-2-3	3	3	3	English 201-2-3	3	3	3
Foreign Language	3	3	3	Foreign Language	3	3	3
History 121-2-3	3	3	3	Social Studies	3	3	3
Science (Biology, Chemistry, Physics or Mathematics)	4	4	4	Major	3	3	3
Elective	3	3	3	Minor	3	3	3
Physical Ed. 101-2-3	1	1	1	Physical Ed. 201-2-3	1	1	1
	—	—	—		—	—	—
	17	17	17		16	16	16

Upper Division

JUNIOR YEAR	Quarter			SENIOR YEAR	Quarter		
	Hours Credit				Hours Credit		
Name of Courses	I	II	III	Name of Courses	I	II	III
Political Science 313	3			History 411	3		
Major	6	6	6	Major	3	3	3
Minor	3	3	3	Minor	3	3	3
Electives	6	6	6	Electives	9	9	9
	—	—	—		—	—	—
	18	15	15		18	15	15

Curricula are arranged in the Division of History and Geography leading to the following degrees:

- Bachelor of Arts—see curriculum above.
- Bachelor of Science—see curriculum below.
- *On Leave.

Bachelor of Science Degree

Teaching of High School Subjects

FRESHMAN YEAR	Quarter			JUNIOR YEAR	Quarter		
	Hours Credit				Hours Credit		
Name of Courses	I	II	III	Name of Courses	I	II	III
English 101-2-3	3	3	3	Education 341	3		
History 121-2-3	3	3	3	Education 362		3	
Science (Biology, Chemistry, Physics and Mathematics)	4	4	4	Education 385			3
Geography 171-2-3	3	3	3	Political Science 313	3		
Physical Ed. 101-2-3	1	1	1	Major	4	4	4
				Minor	3	3	3
				Electives	3	6	6
	15	15	15		16	16	16

SOPHOMORE YEAR	Quarter			SENIOR YEAR	Quarter		
	Hours Credit				Hours Credit		
Name of Courses	I	II	III	Name of Courses	I	II	III
English 201-2-3	3	3	3	Education 471-2		6	
Social Studies	3	3	3	Education 342		3	
Psychology 211-12	3	3		Education 381			3
Education 243			3	History 411		6	9
Science or Health	3	3	3	Electives	3	3	3
Major	3	3	3	Minor	3	3	3
Physical Ed. 201-2-3	1	1	1				
	16	16	16		18	15	18

LABORATORY FOR DEFICIENT STUDENTS

Students who pursue courses in the Division of History and Geography and who earn a cumulative grade of "D" or less during the first six weeks will be required to attend a Social Studies Laboratory from 6 P. M. to 8 P. M. each Tuesday thereafter during the quarter.

The laboratory course "How to Study" will be offered. It will include assistance in reading, note taking, use of reference titles, general use of the Library, and home study. The entire divisional staff function in this laboratory. In addition, teachers will arrange individual conferences to ascertain the causes of the deficiencies.

DEPARTMENT OF GEOGRAPHY

The objectives of the Department of Geography are (1) to give to the student a clear realization of the relation of the field of geography to other fields of knowledge, and (2) to emphasize instruction in geography as an essential part of a liberal education.

A major in geography consists of 45 quarter hours. A student who selects geography as a major is advised to take Geology 111-12-13.

A minor consists of 27 quarter hours, including Geography 371-72-73.

Geography 171-2-3 are prerequisites to all courses in geography except courses 261, 262, 391, and 393.

171-2-3. **Elements of Geography*. (9) A study of the fundamentals of geography as a foundation to the understanding of social problems. An interpretive survey of regional patterns of settlement interpretive of lands and other basic resources.

261. **Elements of Climatology*. (3) A study of climatic elements and controls. The graphic and cartographic representation of climatic settlement and land utilization in relation to types of climate.

262. **Conservation of Natural Resources*. (3) A study of effective utilization and conservation of water, soil, mineral and forest resources.

271-2-3. **Economic Geography*. (9) A survey of world distribution of the products of industry. A study of commodities, of international trade, and of trade routes.

275. **Business Geography*. (3) A course pointing the use of geographic principles in business. This course emphasizes the application of physical conditions of the earth to retail and wholesale business on natural and international basis.

276. **Descriptive Astronomy*. (3) A non-mathematical approach to the study of astronomy. Course includes class lectures, discussions, and outside readings. Open only to majors in geography or with consent of the instructor.

371. **United States and Canada*. (3) Recognition, analysis and interpretation of its basic physiographic features, resources and human adjustments within its several unit areas.

372. **Caribbean America*. (3) The northern countries of Latin America; the West Indies; their patterns of land occupation; their commercial relation with the United States.

373. **South America*. (3) Regions and resources of South America. Distinctive role of each country.

381. **Europe*. (3) Regions and resources of Europe. Distinctive role of each country. Geographic basis of international conflict.

382. **Geography of Cities*. (3) Prerequisite, Geography 171, 172, 173 or 271, 272, and 273. Geographic factors in the origin and growth of urban centers. Analysis and synthesis of the economic and physical structure and functions of trade centers in the light of their geographic setting; areal expansion; intra- and inter-trade center relations; integration with avenues of communication; city planning.

391. **Political Geography*. (3) A study of commercial relations, territorial aims and aspirations, boundaries and raw materials. (3).

393. **Meteorology*. (3) A study of the atmosphere, the instruments used in weather observation, with emphasis upon the application of Meteorology to Aeronautics.

401. **Asia*. (3) Resources and economic activities in their regional setting. Aggressive policies in territorial expansion; China's territorial integrity.

402-403. *Geographic of the South*. A regional study of the South as a hold during the first quarter, and a detailed study of Tennessee, the Tennessee Valley Authority (TVA), and adjoining areas during the second quarter. Prerequisite: Nine hours of geography. Credit: Three hours per quarter.

404. **Africa*. (3) Resources and regions of Africa. Distinctive roles of South Africa and Egypt will be given special emphasis.

405. **World Resources*. (3) A study of the natural conditions and resources in the major areas of international concern. Prerequisites Geography 171-2-3 and senior standing.

406. *Mountain Geography*. A study of the highland areas of the world, agricultural, pastoral, and industrial; mountain communities; recreational values; barrier and boundary theories. Prerequisite: Nine hours of geography. Credit: Three quarter hours.

411. **Australasia*. (3) A consideration of the physical environment and economic activities of the Far East. Prerequisites Geography 171-2-3.

463. **Industrial Localization*. (3) World distribution of manufacturing industries. Detailed analysis of selected industrial districts and industries.

471. **Teaching of Geography*. (3) Principles of organizing and presenting geographic materials for teaching purposes in secondary schools.

GRADUATE COURSES

501-2-3. **Thesis Seminar and Thesis Writing*. (9) A thorough perusal of geographic literature preliminary to thesis writing.

504. **Historical Geography*. (3) The influence of Geography upon historical events, especially around the Mediterranean, in the United States and Asia will be considered. Prerequisite Geography 371-2-3.

511. **Geographical Research*. (3) Fields trips and materials.

581. **Cartography*. (3) A study of graphic methods and maps. Special emphasis on map reading, map projections and construction. Two laboratory periods three times per week.

DEPARTMENT OF HISTORY

Instruction in the Department of History is designed to present the main aspects of the rise and development of civilization. The Department emphasizes the social, economic, and political phases of History but it also deals with the institutional, religious, cultural, diplomatic and religious phases. The aim of the Department is to enable students to read historical literature critically and to acquaint the student with the facts in the development of man and of civilization.

A student who makes History his major will be expected to have covered the Survey courses in American History and European History; specifically, History 201-2-3 and History 301-2. In addition, each student is expected to fulfill all College requirements. Those students who desire the Bachelor's degree in History must fulfill all College requirements. Those students who desire the Bachelor's degree in History must fulfill, in addition to the requirements of the College, the following Divisional requirements: History 121-2-3; 201-2-3; 211-2-3, 301-2-3, and 411. The Department advises the student to complete these courses within the first two years of his work at the College.

Instruction in History is designed to give to the student within the first two years a knowledge of the important events, characters and developments in the past of mankind. To achieve this aim, the Department requires that all majors have a general understanding of certain related fields.

A student who makes History his minor will be expected to have completed the same amount of prerequisite work as that indicated in the preceding paragraphs. In addition, each minor must complete nine hours of History in a prescribed area. Hence, a student with a minor in History must have a minimum of 18 hours.

All majors in History are required to select their advanced courses in the Senior College from one of the following three areas, namely (1) American History—United States (Colonial, Middle, Recent and Regional History) and (2) European History and World Civilization and Culture.

A major in History shall include History 121-2-3, 211-2-3, 321, 322-3, and 411; nine additional hours in Junior or Senior courses in History; Economics 211-2-3 or Sociology 211-2-3; and Political Science 211-2-3.

A minor in History shall include History 121-2-3, 201-2-3, and nine additional hours in courses numbered 300 or above.

DESCRIPTION OF COURSES

Note: Course numbers shown in parentheses are numbers used in catalogues of previous years.

121-2-3. **The Growth of Civilization*. (9) A study of the contribution that all races and nations have made to our present civilization. Assigned readings, discussions, reports and quizzes will comprise the type of work in this course. (Required of all freshmen.)

201-2-3. **American History*. (9) European background of the beginnings and establishment of the United States in 1789. The beginning of our National State from 1789-1877. The development and significance of Jeffersonian Democracy; The War of 1812, and the growth of Nationalism; the Westward Movement; the controversy over the Negro and his place in a democracy; the Civil War and Reconstruction. The emergence of the industrial life and the influence of the machine on American civilization; the problem of rapidly changing environment; industrial consolidation; rise of organized labor; rural trends and the Negro; the flight of the Negro to the city; American Imperial-

ism; education and religion; the plight of a democracy in a collectivistic society; the second World War.

211-2-3. **History of England*. (9) Not open to freshmen. History of England to 1588; History of England, 1588-1763; History of England since 1763.

301. **Foundation of Modern Europe*. (3) Study of the emergence of the economic development of Modern Europe through the Eighteenth Century. Required of all majors.

302. **Modern Europe*. (3) A study of Nationalism, Democracy, Industrial Growth, Imperialism, and Internationalism in the Nineteenth and Twentieth Centuries. Required of all majors.

303. *Modern Europe* continued: Same as the former course (432—Europe since 1914) The world war (1914-1918), the peace treaties, reparations and war debts; reconstruction problems; minority groups; territorial adjustments; political history of the principal nations; and contemporary developments.

341. *History of Tennessee*. (3) A course in the cultural and economic development of the Commonwealth of Tennessee. Special emphasis will be placed on the part the Negro has played.

381-2. (312) **Civil War and Reconstruction*. (6) The study of the factors leading to the secession and an analysis of the problems of reconstruction Three quarter hours each.

331. **American Colonial History*. (3) The economic, social, religious, cultural and political development of America from 1607-1789.

361 (333). **Constitutional History of the United States to 1787*. (3) The origin, development and operation of the Constitution of the United States with emphasis on the factors which have influenced constitutional changes and the historic cases in which the provisions and principles of the Constitution have been interpreted and applied by the courts. Prerequisite: History 201-2-3 or Political Science 221-2-3.

362. **Constitutional History of the United States 1787-1816*. (3) Continuation of History 361.

363. **Constitutional History of the United States 1816-Present*. (3) Continuation of History 362.

371 (403). *Economic and Industrial History of the United States 1603-1860*. (3) A study of the economic development of the United States from the colonial period to the present with particular emphasis on the influence of economic forces in the shaping of social and political growth and change. Prerequisite: History 201-2-3.

372. *Economic and Industrial History of the United States 1865-Present*. (3) Continuation of History 371.

322-3. **The British Empire*. (6) A study of the rise and expansion of the British Empire and its influence on world history to 1783. Topics: The Establishment of the Empire, the rise of the English sea power under the

Tudors; the establishment of colonies in the East and West Indies; India, Africa, and North America under the Stuarts; the struggles with Spain, Holland and France for world dominion; Mercantilism and Colonial administration; the American Revolution since 1783; the lapse and revival of Imperial spirit in Egypt, Australia, New Zealand, and Canada; Protectorates, Mandates, crown colonies, and "Spheres of Influence;" the world importance of the British Empire; the recent developments in British Dominion Government.

332-3. **The Ancient Regime and French Revolution*. (6) A study of the impact of unrestrained powers and the work of Napoleon; the conditions of the French people before and after the revolution.

352-3. **The Agrarian Movement in the United States*. (6) A historical analysis of the development of agriculture in the United States and its influence on American life. Special emphasis will be placed on the reform movements and progressive legislation designed to improve the status of farmers.

401-402-403-(413) **Contemporary World History*. (9) This course deals with world problems that have developed since the First World War. Topics are selected that are of current interest and studied in the light of historical development.

411. **Negro History*. (3) Tracing and discussing the contributions which the Negro has made to American Civilization.

412-3 (412). **History of the South*. (6) A survey of the Political, Economic, Social and Religious history of the South and the relationship of these institutions to the pattern of American History.

421-2-3 (422). **Diplomatic History of the United States*. (9) A survey of the foreign relations of the United States, with special reference to the establishment and development of those major policies which have determined American international action.

431-2. **History of the West*. (6) A survey of the westward expansion of the American Nation. Special emphasis will be given to the movement of population, the occupation of successive frontiers, and the influence of the frontier experience upon national and international developments.

442-3. **Renaissance and Reformation*. (6) The first quarter of this course will be a survey of Europe between 1250 and 1600. Special attention will be given to the Renaissance, the artistic, literary, political, and commercial growth. During the second quarter special emphasis will be given the Protestant Reformation and the Catholic Counter Reformation.

450. **History or Geography*. (3) The writing of Senior Projects for History or Geography.

451-452-453. *Latin American History*. (9) A general survey of the history of Mexico, Central and South America. (1) The colonial period, wars for Independence and (2) recent political history with the economic resources and trade relations emphasized. (3) The development of foreign relations as well as the Western Hemisphere Ideology of Solidarity and mutual aid.

471. **The Teaching of History*. (3) The theory and materials for the

teaching of History will be reviewed. Open to majors in the Division who plan to teach. Assigned readings, personal investigations, field work, and demonstrations in class.

GRADUATE

- I. Each student is required to select an area of concentration and to take an examination in that area before he is admitted to candidacy.
 - A. Student may select any one of the following areas of concentration:
 1. American History—United States (Colonial, Middle, Recent and Regional History)
 2. European History and World Civilization and Culture
 3. Geography
- II. Each student is required to write a thesis which must show scholarly attainment and an ability to do independent research. (See pages 155-57—Graduate Division.)
- III. Student is required to complete a program of 45 quarter hours of work as indicated below:
 - A. Student is required to take the following courses: History 501-2-3, Thesis Writing—9 hours; History 511, Historical Research—3 hours; Geography 501-2-3—9 hours; Geography 511, Geographical Research—3 hours.
 - B. Fifteen quarter hours in the major field which may be selected from either one or both of the areas of concentration.
 - C. Eighteen quarter hours in a related field, a minor. Student is advised to select minor field only after consultation with the Departmental Adviser.
 - D. Not more than 9 quarter hours in the undergraduate division, courses number 300 or above may be selected by the student for either work in his major or minor fields.
- IV. Each student is required to complete a program of 45 quarter hours as indicated below.
- V. Examinations (University Requirements):

A candidate for the Master's degree is expected to acquire such a mastery of a particular field of knowledge as may reasonably be expected of an adequately prepared student who has devoted at least 3 quarters of full-time study to that field. Therefore, each candidate must pass, not later than three weeks before the day on which he expects to receive the degree, a general oral examination. This examination will cover the general field of his major work, thesis and major and minor courses. The examination will be conducted by a committee of not less than 3 members of the faculty, appointed by the Chairman of this Committee.

GRADUATE CURRICULUM

501-2-3. *Thesis Seminar.*

511. *Introduction to Historical Research.*

512-13. *Seminar in American History.*

521-2-3. *Seminar in Regional History.* (9) The study of problems of Southwest and the Negro with individually assigned problems.

531-532. *Recent American History.* (6) The study of contemporary problems in the United States with emphasis on the social, economic, and political phases of American life.

541-542-543. *Russian History.* (9) This course deals with the emergence of Russia from barbarism to a Nation State and her attempts to become a Westernized Nation. A study of Russia's political development will be made from Alexander I to the present day. The many changes incident to her change from feudal state to a dynamic revolutionary state will be considered. Special emphasis will be laid upon the impact of successive revolutionary precursor of Marxian Socialism. Russian's historic mission in foreign affairs will be employed as a guide toward an understanding of her present-day aims.

552-3. *The Far East.* (6) The study of the rise, growth and development of the Orient with special emphasis on China and Japan and the role each has played in international affairs, civilization and culture. (Formerly History 402.)

RELATED COURSES FROM OTHER DIVISIONS RECOMMENDED

For History and Geography Majors

From the Division of Humanities:

American Literature 361-2.

English Literature 311-2-3.

From the Division of Political and Social Sciences:

Sociology 441-2: Races and Nationalism and Problems of Minority Groups (especially for students in Regional History).

Sociology 451: Urban Sociology—The City.

Economics 302: Labor Problems.

Political Science 363-4-5: Political Theory.

Political Science 361: Political Parties.

for a minor, the student must complete not less than 18 hours in subjects other than the major.

Each student will plan a program with the help of faculty advisers. Approval of the program planned must be made in the Division Office.

Group I. *Children Development and Family Relationships*. Six courses equivalent to 18 credit hours. Nine or more hours are selected from Child Development Courses 323, 351, 452, 453 and 464. Nine or more hours may be selected from related course Nutrition 311, 451; Home Management 423; Literature and Music.

Group II. *Foods and Nutrition*. Six courses equivalent to 18 credit hours. Chemistry 322-23 and twelve hours selected from Nutrition 311, 411, 431 and 451; Foods 412, 364, and 221; Bacteriology 342-343; Agriculture 303.

Group III. *Institutional Management*. Twelve credit hours may be selected from course in Institutional Management 413, 435, 450, 436 and 432; Foods 412; Nutrition 451, and Chemistry 322-323.

Group IV. *Textiles and Clothing*. Six courses equivalent to 18 credit hours of which nine or more hours may be selected from Textiles and Clothing 321, 322, 323, 400, 411, 412, 413 and 421. Chemistry 321. Six hours may be selected from Textiles and Clothing Electives.

Child Development and Family Relationships

253. *Child Psychology*. (3) A discussion of young children and factors which operate in their guidance and development. Social and emotional development, language and habit formation are emphasized. Prerequisite: Psychology 211.

323. *Child Development*. (3) A study of the child from the psychological, physiological and Sociological points of view, with emphasis on care, guidance, development, training, environment and habit formation. Special study and observation is made of training procedures in the Nursery School and of each child's progress. Prerequisite: Psychology 253. Two hours and one laboratory period. Observation in the Nursery School two hours per week.

351. *The Young Child and His Family*. (3) In this course emphasis is placed upon the individual development of various family members. Consideration is made of family relations basic to an intelligent understanding of attitudes and behavior of children and young people. Observation of training procedures in the nursery school. Two hours and one laboratory period.

452. *Child Practicum*. (3) Observation and participation in the directing and guiding of young children in the nursery school. Prerequisite: Child Development 323. One hour conference and three laboratory periods. Registration with consent of head of department.

453. *The Child's Play Environment*. (3) A course in the selection, care and use of play materials and equipment for young children. Toys are constructed in the laboratory. One hour and two laboratory periods.

461. *The Growth of Children as Related to Guidance*. (3) A study is made of physical growth of children. Interpretation is made of growth norms

Factors influencing growth, such as nutrition, health, housing, etc., are included. Prerequisites: Psychology 211 and 253. Two hours and one laboratory period.

463. *Family Relationships*. (3) Problems in Family Life. A study of modern life giving special emphasis to the activities of the home as they relate to the development of the family and its individual members. Prerequisites: 323 Child Development and Economic Problems of the Household 422 or Sociology 322.

Foods and Nutrition

111-12. *Food Buying and Preparation*. (3) A course in the study of foods, including standards for selection, purchasing, preparing and serving foods of nutritive value and analyses of simple principles involved in food cookery. One hour and two laboratory periods. Fee \$5.00.

200. *Clinic for Food Study*. This course is designed for students who desire or need special emphasis on improvement of techniques, development of speed, efficiency and independent work habits. After conference with instructor as to type of experience needed, students follow designated procedures to meet needs. No credit.

221. *Food Preservation*. (3) Study is made in the planning and preserving of an adequate food supply for a year for the urban and farm family. Laboratory work is done in various methods of food preservation. One hour and two laboratory periods.

222. *The Art of Entertaining*. (3) This course emphasizes the origin and various types of table services, foods for special occasions, types of silverware, china, glassware and other table accessories and invitations. Correct table manners and hostess techniques and social etiquette will be discussed. Various flower arrangements will be executed and displayed. Open to all college students. Fee \$5.00.

223. *Meal Planning and Table Service*. (3) This course includes meal preparation and table service for various occasions, market plans, cost of meals, the nutritive value of food and aesthetic aspect of meal planning. Open to majors and other Divisions who can qualify in consultation with instruction.

312. *Experimental Cookery*. (3) This course is planned to offer opportunity of a food problem, setting it up, judging, concluding and presenting of Fee \$5.00.

412. *Quantity Cookery*. (3) Practical application of principles of menu planning and food preparation for large groups. This course is designed to present the initial training in preparation of the student to handle school lunch rooms, cafeterias and dining halls. One hour and two laboratory periods. Prerequisite: Foods 363. Fee \$5.00.

413. *Institutional Cookery*. (3) This course deals with problems of lunch rooms, cafeterias and tea rooms for the general public, institutions and schools. Attention is given to methods of quantity purchasing of foods, organization of labor, standards of work materials, equipment and installation, meal planning and preparation in large quantities. The College cafeteria is

used as a laboratory for this work. Two hours and one laboratory period. Prerequisite: Quantity Cookery 412. Fee \$5.00.

421. *Applied Accounting in Food Costs.* (3) This course includes training in the essentials of general and specific cost accounting and the development of skill in financial planning and budgeting. A study is made of basic principles of accounting as applied to cafeterias, both school and commercial, hotels, restaurants, hospitals and other food service enterprises. Three hours.

423. *Planning and Equipment for Institutions.* (3) A study of planned practical equipment for food service in cafeterias, school feeding centers, and hospital dietary departments. Consideration is given material, construction, operation, installation and use of equipment. Three hours.

431. *School Lunch.* (3) A course planned to prepare for the management of school lunchrooms in connection with teaching. A survey is made of the problems of lunchroom management through field trips to lunchrooms in various schools. Two hours and one laboratory period. Fee \$5.00.

450. *Organization and Management Practice.* (3) Study includes menu analyses, the development of standardized recipes, schedules and standardized work procedures. One hour 2 periods. 3 hours credit.

453. *Institution Practice.* (3) Students specializing in Foods and Institutional Management are required to complete project work in the food service of an institution of approved standards; contact arranged by Instructor.

200. *Nutrition Clinic.* A course which gives opportunity for guidance and help in food selection and health practices in the promotion of good nutrition. Conference periods will be given those interested in the work. No credit.

211. *Elementary Nutrition.* (3) This course includes the fundamentals of nutrition for health, a study of the essentials of an adequate diet, the food needs of persons of different ages and occupations and the nutritive values of common foods, with special emphasis on the relation of health to such knowledge. Three hours. Fee \$2.00.

311. *Nutrition.* (3) A study of the nutritive value of foods and their conversion into matter and energy of the body. Prerequisites: Nutrition 211, General Chemistry 101-2-3. One hour and two periods. Fee \$3.00.

411. *Nutrition.* (3) A course in the fundamental principles of human nutrition as related to the construction of practical dietaries and in the application of these principles to the feeding of individuals, families and groups. Prerequisites: Nutrition 311, Chemistry 321, Human Physiology 342-3. Two hours and one period. Fee \$5.00.

431. *Child Nutrition.* (3) A study in the development of a health program for children as related to nutritive requirements and the planning of adequate dietaries. Three hours. Fee \$5.00.

432. *Community Nutrition.* (3) A program which deals with community problems in nutrition and various agencies through which field work can be promoted. Prerequisite: Nutrition 411.

451. *Nutrition in Disease.* (3) A study of the modification of the normal diet in the treatment of disorders of nutrition. Diets in the treatment of

various diseases are planned and prepared in the laboratory. Prerequisites: Nutrition 311; Chemistry 321. Fee \$5.00.

Home Economics Education

311. *Methods of Teaching Home Economics.* (3) A study of instructional methods and principles of teaching philosophies. Curricula development on basis of needs and relation of Home Economics to home, school and community. Prerequisite for Home Economics Education 433. Three hours.

431. *Problems of Curriculum and Teaching.* (3) A study of practical methods of organizing the curriculum and adapting its content to pupil and community needs. Consideration of the part the curriculum has in vitalizing the community and of the underlying principles involved. Three hours.

432. *Vocational Home Economics Education.* (3) A course in the development of Home Economics in state and national programs of Vocational Education. The function performed in vocational guidance; federal aid to Vocational Education; trends in Vocational Home Economics; annual plans and long-time programs for Home Economics in the public schools of Tennessee and steps to be taken in setting up services of Vocational Home Economics. Three hours.

433. *Supervised Teaching in Home Economics.* (6) Supervised observation and teaching in the public schools. Problems of organization and supervision basic to induction of teachers into their profession. Open only to Seniors who have completed required work in technical courses. Requirements: Supervised teaching will be done in off campus teaching centers for a minimum of six weeks. Room and board while in the center will be paid by the student.

442. *Adult Education Methods in Home Economics.* (3) This course deals with a survey of the organization, administration and recent development in adult education with special emphasis upon the field of homemaking education. A study of teaching techniques and materials for adult classes in homemaking and an analysis of the programs in American communities through public school Smith-Lever extension, Smith-Hughes Vocational Education, churches and clubs. Three hours.

483. *Methods of Conducting Home Demonstration Work.* (3) A course in practical methods of conducting Home Demonstration work for students interested in that phase of Home Economics work. A study is made of social conditions which create problems within the community and influence the efforts of community work and of ways of meeting these problems. Three hours.

Home Management

223. *Home Nursing.* (3) Health problems in the home and community and first aid treatment for common household emergencies. Practical application is made in the different types of sick room improvisations and appliances. Laboratory fee \$1.00.

303. *Family Food Supply.* (3) A joint course in Home Economics and Agriculture which deals with the production and preservation of the family food supply. It involves the production of vegetables, fruits, dairy products and

the farm meat supply. Consideration is also given to the preservation, storage and use of food produced on farms.

320. *Household Equipment*. (3) This course deals with the various types of household equipment, standard brands and their selection and care. Minor repairs of household equipment is stressed. A study of heating, lighting and work unit planning in the household is emphasized. Laboratory fee 2.00.

421. *Problems of Home Management*. (3) This course emphasizes the theory and practice of such problems as, household organization, household care, laundering, furniture painting and refinishing, stain removal, current expenditure and family development from an economic social and cultural view point. The applications of newer household trends are stressed. 1 hour lecture and 2 hour laboratory each week. Prerequisite: residence in the Home Management House open to upper Juniors and Seniors.

422. *Economic Problems of the Household*. (3) This course emphasizes the various types of family purchasing, home marketing and marketing techniques home purchasing, mortgages, family financing, family income and budgeting family savings all on the various planes of family living.

423. *Home Management Residence*. (3) Students live in the Home Management House for a period of six weeks. They gain first hand knowledge of household organization, distribution of labor, managerial experiences and personal efficiency, in planning, preparing and serving family meals on varying income levels and meals for special occasions. Prerequisites: Foods 111, 112, 211, 223 and Senior status.

433. *Consumer Education*. (3) A study of the relation of the consumer to manufacturer and distributor; legislation for labeling and branding; purchasing habits; psychology of advertising versus establishment of acceptable standards. Prerequisites: Economics 211-12.

434. *Family Finance*. (3) Problems in spending the income so as to insure economic security. Selected problems in budgeting, accounting, consumers' credit investments and control of property. Prerequisites: Economics 211-12.

Related Art

200. *Related Art Clinic*. (0) Clarification of problems not clearly understood in regular classes, or personal problems concerning dress, home furnishing or house planning. Meetings will be held at student's and teacher's convenience.

201. *Color and Design*. (3) This is a course in personal costuming. It has to do with problems of color and design as they are related to the person and the home as a background, that is, the study of Art principles and certain accepted rules governing their application to personal costuming with regard to size, complexion, personality, function, occasion and other areas of importance.

202. *Color and Design*. (3) This is a course in simple home furnishing in which the aim is to acquaint the student with art principles for apprecia-

tion for those things of aesthetic value already on hand, and further, to apply these principles in the home so as to derive a high degree of satisfaction and comfort from the environment, regardless of economic status.

203. *Costume Design*. (3) This is a course in which students study historic costume as a background and inspiration for modern costume. The course does not emphasize original designing and drafting although individual ideas in keeping with good taste are encouraged. The emphasis is placed on the application of design principles to garment selection with reference to the figure: size, form, age, good points, points not so good, function, occasion. Problems of dress of the average-wage or below-average wage consumer with suggestions for ways to be well dressed on a limited budget. Prerequisite Related Art 201.

204. *Costume Design*. (3) Continued experience in color with the use of pigments and colored cloth. Color schemes for various complexions. Experiment with complexion color charts. Guidance in appreciation for and understanding of design principles applied in the creation of the best commercial dress designs. Prerequisite Related Art 201-203.

421. *House Planning*. (3) Usually offered in the spring and summer quarters. Specific attention is given to planning the small house for comfort and convenience. Appreciation for aesthetic qualities in home planning through the understanding of art principles and how to apply them. Fundamentals of blue print reading. Study of many architectural plans of low cost houses. Brief study of American contribution in domestic architecture and interior decorative fixtures; dados panels, stairways, cornices, cabinets.

TEXTILES AND CLOTHING

100. *Clothing Clinic*. Open to all students who desire close supervision for the purpose of personal improvement, individual satisfaction and economy. Freshman students without previous training in clothing are urged to enroll in this course. Hours arranged. A non-credit course.

102. *Clothing Selection*. (3) A course designed for the study of costume selection and appreciation based on the application of the principles of color and design. Emphasis is placed on personal grooming, selection of appropriate clothing, cost and care of clothing. Two hours, one period.

112. *Elementary Clothing Construction*. (3) Fundamentals of construction applies to simple wash garments. Study of commercial patterns, principles of fitting, use and care of sewing equipment. Three periods.

211. *Intermediate Clothing Construction*. (3) Fundamental principles applied to the construction and care of wash materials and synthetics. Use of commercial patterns. Three periods.

212. *Clothing for Children*. (3) A study of problems in the selection and construction of garments for children at different age levels. Prerequisites: T. & C. 102, 112, 211. Three periods. Fee \$1.00.

213. *Clothing Renovation*. (3) Redesigning, reconstruction and reclaiming outmoded and discarded clothing and accessories.

220. *Applied Elementary Dress Design*. (3) The development and application of decorative design to clothing. Pattern adaptation. Prerequisites: T & C. 102, 112, 211 and Related Art 203.

320. *Needlecraft*. (3) Open to all students who wish to learn the fundamentals of knitting, crocheting, tatting, embroidering, etc.

321. *Advanced Clothing*. (3) An advanced construction course planned to develop sewing technique. Problems in pattern alteration. Three periods. Prerequisites: T. & C. 102, 112, 112, 211 and Related Art 202. Fee \$1.00.

322. *Family Clothing*. (3) A study of the clothing needs of various members of an average family. Construction of articles of clothing for each. Prerequisites: T & C 102, 112, 211, 212.

323. *Textiles*. (3) A study of textile fibers and fabrics used for clothing and house furnishings. Simple methods of testing fibers. Prerequisites: Chemistry 101, 102, 211. Three periods. Fee \$1.00.

400. Home Furnishings. (3) Designed to establish standards for the furnishing and decorating of the home. Emphasis is placed on the selection and arrangement of furniture, on color and design and on individual problems in the selection and construction of home furnishing. Prerequisites: Related Art 201 and 202.. Two laboratory periods and one hour.

411. *Problems in Clothing Construction*. (3) Special problems in the details of clothing construction. The making of illustrative material. Conservation, renovation, and care of clothing. Seniors only. Three periods.

412. *Textile Economics*. (3) A study of problems which affect the consumer in the production, distribution, and consumption of textiles and clothing products. Economic clothing problems of the family. Prerequisites: T. & C. 323 and Ec. 211-2. Two hours, one period.

GRADUATE COURSES

511. *Experimental Cookery (Advanced)*. This field of study is needed in commercial foods work. The course permits the study of class problems which are selected, planned and carried through under the direction and supervision of the instructor. Methods and procedures are outlined and records carefully kept. Prerequisites: Chemistry 322-3. One hour and two periods. Three hours credit.

512. *Demonstrations in Food*. This course includes instruction in the technique of food demonstrations and in planning and giving demonstrations for different groups. One hour and two periods. Three hours credit.

513. *Food Service and Entertainment*. A course designed to offer instruction in preparation and service of food for various types of social occasions. Attention is given to table appointments, settings and decoration suitable for type of entertainment. One hour and two periods. Three hours credit.

521. *Advanced Nutrition*. A study of the fundamental principles of nutrition and the application of these principles to the feeding of individuals,

families and groups. Prerequisites: Chemistry 321 and Nutrition 311. Three hours credit.

523. *Experimental Methods in Nutrition*. This study includes experimental work with animals, determination of energy value of foods and dietary studies. Prerequisite: Nutrition 521.

531. *Community Nutrition*. A study of nutritional habits of individuals and methods of improving nutritional practices in a community. Supervised work in surrounding communities and centers. Registration by permission of teacher in charge. Three periods. Three hours.

581. *Problems in Nutrition*. A study of problems in nutrition of special interest. Hours arranged. Three hours credit.

Home Economics Education

520. *Philosophy and Development of Home Economics Education*. (3) Trends and philosophy of home economics in vocational and general education. History of home economics and of homemaking education.

521. *Curriculum Workshop*. (3) A study of high school home economics curricula. Individual and group work on curricula revision and building, program planning.

523. *Research in Home Economics Education*. (3) This course is designed for a critical study of research literature adapted to various interests and aspects in Home Economics.

531. *Home Experiences and Community Programs*. (3) Theory of home projects, guidance and evaluation in home economics summer programs.

533. *Newer Trends in Home Economics*. (3) This course is planned for teachers who have had experience in teaching Home Economics. Emphasis is placed on evaluation devices and methods for presenting Home Economics in the school program; organization of classes in adult education and out-of-school youth.

534. *Evaluation in Home Economics*. (3) The purpose of evaluation in the development of home economics programs. Various devices used in evaluation or progress in high school; grading; tests and reports.

561. *Administration in Home Economics*. A course which offers experienced teachers the opportunity to prepare for supervisory or administrative work. Emphasis is placed on program planning and on problems of organization in Home Economics. Three hours credit.

562. *Special Problems in Home Economics Education*. (3) A study of teaching methods for special groups as civic and business organizations and social service centers. Special emphasis is given demonstration methods and use of illustrative materials. Three hours.

591-592. *Seminar in Home Economics Education*. An integration of interest areas through discussion which aims to broaden the individual in studies which emphasize new trends and creative contributions to the field. Recent literature in field of Home Economics is reviewed for the purpose of building a personal and professional reference library. Three hours each quarter.

Home Management

541. *Family Financial Problems.* A study centered upon the planning and recording of expenditures by the case method. Prerequisite: Home Management 433. Three hours credit.

551. *Family Housing Problems.* This course provides a study of the needs of the family in housing. Stress is placed on the interrelationship between the family and community, the site, and location, financing, building or purchasing of a home. Field trips are made to localities of special interest to the course. Three hours. Three hours credit.

Textiles and Clothing

501. *Seminar in Textiles and Clothing.* (3) Study of changes and developments in the field, preparation and discussions of papers on textile and clothing subjects.

502. *Methods of Teaching Clothing Selection.* (3) A course to assist teachers in the organization of units for high school or college classes on problems in the selection of family clothing and household textiles. Three periods. Three hours credit.

503. *Methods of Clothing Construction for Teachers.* (3) A study of construction problems met by the clothing teacher, developing methods which hold to good standards and require a minimum amount of time. The making of illustrative material on construction and finishes of cotton, wool, silk or rayon. Three hours credit.

521. *Draping.* Designing and draping dresses with emphasis upon creative designs and the handling of different fabrics. Designs draped in muslin and completed in suitable material.

523. *Special Problems in Textiles and Clothing.* (3) Problems of particular interest to the student may be selected for advanced study with permission of major professor.

DIVISION OF THE HUMANITIES

THOMAS E. POAG, *Director of the Division of the Humanities, Head of the Department of Speech and Drama and Professor of Speech and Drama.*

GEORGE W. GORE, JR., *Director of the Division of Education, Professor of Journalism.*

ALMA D. JONES, *Chairman, Freshman English, Professor of English*

EARL L. SASSER, *Professor of English*

*LAURA M. AVERITTE, *Associate Professor of English*

CRAWFORD B. LINDSAY, *Associate Professor of English*

HINTON C. JONES, *Chairman, Sophomore English, Assistant Professor of English*

BENTON ADAMS, *Instructor in Drama and Art*

LOIS BELTON, *Instructor in Speech and English*

MARY F. CARTER, *Instructor in English*

HELEN M. HOUGHTON, *Instructor in English*

ROBERT J. HUDSON, *Instructor in English*

MILLCENT D. JORDAN, *Instructor in Speech and English*

IOLA E. LEWIS, *Instructor in English*

MYRTLE N. SEETS, *Instructor in English*

ALMA T. WATKINS, *Head of the Department of Modern Foreign Languages, Associate Professor of Romance Languages.*

VIRGINIA S. NAYBONGO, *Part-time Professor of Romance Languages*

HELENA R. BLACK, *Instructor in Romance Languages*

GLADYS R. KELLOGG, *Instructor in Romance Languages*

HAZEL WRIGHT, *Instructor in Romance Languages*

FRANCES THOMPSON, *Professor of Stage and Costume Design*

*MARIE BROOKS STRANGE, *Assistant Professor of Music*

SINGER BUCHANON, *Technician in Speech and Drama*

HELYNE G. WILHOITE, *Secretary to the Division of the Humanities*

MYRTLE BLACKMAN, *Graduate Assistant*

STATEMENT OF ORGANIZATION

The Division of the Humanities is composed of the Departments of English, Modern Foreign Languages, and Speech and Drama. Related courses in Art, Music and Fine Arts are offered in the Division of Education. Provisions are made for students majoring in the Division of the Humanities to take these courses which are basic to studies in the Humanities. Since courses in language and literature are an essential part of the College curriculum for every student, the Division of the Humanities fundamentally serves each Division of the College.

**On leave.

*Division of Education

BACHELOR OF ARTS CURRICULUM

The work of the Division leading to the degree of Bachelor of Arts is organized into two divisions: (1) the Lower Division, comprising the work of the Freshman and Sophomore years; and (2) the Upper Division, comprising the work of the Junior and Senior years.

Students who present fifteen units of high school credits will be admitted into the Lower Division. Students will be admitted into the Upper Division only when they shall have completed the work of the Lower Division with an average grade of C, and shall have submitted to the adviser for approval a complete program of work in the Upper Division. For consultation in the formulation of this program, some member of the faculty of the student's major department will serve as adviser.

Major. A student registered in the Division of the Humanities must elect one subject, to be known as his major, in which he shall present at least twenty-seven hours of course work, exclusive of beginning courses and the required courses in the Lower Division.

Minor. 18-36 hours are required to complete a minor in subjects listed in the Division of the Humanities. Majors are permitted to elect subjects for a minor in other Divisions of the College.

ENGLISH CURRICULUM

Lower Division							
FRESHMAN YEAR	Quarter Hours Credit			SOPHOMORE YEAR	Quarter Hours Credit		
Name of Course	I	II	III	Name of Course	I	II	III
English 101-2-3	3	3	3	English 201-2-3	3	3	3
¹ French, Spanish or German 101-2-3	3	3	3	¹ French, Spanish or German 201-2-3	3	3	3
History 121-2-3	3	3	3	Sociology or Political Science	3	3	3
Biology, Chemistry, Physics ² or Math.	4	4	4	Science or Major	4	4	4
Electives*	3	3	3	Elective or Minor	3	3	3
Physical Ed. 101-2-3	1	1	1	Physical Ed. 201-2-3	1	1	1
	17	17	17		17	17	17

Upper Division							
JUNIOR YEAR	Quarter Hours Credit			SENIOR YEAR	Quarter Hours Credit		
Name of Course	I	II	III	Name of Course	I	II	III
Political Science 313	3			History 411	3		
Major	6	6	6	Major	3	3	3
Minor	3	3	3	Minor	3	3	3
Electives	6	9	9	Electives	9	9	9
	18	18	18		18	15	15

¹The language requirement for the degree may be satisfied by the continuation for two years in college of the language presented for entrance, if entrance credits are for two years; if credit for four years is presented for entrance, the requirement may be satisfied by the continuation of the same language for one year in college. If no credit in foreign language is presented for entrance, or if the language presented on entrance is not continued in college three years of one language must be taken in college. Students who plan to do graduate work are advised to secure a reading knowledge of French or German.

²Speech and Drama majors are required to take one year of Physics and one year of Mathematics or General Science.

MODERN FOREIGN LANGUAGE CURRICULUM

Lower Division							
FRESHMAN YEAR	Quarter Hours Credit			SOPHOMORE YEAR	Quarter Hours Credit		
Name of Course	I	II	III	Name of Course	I	II	III
French or Spanish 101-2-3	3	3	3	French or Spanish 201-2-3	3	3	3
English 1-1-2-3	3	3	3	English 201-2-3	3	3	3
History 121-2-3	3	3	3	Sociology or Political Science	3	3	3
Biology, Chemistry, Physics or Math	4	4	4	Biology, Chemistry, Physics or Math.	4	4	4
Elective	3	3	3	Minor	3	3	3
Physical Ed. 101-2-3	1	1	1	Physical Ed. 201-2-3	1	1	1
	17	17	17		17	17	17

Upper Division							
JUNIOR YEAR	Quarter Hours Credit			SENIOR YEAR	Quarter Hours Credit		
Name of Course	I	II	III	Name of Course	I	II	III
French or Spanish 311-2-3	3	3	3	French or Spanish 421-2-3	3	3	3
Political Science 313	3			French or Spanish 441-2-3	3	3	3
Minor	3	3	3	History 411	3		
Education	3	6	6	Minor	3	3	3
Electives	6	6	6	Education	3	6	6
	18	18	18	Electives	3		
					18	15	15

SPEECH AND DRAMA CURRICULUM

FRESHMAN YEAR	Quarter			JUNIOR YEAR	Quarter		
	Hours Credit				Hours Credit		
Name of Course	I	II	III	Name of Course	I	II	III
Speech 201-2-3	3	3	3	Speech 301-2-3	3	3	3
English 101-2-3	3	3	3	Speech 341-2	3	3	
French, Spanish or German 101-2-3	3	3	3	Political Sc. 313			3
General Science 111-2-3	3	3	3	Elective			3
Electives (Art or Music)	3	3	3	English	6	6	6
Education 101-2-3	1	1	1	Education	6	6	6
Physical Ed. 101-2-3	1	1	1		18	18	18
	17	17	17	SENIOR YEAR			
	Quarter			Quarter			
	Hours Credit			Hours Credit			
Name of Course	I	II	III	Name of Course	I	II	III
Speech 211-12-13	3	3	3	Speech 411-12-13	3	3	3
English 201-2-3	3	3	3	Speech 421-22-23	3	3	3
Social or Pol. Sc.	3	3	3	History 411			3
Math. or Physics	4	4	4	Education	6	6	
French, Spanish, or German 201-2-3	3	3	3	Speech 451	3		
Physical Ed. 201-2-3	1	1	1	Electives			3
	17	17	17		18	15	15

Facilities for the Theatre Workshop

The facilities at Tennessee State College for Speech and Drama include: (1) A scenic laboratory for stage designing, constructing of scenery, and for research, and (2) a Laboratory Theatre, for daily rehearsals and experimental productions. The stage in this room is 12' x 20' x 12" and is enclosed with a gray cyclorama. The Laboratory Theatre will seat 325 people. Three additional rehearsal rooms are found on the right of the Laboratory Theatre. (3) The College Auditorium is used for major productions. The stage is 20' x 33' x 20' with back stage space of more than 25'. It is considered the best stage in the city of Nashville for productions. It is enclosed with a reversible cyclorama, gray and blue, and also includes two olio curtains, blue and gold. New lighting equipment has been installed. There is also a projection room equipped with two standard projection machines. The Auditorium will seat more than 1,000 persons.

Department of English

The program of work in the Department of English covers the fields of Grammar, Composition, Journalism, and Literature. The courses are designed

to meet the English requirements of each division of the college and to give undergraduate and graduate training to prospective teachers of English.

Classification of English Courses

I. *American Literature*: 361-2-3, 423.

II. *Composition*: 101-2-3, 301-2-3, 321-2-3, 371.

III. *English Language and Literature*: 201-2-3, 261, 311-2-3, 331, 341-2-3, 351, 411-2-3, 422, 441, 451-2, 471.

Majors and minors in English: Each must offer English 101, 102, 103, 201, 202, 203 as prerequisites. Twenty-seven additional hours are required for a major and 18 additional hours for a minor. English 451 and 471 are required for English majors.

1. Major in English with minor in Speech: The twenty-seven hours for the major must be selected from I, II, III; the 18 hours for the minor in Speech from the Department of Speech and Drama.

2. Major in English (with minor other than Speech): 27 hours from I, II, III.

3. Minor in English: 36 hours from I, II, III.

English

100. *English Fundamentals*. A non-credit course designed for students who give evidence by entrance examination of their need of intensive work in the fundamentals of English grammar and composition.

101. *English Composition*. (3) Fall. The principles of correct English with special attention directed to the mechanics of writing and the fundamentals of English grammar. Interpreting the printed page, use of the library, paragraphing, sentence structure, word study, punctuation and other mechanical essentials of writing. Forms of composition include the class theme and the essay.

102. *English Composition*. (3) Winter. Principles of correct English continued with attention directed to a more analytical study of the forms of composition. The research paper, the report, outlining, note-taking, paraphrasing, summarizing, and locating information are included during the quarter.

103. *English Composition*. (3) Spring. Writing based on literary types, both prose and poetry. Introduction to the study of literature. Techniques of writing continued.

201-202. *General Survey of English Literature*. (6) Fall and Winter. Lectures, reports, readings, and classroom discussion of typical writings, from the Anglo-Saxon Period to the Twentieth Century.

203. *Literary Types*. (3) Spring. A types course which uses selections from major American writers.

261. *Children's Literature*. (3) Spring. This course offers an opportunity to familiarize prospective teachers of primary grades with the field of literature suited to the tastes of children. Principles that underlie selection of children's literature will also be considered.

301-2-3. *Elementary Journalism*. (9) A practical course in English composition, with emphasis upon the construction and function of daily and weekly

newspapers, community publicity, school publications and news stories. (Three credit hours each quarter).

311. *Literature of the Eighteenth Century*. (3) Fall. Study of representative selections of English Literature from the end of the Restoration Period to the beginnings of the Romantic Movement.

312. *The Romantic Movement*. (3) Spring. Study of selections from chief representatives of the Romantic movement.

313. *Victorian Literature*. (3) Spring. Study of selections from chief representatives of the Victorian Period. Emphasis upon study of literature in relation to the times in which it was produced.

321. *Advanced Composition*. (3) Fall. The course is open to students beyond the freshman year who desire additional training in written communication.

322. *Expository Writing*. (3) Winter. Training in preparation of the research report and other types of expository writing with emphasis on the collection of material, analysis, organization and arrangement.

323. *Critical Writing*. (3) Spring. Studies in the significance of critical traditions and current practices. Individual interests will be followed in the preparation of critical papers.

331. *The Literature of the English Bible*. (3) Studies in the literature of the English Bible and its influence on English secular literature.

341. *Introduction to Drama*. (3) Fall. Study of drama as a literary form. Study of representative classical and modern plays.

342. *Modern Drama*. (3) Winter. Extensive study of selections from modern European drama, chiefly British. Readings and reports.

343. *American Drama*. (3) Spring. Continuation of 342, using plays by chief American authors.

351. *Oral Interpretation of Literature*. (3) Fall. Principles of oral reading, intensive study of background and thought content of literary materials; memorization; individual drill.

361. *American Literature*. (3) Fall. Prerequisite: 18 hours of English. A critical and appreciative study of major American writers with attention to the background, tendency and movement in the political and literary life of America. From the beginning through the Civil War.

362. *American Literature*. (3) Winter. Prerequisite: 18 hours of English. Continuation of 361 to contemporary times.

363. *Literature of Negro Life*. (3) Spring. American Literature dealing with Negro Life.

371. *Business English*. (3) A course in business correspondence and advertising.

411. *Shakespeare*. (3) A study of the principal plays of Shakespeare.

412. *Shakespeare*. (3) A study of Shakespeare in relation to the social and cultural background of the Elizabethan period, with emphasis upon the literature of the time including the drama.

413. *Comparative Literature*. (3) Spring. Prerequisite: 36 hours of English. Study of Masterpieces of World Literature in translations.

422. *Novel*. (3) Winter. Study of social backgrounds as presented in selected European—chiefly British—novels.

423. *Novel*. (3) Spring. Continuation of 422 using works by American writers.

451. *History of the English Language*. (3) Fall. Prerequisite: 18 hours of English. Study of the development of the English language from the beginnings to modern times. Some attention is given to phonetics and to elementary principles of linguistics. Required of majors and minors. Must be taken during resident at this college.

452. *Methods of Teaching High School English*. (3) Fall and Spring. Prerequisite: 39 hours of English. A methods course in Secondary School English. Required of majors.

453. *Current English*. (3) Spring. Prerequisites: 18 hours of English. Advanced grammar and modern usage. Some attention to be given to semantics.

GRADUATE COURSES

The candidate must have completed the equivalent of an under-graduate major in English as offered at Tennessee State College. Fifteen hours in the courses on the 400 level may be offered for graduate credit. English 451 is required on the undergraduate level.

501-2-3. *The English Seminar*. (9) Methods and Materials for the Study of English. (Three credit hours each quarter.)

511. *Studies in Old English Prose*. (3)

512. *Studies in Old English Poetry*. (3)

513. *Studies in Middle English*. (3)

521-2-3. *Studies in Nineteenth Century English Literature*. (9) (Three credit hours each quarter.)

531-2-3. *Studies in American Literature*. (9) (Three credit hours each quarter.)

541. *The English Drama, I*. (3) The English Drama from its Origin to 1642.

542. *The English Drama, II*. (3) The English Drama from 1660 to 1800.

543. *The English Drama, III*. (3) The English Drama from 1800 to the present.

551-2-3. *Studies in Language and Current Usage*. (9) (Three credit hours each quarter.)

561-2-3. *Studies in Restoration and Eighteenth Century Literature*. (9) (Three credit hours each quarter.)

571. *Studies in Shakespeare's Comedies*. (3)

572. *Studies in Shakespeare's Tragedies*. (3)

DEPARTMENT OF MODERN FOREIGN LANGUAGES

Students majoring in Foreign Languages shall present 18 credit hours of course work in the Lower Division (Freshman and Sophomore Years) and at least 27 credit hours of work in the Upper Division (Junior and Senior Years) of their concentration group, i.e., courses bearing numbers above 300.

Students minoring in Foreign Languages shall present 18 credit hours of

course work in the Lower Division (Freshman and Sophomore Years), and at least 9 credit hours of course work in the Upper Division (Junior and Senior Years) of their concentration group, i.e., courses bearing numbers above 300.

Germanic Languages

101-2-3. *Elementary German*. (9) For beginners. (Three credit hours each quarter.)

201-2-3. *Intermediate German*. (9) Prerequisite: German 101-2-3, or the equivalent. (Three credit hours each quarter.)

ROMANCE LANGUAGES

French

101. *Elementary French*. (3) Fall Quarter. Pronunciation, grammar, dictation, easy reading.

102. *Elementary French*. (3) Winter Quarter. Continuation of French 101. Conversation. Extensive reading. Course partly conducted in French. Prerequisite for French 102, French 101 or the equivalent.

103. *Elementary French*. (3) Spring Quarter. Grammar continued. Outside reading and reports. Conversation and dictation. Course partly conducted in French. Prerequisite: French 101-102, or the equivalent.

201. *Intermediate French*. (3) Fall Quarter. Grammar review. Composition. Extensive reading and reports. Dictation, conversation, prerequisite: one year of college French or two years of high school French. Course conducted partly in French.

202. *Intermediate French*. (3) Winter Quarter. Continuation of French 201. Prerequisite: French 201.

203. *Intermediate French*. (3) Spring Quarter. Continuation of French 202. Prerequisite: French 201 and 202 or the equivalent. This course is conducted in French.

221-2-3. *Conversational French*. (9) Elective for students who have completed French 103 or the equivalent. Recommended for students in French 201-2-3 or 311-12-13 and especially for those who plan to take French 441-2-3. Not to be used to satisfy any part of the language requirement. (Three credit hours each quarter.)

311-2-3. *Aspects of French Literature*. (9) Selected readings intended to give students an acquaintance with some of the more important personalities, movements and ideas of French literature with emphasis placed on 17th, 18th, and 19th century literature. (Three credit hours each quarter.)

421. *French Phonetics*. (3) Analysis of the sounds of French and their articulation. Oral and aural practice. Required of those who wish to be recommended by the Department for teaching positions.

422. *Advanced Grammar and Composition*. (3) Review of grammatical principles. Required of those who wish to be recommended by the Department for teaching positions.

423. *The Teaching of French*. (3) Methods, materials and texts. Required of those who wish to be recommended by the Department for teaching positions.

441-2-3. *French Civilization*. (9) A course in the history of French civilization and culture. Conducted in French. Required of those who wish to be recommended by the Department for teaching positions. (Three credit hours each quarter.)

451-2-3. *Modern French Literature*. (9) A survey of the Nineteenth Century in the novel, drama, and poetry: Romanticism, Realism, the Parnasian reaction in Poetry, Naturalism, and Symbolism. (Three credit hours each quarter.)

Spanish

101. *Elementary Spanish*. (3) Fall Quarter. Grammar, easy reading. Pronunciation and dictation.

102. *Elementary Spanish*. (3) Winter Quarter. Continuation of Spanish 101. Outside reading and reports. Conversation and dictation. Prerequisite: Spanish 101 or the equivalent.

103. *Elementary Spanish*. (3) Spring Quarter. Grammar continued. Outside reading and reports. Conversation and dictation. Prerequisite: Spanish 101-102 or the equivalent. Course partly conducted in Spanish.

201. *Intermediate Spanish*. (3) Fall Quarter. Grammar review. Composition. Outside reading and reports. Conversation and dictation. Prerequisite: One year of college Spanish or two years of high school Spanish. Course partly conducted in Spanish.

202. *Intermediate Spanish*. (3) Winter Quarter. Continuation of Spanish 201. Outside reading and reports. Conversation and dictation. Prerequisite: Spanish 201. Course conducted partly in Spanish.

203. *Intermediate Spanish*. (3) Spring Quarter. Continuation of Spanish 202. Outside reading and reports. Conversation and dictation. Prerequisite: Spanish 201-2. Course conducted in Spanish.

221-2-3. *Conversational Spanish*. (9) Elective for students who have completed Spanish 103 or the equivalent. Not to be used to satisfy any part of the language requirement. Recommended for students in Spanish 201-2-3 or 311-2-3 and especially for those who plan to take Spanish 441-2-3. (Three hours credit each quarter.)

311-2-3. *Aspects of Spanish Literature*. (9) Selected readings intended to give the students an acquaintance with some of the more important personalities, movements, and ideas in the 18th and 19th Centuries with a cross-section from Spanish-American writers. (Three credit hours each quarter.)

421. *Spanish Phonetics*. (3) Analysis of the sounds of Spanish and their articulation with exercises and aural-oral drill. Required of those who wish to be recommended by the Department for teaching positions.

422. *Advanced Grammar and Composition*. (3) Review of grammatical principles. Required of those who wish to be recommended by the Department for teaching positions.

423. *The Teaching of Spanish*. (3) Method, materials, and texts. Required of those who wish to be recommended by the Department for teaching positions.

441-2-3. *Spanish and Spanish-American Civilization.* (19) A course in the history of Spanish and Spanish-American civilization and cultures, conducted largely in Spanish. Required of those who wish to be recommended by the Department for teaching positions. (Three credit hours each quarter.)

451-2-3. *Modern Spanish Literature.* (9) A survey of the 19th Century novel, drama and poetry; Romanticism, Realism, Regionalism, and Modernism. (Three credit hours each quarter.)

Dandy *Italian
101-2-3. *Elementary Italian.* (9) (Three credit hours each quarter.)

*Portuguese
101-2-3. *Elementary Portuguese.* (9) (Three credit hours each quarter.)

DEPARTMENT OF SPEECH AND DRAMA

The Departmental program in Speech and Drama is divided into three areas: (1) Rhetoric and Public Speaking; (2) Phonetics and Speech Training; and (3) Dramatic Production.

The Department combines the best of educational drama with a grounding in professional drama and a sound liberal arts program. Students study the great dramas, and bring them to life on the stage. Frequently they play a bit just off Broadway; occasionally they produce new scripts written in the play-writing class or experiment with a script by known and unknown playwrights. When a play is selected for presentation, students carry through all aspects of the production under supervision of competent instructors. They have opportunity to design sets under the direction of our Technical Director and teaching staff; they construct, paint, and manipulate the settings; they plan for lights and operate control boards; they design and make costumes; they serve as assistant directors, stage managers, and crew heads. Most interesting for many students, they have opportunity to act great roles in great plays, some playing in most of the productions a year.

Courses in the field of Speech include all of the training required by the State Department of Education for a teaching certificate, and further to meet the needs of graduate students. Forty-eight hours of courses in Speech, Drama and related subjects are required for a major; and 18 hours for a minor. The candidate must complete the first two years of the Liberal Arts Curriculum with emphasis on the Sciences in the Elements of Physics, and Mathematics or General Science.

Classification of Courses

Speech Courses

- I. *Speech:* 111-2-3, 201-2-3, 212-213 223. (Select 18 hours.)
- II. *Speech:* 101-2-3, 211, 301-302-303, 322, 412, 413. (Select 15 hours.)
- III. *Speech:* 341-2, 411-451. (Select 9 hours.)
- IV. *Speech:* 421-422-423. (Select 6 hours.)

*Dependent upon number of students apply for courses.

Courses marked with asterisk are specifically required to complete a minor and are the basic courses for the major in Speech and Drama.

Speech

Speech 111-2-3. *Speech Composition.* (9) Oral Communication.

Speech 201* *Fundamentals of Speech.* (3) Emphasis will be placed on speaking as a thinking process. The student will have practical problems in voice improvement, voice control, vocal breathing, articulation and enunciation. Platform manners and delivery will be stressed.

Speech 202* *Public Speaking.* (3) The practice of speech, composition and delivery will be stressed. The student will have practice in preparing and presenting short informative, entertaining and persuasive speeches. The methods in which the student is trained are applicable to social and business conversation as well as to public speaking.

Speech 203* *Argumentation and Debating.* (3) This course deals with such principles and practices of argumentation as analysis of propositions, evidence, brief making, and preparation and delivery of forensics, as well as participation in classroom discussions. Techniques governing round table, forum and panel discussions will be studied.

Speech 212. *American Pronunciation.* (3) Studies in regional phonetics.

Speech 213* *Speech Correction.* (3) The course is especially designed to meet the needs of the teacher of Speech in public schools and colleges. This course will deal with actual clinical processes in the theory and practice of speech correction and training of visual hearing. The student will be given an opportunity to study and work with a wide range of cases of speech disorders such as stammering, stuttering, nasality, lisp, foreign accent, cluttering, careless speech and general voice problems. Supplementary exercises in the analysis of English speech sounds will be given as an introduction to the body of speech correction.

Speech 223. *Choral Speaking.* (3) Oral group interpretation of verse. Affords an opportunity for intensified and vital artistic expression through the formation of a speaking choir. Values for both elementary and adult group. Methods of conducting groups and selection of materials will be considered. (Class limited to 25.)

Speech 321. *Speech Correction.* (3) Functional Speech defects and clinical practice.

Speech 322. *Speech Correction.* (3) Organic Speech defects and clinical practice.

Speech 323. *Speech Correction.* (3) Methods of Teaching Speech Correction.

Speech 361. *Parliamentary Procedure.* (3) This course deals with a study of the laws and techniques of parliamentary practices.

*Dependent upon number of students applying for course.

Speech 451. *History of the English Languages.* (3) Same as English 451.

Speech 452. *Advanced Public Speaking.* (3) The history of public address from the Greeks to modern times.

Speech 453. *Methods of teaching high school speech.* (3) A method course in the teaching of speech and drama on the secondary level.

Drama

Speech 101-2-3. *Theatre Practice.* (3) An Introduction to theatre organization and practices. One credit hour each quarter.

Speech 211. *Elements of Acting.* (3) This course deals with study and practice in the fundamentals of acting technique. The importance of voice, posture, gesture, and movement in theatrical expressiveness. Scenes from the world's best dramas will be analyzed and used as criteria for the course.

Speech 301 (401). *General Dramatics.* (3) This course deals with the basic principles of stage design, casting, acting technique, preliminary script analysis, and technique of production. The student will be required to make a prompt book and to apply his technical knowledge to the productions of the years.

Speech 302. *Play Interpretation and Direction.* (3) The fundamental principles of directing are taught through exercises and projects. Each student will be required to direct a one-act play; and to attend rehearsals of the Tennessee State Players Guild. Study and practice in the methods by which the values of the written drama are translated to the stage in terms of acting, stage composition, grouping, movement, tempo, smoothness, and rhythm will be emphasized.

Speech 303 (301). *Playwriting.* (3) This course deals with the general principles and techniques of playwriting. Practical laboratory work dealing with a study of the plot, characterization, and dialogue necessary for creative production for stage, radio and screen will be stressed. The student will have an opportunity to stage his original plays in the workshop theatre.

Speech 322. *Theater Practice.* (3) Practical experience in the theatre workshop and weekly reports. To be given each quarter.

Speech 341. *Introduction to Drama.* (3) Same as English 341.

Speech 342. *Modern Drama.* (3) Same as English 342.

Speech 343. *American Drama.* (3) Same as English 343.

Speech 411. *Shakespeare.* (3) Same as English 411.

Speech 412 (403). *Radio Production.* (3) This course includes characterization and interpretation as well as practice in acting in a great variety of radio plays. Students will have an opportunity to practice in group playing. Broadcasting Station TSPG on the campus will be used for Laboratory practice. Students will have an opportunity to play speeches and plays.

Speech 413. *Community Drama.* (3) This course will take up the problems of the teacher, and community worker in the presentation of plays. Special emphasis will be placed upon directing and recreational activities in

the rural communities. General techniques in organizing and managing the Little Theatre in social centers, churches, and clubs will be stressed. The student will have an opportunity to make general equipment for the community theatre in the scenic workshop. Special problems in analysis and production of pageants, folk-songs, masques, and festivals in relation to community development are also studied.

Speech 421. *Costumes Design.* (3) Same as Art 311.

Speech 422. *Stage Design.* (3) Same as Art 312.

Speech 423. *Stage Design.* (3) Same as Art 313.

GRADUATE COURSES

Speech and Drama

501. *Phonetics and Speech Training.* (3) Principles of Phonetics; study of English pronunciation, based chiefly on contemporary American usage; practice in phonetic analysis and, where necessary, drill for improvement of individual speech.

502. *Regional and Historical Phonetics.* (3)

513. *Advanced Public Speaking.* (3)

541-2-3. *Studies in Drama and Theatre.* (9) (Three credit hours each quarter.)

THE DIVISION OF POLITICAL AND SOCIAL SCIENCE

ALVIN W. ROSE, *Director of the Division, Professor and Chairman of the Department of Sociology.*

SUSIE O. BRYANT, *Professor and Head of the Department of Political Science.*

MARY E. LEE, *Associate Professor and Head of the Department of Social Administration.*

RALEIGH A. WILSON, *Associate Professor of Government.*

JEROME HOLLAND, *Associate Professor of Sociology.*

GLADYS B. BUTLER, *Assistant Professor of Sociology.*

KATHLEEN H. POAG, *Instructor in Sociology.*

RACHEL J. PATILLO, *Instructor in Social Studies for Veterans.*

NORA L. ROY, *Instructor in Sociology.*

MARY E. EVANS, *Divisional Secretary.*

A—Introductory

The Division of Political and Social Science is composed of the Departments of Political Science, Social Administration, and Sociology.

The general design of the Division of Political and Social Science embraces a fourfold objective: (1) to provide a broad and basic background for understanding the problems of citizenship and human relations; (2) to train students for employment in civil service, teaching, social work and other community organizations; (3) to prepare students for advanced specialized study; and (4) to train students to conduct research in the fundamental problems of social science.

B—Requirements for Admission

The general requirements for admission to all classes in the Division of Political and Social Science are identical with the admission requirements of the general college.

C—The Bachelor of Arts

Major and Minor: Students in the Division of Political and Social Science are required to take a minimum of one major and one minor. The minor field may be taken within the Division or in related fields of other Divisions. Political science, sociology, social administration, psychology, agriculture, history, economics, education, business administration, philosophy, and geography are acceptable as minor fields.

A major in the Division of Political and Social Science consists of a minimum of 45 quarter hours within the field of specialization; a minimum of 24 hours in a related area is required for the minor field.

Required Courses: Students majoring in any department of the Division are required to complete 18 hours English; 18 hours French, German, or Spanish; 21 hours History; 12 hours Biology, Chemistry, or physics; 12 hours political science, 9 hours sociology, 9 hours psychology; 9 hours economics; 6 hours mathematics; and 6 hours physical education.

These courses should be taken, as nearly as possible, in accordance with the curriculum pattern for each department.

Ample provision is allowed the student who also wishes the necessary hours in education for the teacher's certificate in Tennessee or in other states.

D—Standards of Scholarship

A student is required to maintain an annual grade-point average of 2.5 in both major and minor fields. The student who fails to maintain such an average is advised to repeat the courses in which the low grades were earned, or to discontinue specializing in that particular department.

In order to qualify for graduation the student must also submit a senior project and pass a comprehensive examination, both in accordance with the general requirements of the College.

E—Laicos S. Ronoh

Students majoring in the Division of Political and Social Science who have a minimum total of 100 quarter hours with a cumulative grade-point average of 3.0 may apply for membership in Laicos S. Ronoh honorary society.

Laicos S. Ronoh is a society for scholars in the Division of Political and Social Science. Its program is given almost completely to advanced research and study. The experience of fellowship which its members enjoy with each other and with the Divisional faculty is intended to prepare them especially well for graduate study in any of the world's leading universities.

F—Graduate Study

Graduate study for the Master of Arts degree is offered in Political Science and Sociology. Social Administration graduate courses sufficient for a minor are offered for students pursuing the master of arts degree in a related field.

Regulations governing graduate study in the Division of Political and Social Science are identical with those of the College.

II

DEPARTMENT OF POLITICAL SCIENCE

The courses offered in the Political Science Department are designed: (1) to acquaint students with the problems of citizenship; (2) to prepare teachers and investigators for instructional and research positions; (3) to meet the needs of students who plan to enter government service; (4) to provide the background for students who intend to specialize in social sciences or in professions such as law and journalism; and (5) to equip students to conduct research in the problems of government.

Major requirements in Political Science: students who major in Political Science must complete a minimum of thirty-six quarter hours in the department, excluding Political Science 221, 222, 223 and 313. Selections of other courses within the thirty-six quarter hours depend upon the students' objectives. Major requirements within the department should be supplemented with History 201-2-3 and Economics 211-2-3 or Sociology 211-2-3.

Students who minor in the department must complete a minimum of fifteen quarter hours in addition to the basic course, Political Science 221-2-3.

A—Curriculum Pattern

FRESHMAN				JUNIOR			
	I	II	III		I	II	III
English 101-2-3	3	3	3	Pol. Sci. 321-2-3	3	3	3
Foreign Language	3	3	3	Pol. Sci. 341-2-3	3	3	3
History 121-2-3	3	3	3	Pol. Sci. 361-2	3	3	
Science	4	4	4	Pol. Sci. 373			3
Phys. Ed. 101-2-3	1	1	1	Geography 275	3		
Orientation	1	1	1	Geography 262		3	
Psychology 211-12	3	3		Elective	3	3	3
Electives			3	Minor	3	3	6
	18	18	18		18	18	18
SOPHOMORE				SENIOR			
	I	II	III		I	II	III
English 201-2-3	3	3	3	Major	6	6	3
Foreign Language	3	3	3	Minor	6	3	3
Eco. or Soc. 211-2-3	3	3	3	Electives	3	9	9
Pol. Sc. 211-2-3	3	3	3	History 411	3		
History 201-2-3	3	3	3				
History 302		3			18	18	18
Speech 202		3					
Phy. Ed. 201-2-3	1	1	1				
Pol. Sc. 313			3				
	19	19	19				

B—Description of Courses
(Political Science)

220. *Survey of Political Science.* (3) The principles and problems of government. Fundamental political concepts, processes and methods. Designed for students who desire a general introductory knowledge of political science. Not open to Freshman. Staff.
221. *American Government: National.* (3) An introductory course dealing with the foundation, organization and principles of the national government. Emphasis upon the relations of the citizens to the government, and upon the rights, duties and obligations of citizenship. Staff.
222. *American Government: National.* ACQ The function and operations of the national government. Prerequisite: Political Science 221. Staff.
223. *American Government: State and Local.* (3) Organizing, principles and operations of the state and local units of government. Illustrative materials will be drawn largely from Tennessee. Prerequisite: Political Science 222. Staff.
312. *The Legislative Process.* (3) The structure and methods of transacting business in the American Congress and state legislature. Prerequisite: Political Science 221-2-3. Not offered 1947-48.
313. *Tennessee State Government.* (3) The study of Tennessee government from the functional viewpoint, emphasizing political activities, taxation,

education, social welfare and economic services of the government. Prerequisite Political Science 221-2-3. Wilson.

321. *Comparative European Governments.* (3) A study of the governments of selected European countries, with emphasis on the administration of the occupied countries, and the development of the new political systems. Prerequisite: Political Science 221-2-3; History 302. Bryant.

322. *Comparative European Governments.* (3) Continuation of Political Science 321. Bryant.

323. *Comparative European Governments.* (3) Continuation of Political Science 322. Bryant.

331. *Latin American Governments.* (3) An analysis of the political institutions, ideas, and problems of the major Latin American States, with emphasis on international relations and policies. Prerequisite: History 321-22.

332. *Government of Britain and France.* (3) A study of the fundamental elements of the governments of Britain and France. Prerequisite: History 302. Bryant.

333. *Government of Russia.* (3) A course dealing with the structure, powers, functions, operations, problems and trends of the Russian government under Soviet rule. Prerequisite: History 302. Bryant.

341. *International Relations.* (3) A study of the present-day relations among the states of the world and the principal factors which underlie these relations. Prerequisite: Political Science 321-2-3. Bryant.

342. *International Relations.* (3) Continuation of Political Science 341. Bryant.

343. *International Relations.* (3) Continuation of Political Science 342. Bryant.

361. *American Political Parties and Politics.* (3) An analysis of the dynamics of American politics, with emphasis upon the factors influencing the formation of public opinion and the role of pressure groups. Prerequisite: Political Science 221-2-3; History 201-2-3. Bryant.

362. *American Political Parties and Politics.* (3) A study of the formation of political parties; nominations and elections; methods of representation and voting; and the importance of parties in American government. Prerequisite: Political Science 361. Bryant.

373. *Propaganda and Public Opinion.* (3) An analysis of the purposes and techniques of propaganda and the foundation and expression of public opinion.

431. *American Constitutional Law.* (3) Study of the sources, principles and powers of government in the United States as embodied in the Constitution and judicial decisions in leading cases. Prerequisite: History 201-2-3; Political Science 221-2-3.

432. *American Constitutional Law.* (3) Continuation of Political Science 431.

433. *International Law.* (3) Study of the right and duties of states

in their normal relations; war; neutrality; intervention; blockade; etc. Prerequisite: Political Science 341-2-3.

441. *Public Administration*. (3) Study of the principles of public administration; structure and organization, financial management, administrative responsibility, and the relation between the administrative and other branches of government in the United States. Prerequisite: Political Science 221-2-3. Wilson.

450. *Senior Project Writing*. (3) Staff.

451. *An American Diplomacy*. (3) Consideration of the more important principles of American diplomacy and their applications as bases for the understanding of the foundations of American foreign policy. Prerequisite: History 422-3. Bryant.

455 (363). *Western Political Thought*. (3) The origin and evolution of the major political concepts of the Western World. Wilson.

457 (364). *American Political Thought*. (3) An intensive study of American political ideas from the colonial period to the present. Wilson.

459 (365). *Contemporary Political Thought*. (3) Study of the changing political ideas since the late Eighteenth revolutions, as bases for contemporary systems of democracy, communism and facism. Wilson.

501. *Seminar in Political Science*. (3) Intensive study of selected problems in political science. Open to graduate students and seniors majoring in Political Science. Wilson.

III

DEPARTMENT OF SOCIAL ADMINISTRATION

Preparation for social work at the undergraduate level consists of courses drawn from many departments of the college to form a planned sequence of study toward social work. It is intended to prepare capable men and women for junior positions in private and public agencies and for students who later on will return to the graduate school to continue their training.

All courses listed in the curriculum pattern, unless otherwise designated, are required for majors in Social Administration.

A—Curriculum Pattern
(Pre-professional)

FRESHMAN	I	II	III	JUNIOR	I	II	III
English 101-2-3	3	3	3	History 201-2-3	3	3	3
Foreign Language	3	3	3	Economics 211-2-3	3	3	3
History 121-2-3	3	3	3	Sociology 322	3		
Zoology 101-2-3	4	4	4	Social Adm. 451	3		
Psychology 221-2-3	3	3	3	Education 323		3	
Physical Education	1	1	1	Sociology 303		3	
	—	—	—	Sociology 351	3		
	17	17	17	Pol. Science 313		3	

SOPHOMORE	I	II	III				
English 201-2-3	3	3	3	Social Adm. 412	3		
Foreign Language	3	3	3	Social Adm. 331	3		
Sociology 211-2-3	3	3	3	Social Adm. 332	3		
Political Science 221-2-3	3	3	3	Social Adm. 333	3		
Nutrition 211	3			Sociology 461	3		
Education 243	3			Elective	—	3	
Phy. Ed. 201-2-3	1	1	1		18	18 18	
Zoology 213			3	SENIOR	I	II	III
Elective	—	—	—	Social Adm. 341	3		
	19	16	16	Sociology 441	3		
				Social Adm. 420	3		
				Social Adm. 421	3		
				Social Adm. 422	3		
				Social Adm. 423	6		
				Social Adm. 433	3		
				Social Adm. 450	1	1	1
				Social Adm. 471	3		
				Social Adm. 472	3		
				Social Adm. 473	3		
				Electives	6	6	3
					—	—	—
					16	16	19

B—Description of Courses
(Social Administration)

331. *Leisure and Recreation*. (3) The sources of leisure in early and modern society. Historical and social functions of play. Recreational problems of communities. Fall Quarter.

332. *Group Work and Recreational Agencies*. (3) The study of the public and semi-public recreational resources of the community. The place of commercialized recreation in American cities and towns. Prerequisite: Sociology 331. Winter Quarter.

333. *Leadership and Direction of Group Activities*. (3) This course will consider problems of directing boys and girls clubs and adult leisure groups. The use of active and quiet games, stories, music, dramatics, and folk recreation. Prerequisite: Sociology 331 or 332. Spring Quarter.

341. *Survey of the Field of Social Work*. (3) The course is designed for students who are considering pre-professional and professional courses in social work and are entering an allied profession such as teaching, law, medicine, or the ministry. A survey of contemporary social work by functional groupings such as social case work, group work and community organizations. The emphasis is on objectives, processes, and personnel requirements in each functional group. Required for Social Work. Fall Quarter.

412. *Criminology*. (3) The course will include the problem of crime and criminals; the making of the criminal; the theories of crime and pun-

ishment; machinery employed in dealing with the criminals; penal and correctional institutions and programs of correction. Case studies and visits to institutions serve as aids in enriching understanding. Winter Quarter.

413. *Case Recording and Office Procedure.* (3) A study of the various methods of case history writing, correspondence, case accounting and other office procedures common to public assistance agencies. Required for Social Work. Spring Quarter.

421. *Introduction to Social Casework.* (3) A limited beginning in social case work and an introductory consideration of the basic skills in working with people. Emphasis is placed on meeting needs of individuals and families, individualizing people, understanding attitudes and using community resources. Required for Social Work. Prerequisite: 341. Winter Quarter.

422. *The Interview.* (3) The course is designed to contribute to the understanding of the individual with focus on the interview, its meaning and use in personnel and welfare work. Required for Social Work. Winter Quarter.

423. *Introductory Field Work.* (3-6) Experience, under supervision, in selected social agencies in Davidson County in order to observe their structure, scope, function, and to obtain limited participation. Prerequisites: Social Administration 341- 421, 422. Spring Quarter.

433. *Social Work and Health Problems.* (3) Elementary medical information for social workers. The course revolves around the symptoms, and etiology of common diseases; the responsibility of the social worker to detect, report, and to organize medical care as resources in treatment. It includes the public health agencies. Spring Quarter.

450. *Seminar.* (3) Designed to assist students in the choice of a senior project and in the development of the research involved. The work of the student is expected to mature into a definite report in the Spring Quarter. Open to Seniors only. For Winter and Spring Quarters.

451. *Juvenile Delinquency.* (3) A survey of the causation, prevention and treatment of juvenile delinquency, including the system of probation use of clinics, juvenile courts, correctional institutions, child placement, and recreational programs. Fall Quarter.

471. *Group Work Methods.* (3) An analysis of social work and its practical application in group work and its practical application in group leadership. Study will be given to the principle agencies in the field such as Settlements, Y. M. C. A., Y. W. C. A., Boy Scouts, Girl Scouts, and Camp Fire Girls. Prerequisite: Sociology 331 or 332. Fall Quarter

472. *Supervisory Problems.* (3) Supervisory practices in various group work agencies and similar organizations. A study of the methods of recruiting selection, training, supervision and guidance of professional and volunteer personnel. Prerequisite: Senior Standing; Sociology 332. Winter Quarter.

473. *Field Work.* (3) Experience in Group Work under supervision of organizations in these fields and instructor. Prerequisite: Senior Standing; 331, 471, 332, 333, 472.

511. *Organization and Administration of Counseling and Guidance Services.* A brief history of the counseling and guidance movement and a critical analysis of contemporary programs.

512. *Principles of Social Case Work.* A study of the principles common to social case work in all fields. Techniques of social inquiry, the nature of social data with their application to social diagnosis and treatment.

513. *Case Work in the Schools.* Procedures and techniques for gathering, interpreting, and using information in the appraisal of the individual student and his adjustment situation.

521. *Field Work in Counseling and Guidance.* Supervised practice in counseling in a specialized counseling agency. Designed exclusively for graduate students in the Department of Social Education.

522. *Counseling Techniques.* An examination of the counseling techniques developed in education, social work, clinical psychology, and industry, and a study of their practical application to the major adjustment problems of the student.

523. *Guidance and Personnel in Secondary Schools.* Principles and techniques for counseling adolescents with respect to their educational, vocational, social, and recreational needs.

Soc. Adm. 531, 532. *Field Work* (Case Work)—Field Work Placements are made in either a public or private agency. Continued correlation is made between the field and class instruction. Variable credit. Fall, Winter and Spring Quarters.

IV

DEPARTMENT OF SOCIOLOGY

The Department of Sociology is designed to provide the student with a systematic framework for understanding the nature of the social world. Theory and methods of research are blended so as to equip the student for advanced study and for employment in public and private social organizations.

All courses listed in the curriculum pattern, unless otherwise designated, are required for majors in sociology.

		A—Curriculum Pattern					
FRESHMAN		I	II	III	JUNIOR		
English	101-2-3	3	3	3	Political Science	221-22-23	3 3 3
French or German		3	3	3	Economics	211-12-13	3 3 3
History	121-2-3	3	3	3	Soc. 301 (Econ.)		3
Biology, Chemistry, or					Sociology 441		3
Physics		4	4	4	Sociology 351		3
Psychology	211-12, 243..	3	3	3	Sociology 462		3
Physical Education		1	1	1	Sociology 422		3
		—	—	—	Sociology 392		3
		17	17	17	Political Science 313		3

SOPHOMORE		I	II	III	Electives	3	6	6
English 201-2-3	.....	3	3	3		—	—	—
French or German	.....	3	3	3		18	18	18
Sociology 211-12-13	....	3	3	3				
Mathematics 161-62	....	5	5		SENIOR	I	II	III
Sociology 303	.....			3	Sociology 491	.....	3	
Physical Education	.....	1	1	1	Sociology 461	.....	3	
History 201-2-3	.....	3	3	3	Sociology 322	.....	3	
		—	—	—	History 411	.....	3	
		18	18	16	Sociology 332	.....	3	
					Sociology 421	.....	3	
					Sociology 412	.....	3	
					Sociology 473	.....	3	
					Economics 302	.....	3	
					Sociology 443	.....	3	
					Sociology 450	.....	3	
					Electives	.....	3	6
						—	—
							18	18
							18	18

B—Description of Courses
(Sociology)

211-12-13. *Introduction to Sociology.* The relationship of people to their physical and cultural surroundings and to each other. A systematic conceptual frame-work is developed that will permit the student to view the social world and its major problems in terms other than common sense. Staff. Prerequisite for all other Sociology courses.

301. *Labor Problems.* An analysis of the major socio-economic problems of labor as a primary dimension in contemporary society. A structural-functional analysis of such interrelated issues as labor unions, wages, prices, and governmental control. Fall Quarter. J. Holland.

303. *Introduction to Field Study.* The theory and planning of social research, the questionnaire, the schedule, the interview, life history, case history, sociograms, sampling, etc. Spring Quarter. Staff.

312. *Recent Labor Legislation.* An analysis of labor legislation as a mechanism of social control. Major emphasis is on national legislation beginning with the National Labor Relations Act and running through the Taft-Hartley Act. Winter Quarter. J. Holland.

313. *Problems of Personnel Management.* A consideration of human relations in industry; the formal and informal structure of industry seen as a social system with its attendant problems of upgrading absenteeism, foremanship, accidents, production rates, unionism, and morale. Spring Quarter. J. Holland.

322. *The Family.* Principles and problems associated with the organization, disorganization and reorganization of the family in the American and other societies. Winter Quarter. Poag.

332. *Social Pathology.* The theory and description of several forms of social and personal disorganization, and a consideration of methods for study, of social and personal disorganization, and a consideration of methods for study, prediction, control. Winter Quarter. Butler.

351. *Introduction to Social Psychology.* A conceptual frame-work for describing the process by which individuals take on the social heritage; the nature of symbolic behavior and general interpersonal relationships. Fall Quarter. Butler.

393. *Racial and Cultural Relations.* An introduction to the sociology of race and culture contacts, with emphasis on American problems. Spring Quarter. Rose.

412. *Criminology.* (Identical with Social Work No. 412.) The social nature of crime; factors associated with the development and control of criminally deviant behavior. Winter Quarter. Lee.

421. *Population Problems.* Theories and trends in population growth; the political and economic implications of these trends at regional, national and international levels. Fall Quarter. Poag.

411. *Statistics.* Measures of central tendency and dispersion, linear and non-linear time series analysis, linear and multiple correlation, correlation of attributes, sampling, etc. Prerequisites, Math. 161, 162 or consent of Instructor. Fall Quarter. Rose.

443. *Rural Sociology.* The structure and dynamics of rural life; technology and social change in the rural community. Spring Quarter. Poag.

450. *Seminar in Social Research.* A discussion of senior projects on which students have been working (under-supervision) not less than two quarters. Spring Quarter. Staff.

451. *Juvenile Delinquency.* (Identical with Social Work 451). Fall Quarter. Lee.

461. *Urban Sociology.* The ecology of the city, describing the symbiotic aspects of community structure; the impact of urbanism upon social institutions; and the problems and possibilities of urban planning. Fall Quarter. Butler.

462. *Social Institutions.* The theory of social structure, a comparison of the social organization of different cultural areas, the method of studying institutions, and an appraisal of major controversial issues. Winter Quarter. Rose.

472. *Advanced Social Psychology.* An examination of the major points of view in social psychology including those of Mead, Dewey, Cooley, Gestalt Psychology, Behaviorism, Psychoanalysis, etc. Prerequisite: 353 and consent of Instructor. Winter Quarter. Rose.

473. *Theory and Methods of Personality Study.* This course is designed to survey the field of Experimental Social Psychology. Methods in psychiatric therapy, projective methods (Rorschach and Thematic Apperception Tests), factor analysis, rating scales, frustration theory and techniques, level of aspira-

tion theory and techniques, etc. Prerequisite: 353 and consent of Instructor. Spring Quarter. Rose and Butler.

482. *Collective Behavior*. The study of crowds, publics, fashion, mass movements, propaganda, and social movements; and an appraisal of the controversial issues in collective psychology. Winter Quarter. Butler.

491. *History of Sociological Theory*. The emergence of Sociology as a specialized discipline. In tracing this development a critical appraisal is made of the major sociological theories as represented by Comte, Spencer, Durkheim, Weber, Simmel, Sumner, etc., and including those of the contemporary period. Fall Quarter. Rose.

501. *Social Organization*. An appraisal of the major ethnological and sociological theories in Social Organization. Prerequisite: Graduate status. Fall Quarter. Rose.

512. *Individual Study in Sociological Theories*. Prerequisite: Graduate status. Fall Quarter. Rose.

523. *Thesis Seminar*. Prerequisite: Graduate status. Spring Quarter. Rose.

DIVISION OF SCIENCE

HUBERT B. CROUCH, *Director of Division, Professor and Head of the Department of Biology.*

ALGER V. BOSWELL, *Professor and Head of the Department of Mathematics.*

CARL M. HILL, *Professor and Head of the Department of Chemistry.*

WILLIAM C. McNEILL, JR., *Professor and Acting Head of the Department of Physics.*

EDWARD FERGUSON, JR., *Professor of Biology.*

MARION RICHARDS MYLES, *Associate Professor of Biology.*

MARY E. HILL, *Assistant Professor of Chemistry.*

ROBERT H. JORDAN, *Assistant Professor of Biology.*

JAMES U. LOWE, JR., *Assistant Professor of Chemistry.*

CLEM RUSS, *Assistant Professor of Biology.*

ALFRED S. SPRIGGS, *Assistant Professor of Chemistry.*

MARTHA M. ALLEN, *Instructor in Biology.*

SADIE C. GASAWAY, *Instructor in Mathematics.*

ANNIE G. H. SASSER, *Instructor in Mathematics.*

YANCEY GRIGGS, *Assistant Instructor in Chemistry.*

JULIA T. HAWKINS, *Assistant Instructor in Chemistry.*

CATHERINE A. MARYLAND, *Assistant Instructor in Biology.*

GWENDOLYN PYRTLE, *Assistant Instructor in Biology.*

GLADYS BURGESS, *Graduate Assistant in Biology.*

ALAN LOTT, *Graduate Assistant in Biology.*

RUBY PRIGMORE, *Graduate Assistant in Chemistry.*

GILBERT SENTER, *Graduate Assistant in Chemistry.*

MABEL B. CROOKS, *Secretary.*

GENERAL INFORMATION

Objectives

The primary objectives of the Division of Science are (a) to provide training in the sciences that may assist the student in making the personal and social adjustments necessary for resourceful living; (b) to train science teachers for the schools of Tennessee; (c) to provide the required science backgrounds for major students in other curricula offered at the College; (d) to prepare students for entrance into professional studies—particularly in medicine, dentistry, nursing, and related health service professions; and (e) to train science specialists with specific proficiencies for contributing to the improvement of the life of the region and the nation through research and technical skills.

Organization

The Division of Science is organized into the departments of Biology, Chemistry, Mathematics, and Physics. Each department offers curricula leading to the baccalaureate degree; and graduate studies are offered in a limited number of fields. Several specialized curricula are also provided for those who plan to pursue studies in medicine, dentistry, nursing, and related professions.

Aside from the curricular offerings, each department provides for major advisory personnel, departmental clubs, seminars, and other programs designed for the improvement of scholarship in the major field of concentration.

Facilities

The principal facilities for science and research at the College include Harned (Science) Hall, with its several laboratories, lecture rooms, offices, and service rooms; the greenhouse; and the college lake area. Other facilities of the College are utilized according to the requirements of special programs.

Harned Hall contains fifteen laboratories, three lecture rooms, ten offices, a photographic dark room, and six storage and service rooms. Six of the laboratories are especially equipped for graduate and staff investigations in the biological sciences and chemistry.

Undergraduate Curricula

Four year curricula leading to the bachelor's degree are offered respectively in biology, chemistry, mathematics, physics, and the natural sciences. Two-year preparatory curricula are offered for the study of medicine, dentistry, nursing, and clinical laboratory technology. By special arrangements, students who have completed the appropriate preparatory curriculum at the College may become eligible for a bachelor's degree after a prescribed period of study at Meharry Medical College.

Major Requirements

1. A major must be selected in one field; either in biology, chemistry, mathematics, physics, or in the natural science area.
2. The major should be selected as early as possible in order to prevent irregularities that may delay the fulfillment of requirements for advanced standing and graduation. A major must be selected by the beginning of the Junior year.
3. Student who register in the pre-medical, pre-dental, pre-nursing, and pre-clinical technology courses are not regarded as majors working toward a degree. Such students must select a major in a science at the beginning of the Junior year, or register as special students.
4. Thirty-six basic quarter hours, above the full year beginning courses, are required for a major in the Division of Science. Additional courses may be required by the respective departments.
5. A major in the natural sciences requires a minimum of twenty-seven quarter hours in one or two fields of science in addition to beginning one year courses respectively in biology, chemistry, mathematics, and physics. At least twelve of the twenty-seven required hours must be taken in sequence either in biology or chemistry.

Graduate Study

Graduate studies are offered in certain fields within the limitations of available facilities and staff. Studies leading to the Master of Science degree are offered presently in chemistry animal biology (zoology), and mathematics.

Graduates of accredited colleges who have demonstrated superior scholarship abilities are invited to apply for admission. Regulations on graduate studies are outlined in the sections of the catalog on the Graduate Division. For further information, communicate with the head of the department in which the major work is to be pursued, or with the Chairman of the Graduate Council.

DEPARTMENT OF BIOLOGY

The Department offers curricula leading to the Bachelor of Science degree, with majors respectively in Biology and Zoology; and graduate studies leading to the Master of Science degree in Zoology. Courses are also provided to fulfill the biology requirements of other curricula at the College.

UNDERGRADUATE MAJORS

Forty-eight quarter hours in the biological sciences are required for a major in Biology or Zoology. Each major requires certain prescribed courses taken in proper sequences, along with recommended electives. The major should be selected during the freshman year, and not later than the end of the sophomore year.

LOWER DIVISION:—All majors in the Department are required to pursue the same curriculum during the freshman and sophomore years. The biological sciences during these years, in proper group sequences, include: (Zoology 101-2-3) and (Zoology 211, 232-3).

FRESHMAN YEAR	Lower Division Curriculum						SOPHOMORE YEAR	Quarter Hours Credit
	Quarter Hours Credit			Quarter Hours Credit				
	I	II	III	I	II	III		
<i>Name of Course</i>				<i>Name of Course</i>				
Zoology 101-2-3	4	4	4	Zoology 211	4			
Chemistry 111-2-3	4	4	4	Zoology 232-3	4	4		
Mathematics 151-2-3	3	3	3	Physics 211-2-3	4	4	4	
English 101-2-3	3	3	3	English**	3	3	3	
Physical Ed. 101-2-3	1	1	1	Physical Ed. 201-2-3	1	1	1	
Language* 101-2-3 or				Language 201-2-3 or				
Language 201-2-3	3	3	3	Social Science	3	3	3	
	—	—	—	Psychology 211-2-3	3	3	3	
	18	18	18		—	—	—	
					18	18	18	

*A student who has had two units of the language in high school will take Language 201-2-3.

**Advanced composition, public speaking, and literature.

Upper Division. Beginning with the junior year, each major in the Department must select a major in Biology or Zoology in order to complete requirements for graduation at the end of four years of study.

Upper Division Curriculum with a Major in Zoology

The required courses in the biological sciences include: (Zoology 331, 342-3) and (Botany 111-2-3, or Botany 111-2 and Bacteriology 241, or Botany 111-2 and Botany 321). The Upper Division Curriculum for Majors in Biology is as follows:

JUNIOR YEAR	Quarter			SENIOR YEAR	Quarter		
	Hours Credit				Hours Credit		
Name of Course	I	II	III	Name of Course	I	II	III
Zoology 331	4			Botany 111-2-3, or			
Zoology 342-3		4	4	Botany 111-2 and			
Chemistry 311-2-3	4	4	4	Botany 321, or			
Social Sciences	3	3	3	Botany 111-2 and			
Secondary Education				Bacteriology 241	4	4	4
or Electives	7	7	7	Secondary Education			
	—	—	—	or Electives	7	7	7
	18	18	18	Minor or			
				Electives	7	7	7
					—	—	—
					18	18	18

Upper Division Curriculum with a Major in Zoology

The required courses in Zoology for a major include: (Zoology 331, 342-2) and (Zoology 401, 422, 433). The Upper Division Curriculum for Majors in Zoology is as follows:

JUNIOR YEAR	Quarter			SENIOR YEAR	Quarter		
	Hours Credit				Hours Credit		
Name of Course	I	II	III	Name of Course	I	II	III
Zoology 331	4			Zoology 401	4		
Chemistry 311-2-3	4	4	4	Zoology 422		4	
Social Sciences	3	3	3	Zoology 433			4
Secondary Education				Secondary Education			
or Electives*	7	7	7	or Electives	7	7	7
	—	—	—	Minor or			
	18	18	18	Electives	7	7	7
					—	—	—
					18	18	18

*Students who wish to qualify for teaching science in high schools must complete 27 quarter hours of secondary education approved by the State Board of Education under the State Certification Laws. A student who does not wish to qualify for a secondary school teaching certificate must sign a waiver and make proper substitutions. These data become a part of the student's permanent record.

Electives. Additional hours in biology may be elected from the courses described under Zoology and/or Botany. The kinds and numbers of courses to

be elected depend upon the student's interest in the field, and upon whether or not a minor is pursued in a field outside the Department of Biology. Students who do not elect minors should take additional courses in biology above the basic requirements above.

Minors. A minor is not required for majors in the Department of Biology. However, the Department offers minors for departmental majors or for majors in other curricula at the College. Minors are offered respectively in Biology, Zoology, and Botany. Thirty-six quarter hours are required.

A minor in Biology requires (Zoology 101-2-3) (Zoology 211, 232-3; or Zoology 211, 342-343) and (Botany 111-2-3; or Botany 111-2, and Botany 321; or Botany 111-2, and Bacteriology 241).

A minor in Zoology requires (Zoology 101-2-3) (Zoology 211, 232-3) and (Zoology 331, 342-3).

A minor in Botany requires (Botany 111-2-3) (Botany 321-2-3) and (Botany 421, 433 and Bacteriology 241).

Graduate Studies in Zoology

Graduate studies leading to the Master of Science degree in the biological sciences are offered at the present time only in the field of Zoology. Forty-five quarter hours are required, which may be distributed as follows:

- Plan I: Zoology major without a minor—45 hours in Zoology, with a maximum of 12 quarter credit hours in research and thesis construction.
- Plan II: Zoology major with one minor—30 quarter hours in Zoology, and 15 quarter hours in the minor; with a maximum of 9 quarter credit hours in research and thesis construction.

A thesis is required of all persons who qualify for graduation. In addition to the Graduate Seminar required of all graduate students of the College, a weekly Seminar is required for all majors in Zoology. This seminar does not offer credit.

A maximum of 8 quarter hour of graduate credits will be allowed for undergraduate courses. These courses must be numbered 400 or above. They must be taken at Tennessee A and I State College; and they must not be courses presented for the fulfillment of the undergraduate requirements for courses pursued in graduate studies. Graduate courses offered in Zoology are listed under the "Description of Courses."

Laboratory Fees

All courses that offer laboratory studies in the Department require a course fee of \$3.00, payable in the Office of the Bursar during registration. Research work that requires the use of special consumable facilities may either require the payment of regular laboratory fees or the student may be required to pay the purchase prices of such facilities.

DESCRIPTION OF COURSES

*Undergraduate**Zoology*

101-2-3. *General Zoology*. Fundamentals of animal life, with emphasis upon structure, development, life history, and certain significant problems relating to animals and man. Open to all students. Recommended for majors in Agriculture, and for students who plan to take courses in Human Physiology. Two hours and two laboratory periods. Four hours credit each quarter.

211. *Heredity and Genetics*. The principles of inheritance. Recommended for majors in Agriculture and child development. Prerequisite: One college course in biological science. Four hours credit. Two hours and two laboratory periods.

232. *Comparative Anatomy*. Beginning with the prochordates, the general group characteristics are studied. The fundamental portion of the course deals with systemic anatomy or vertebrate types and their homologies. Required of Premedics. Two hours and two laboratories. Four hours credit.

233. *Mammalian Anatomy*. Considerations of the gross and systemic anatomy of mammals, with complete dissection of the cat. Required of Premedics. Prerequisite: Zoology 332. Two hours and two laboratory periods. Four hours credit.

331. *Embryology*. Development of higher vertebrates, with special emphasis on organogenesis of the foetal pig. Prerequisites: Zoology 211-2. Two hours and two laboratory periods. Four hours credit.

342-3. *Human Physiology*. Biological fundamentals of development, reproduction, structure, and physiological activities in the human biology. Required of Home Economics and Physical and Health Education Majors. Prerequisites: Zoology 101, and a course in general chemistry. Two hours and two laboratory periods. Four hours credit.

401. *Invertebrate Zoology*. A study on the morphology, taxonomy, and life histories of invertebrate animals. Prerequisite: Zoology 101-2. Two hours and two laboratories. Four hours credit.

411. *Animal Ecology*. Life patterns of animals and group influences of animals upon the living and physical environments. Prerequisite: Zoology 101-2. One hour and three laboratory periods. Four hours credit.

422. *Vertebrate Histology*. Preparation and identification of vertebrate organs and tissues. Prerequisite: 101-2-3. Two hours and two laboratory periods. Four hours credit.

433. *General Entomology*. Fundamentals of insect life. Special considerations of insects. Prerequisites: 101-2. Two hours and three laboratories. Four hours credit.

Bacteriology

233. *Household Bacteriology*. For Home Economics students. Two hours and two laboratory periods. Four hours credit.

241. *General Bacteriology*. Considerations of the bacteria, molds, yeasts, certain protozoa, and viruses; with some practice in culture methods, staining, and identifications. Required in Home Economics and Agriculture. Prerequisite: One course in a biological science or chemistry. Two hours and two laboratory periods. Four hours credit.

Botany

111-2-3. *Fundamentals of Botany*. A general course, dealing with the nature, development, physiology, structure, and natural grouping of plants. Recommended for majors in Agronomy; and may fulfill the biology requirements in elementary and secondary education. Two hours and two laboratory periods. Four hours credit each quarter.

211. *Field Botany*. A study of plant life in nature. Plant life patterns and identification of common plants are emphasized. Prerequisite: Botany 111-2. Six hours of field study and one hour of recitation. Four hours credit.

321. *Plant Physiology*. Physiology of seed plants, with special emphasis on respiration, transpiration, photosynthesis, digestion, absorption, and nutrition. Required in Agronomy. Prerequisites: Botany 111-2-3, and a course in general chemistry. Three laboratory periods. Four hours credit.

322. *Plant Anatomy*. A study of the structures of higher plants. Prerequisites: Botany 111-2-3. Two hours and two laboratory periods. Four hours credit.

323. *Plant Pathology*. Diseases of common field crops, theory and practice in control measures. Required in Agriculture. Prerequisite: Botany 111. Two hours and two laboratory periods. Four hours credit.

421. *Plant Ecology*. A study of the interrelations and life habits of higher plants. Prerequisite: Botany 322. Two hours and three laboratory periods. Four hours credit.

433. *Plant Taxonomy*. Systematic classification of higher plants. Prerequisite: Botany 111-2-3. One hour and three laboratory periods. Four hours credit.

Graduate

Zoology 511-2-3. *Special Problems*. This course series is provided for individual research studies under the supervision of the major adviser. In order to qualify for this program, a student must present a general statement of proposed research, and obtain approval of the major adviser, the head of the department, and the Graduate Council. Three to four quarter hours credits are allowed each quarter. But the total numbers of credit hours may not exceed 9 for students with one minor; nor more than 12 hours for students who elect to pursue the 45 quarter credit hours in the major field.

Zoology 521-2-3. *Physiology*. Advanced and experimental studies on the physiology of vertebrates with special reference to the mammals. Four hours credit, each quarter.

Zoology 531-2-3. *Histology and Embryology*. Detailed studies on the tissues and organs of selected adult vertebrates and the foetal pig. Four hours credit, each quarter.

Zoology 541-2-3. *Parasitology*. Studies on the animal parasites of animals in general, with special references to the parasites of reptiles, birds, and mammals. The parasites are studies in phylogenetic order during the first two quarters. The third quarter is devoted to examinations of domestic animals for parasites and studies on host-parasite relations. Four hours credit, each quarter.

Zoology 581-2-3. *Entomology*. Advanced studies on the morphology, taxonomy, and economic significance of insects. Four hours credit, each quarter.

DEPARTMENT OF CHEMISTRY

The department's program is designed to meet the needs of two general groups of students:

- (1) Those who desire to pursue an undergraduate or graduate major or minor in Chemistry and
- (2) Those (from other departments of the college) who wish to satisfy course requirements in Chemistry.

Students who are taking an undergraduate major or minor in Chemistry must begin their work in the Freshman year. Students who are taking Chemistry to fulfill a course requirement should begin their study either in the Freshman or Sophomore year.

Undergraduate Program

Bachelor of Science Degree With a Major in Chemistry

An undergraduate Major consists of a minimum of 57 quarter hours, accumulated through pursuing the following courses:

Chemistry 111-2-3 (General)	12	Quarter Hours
Chemistry 211-2-3 (Analytical)	12	Quarter Hours
Chemistry 311-2-3 (Organic)	12	Quarter Hours
Chemistry 411-2-3 (Physical)	12	Quarter Hours
Chemistry 451 (Chemical Bibliography)	3	Quarter Hours
Chemistry 452-3 (Organic Qualitative Analysis)	6	Quarter Hours

57 Quarter Hours

Students who successfully complete the requirements leading to this degree are qualified (1) to fill positions in high schools as chemistry instructors or in chemical industry, (2) to enter graduate study leading to chemical research or college teaching, or (3) to enter professional training in Medicine, Dentistry, or Nursing.

An undergraduate Minor in Chemistry consists of a minimum of 36 quarter hours. The required courses are:

Chemistry 111-2-3 (General)	12	Quarter Hours
Chemistry 211-2-3 (Analytical)	12	Quarter Hours
Chemistry 321-2-3 (Food-Nutrition)	12	Quarter Hours
(Recommended for Majors in Health and Home Economics)		
Or Chemistry 311-2-3 (Organic)	12	Quarter Hours

36 Quarter Hours

CURRICULUM FOR A MAJOR

FRESHMAN YEAR	Quarter			SOPHOMORE YEAR	Quarter		
	Hours Credit				Hours Credit		
Name of Courses	I	II	III	Name of Courses	I	II	III
Chemistry 111-2-3	4	4	4	Chemistry 211-2-3	4	4	4
English 101-2-3	3	3	3	Language 101-2-3 or Lan- guage 201-2-3	3	3	3
Mathematics 161-2-3	5	5	5	Mathematics 261-2-3	3	3	3
Physical Education 101- 2-3	1	1	1	History 201-2-3 or Eco- nomics 211-2-3	3	3	3
Zoology 101-2	4	4		Physical Education 211- 2-3	1	1	1
Botany 111			4	*English 201-2-3	3	3	3
	17	17	17				
					17	17	17
JUNIOR YEAR	Quarter			SENIOR YEAR	Quarter		
Hours Credit					Hours Credit		
Name of Courses	I	II	III	Name of Courses	I	II	III
Chemistry 311-2-3	4	4	4	Chemistry 411-2-3	4	4	4
Physics 211-2-3	4	4	4	Chemistry 451	3		
Electives I	10	10	10	Chemistry 452-3		3	3
	18	18	18	Electives I	3	3	3
				Electives II	7	7	7
					17	17	17

Electives I: Education, Philosophy, Biological Sciences, Mathematics, English, Health, Physics, Social Sciences, Language, Psychology, and Art Appreciation.

Electives II: Education, Mathematics, Biological Sciences, Physics, Geology, Health, Social Science, and Art Appreciation.

*English 201-2-3, Advanced Composition, Public Speaking, and Literature.

DESCRIPTION OF COURSES

All laboratory courses require a fee of \$4.00.

Chemistry

101-2-3. *General Chemistry*. This course is a study of the fundamental elementary principles of chemistry. During the third quarter, special attention is given to the application of these principles to problems of Agriculture, Home Economics, and Health. Three lectures and two two-hour laboratory periods per week. Four quarter hours credit each quarter. Recommended for Majors in Agriculture, Home Economics, Health, and Nursing.

111-2-3. *General Chemistry*. This course is a study of the fundamental laws and theories of chemistry. It is designed to meet the needs of chemistry majors and other freshmen who show a high rating on the chemistry aptitude test at the College. The third quarter is devoted to a systematic study of the metals and non-metal from the periodic classification. Two lectures, one recitation, and two two-hour laboratory periods per week. Four hours credit each quarter. Required of Majors in Chemistry, Biology, Engineering, and Pre-Medical and Pre-Dental students.

211-2-3. *Elementary Analytical Chemistry*. Chemistry 111-2-3 and Mathematics 161-2-3 are prerequisites. This course includes the theories and laboratory practice in both qualitative and quantitative analysis. The qualitative analysis part of the course deals with the analysis for the several groups of cations and anions. The quantitative analysis part includes both volumetric and gravimetric analysis, together with related stoichiometric problems. Two lectures and two three-hour laboratory periods per week. Four quarter hours credit each quarter.

311-2-3. *Organic Chemistry*. Chemistry 111-2-3, prerequisite. A systematic study of the source, physical properties, and chemical behavior of aliphatic, aromatic, and heterocyclic compounds of carbon. Three lectures and two three-hour laboratory periods. Four hours credit each quarter.

321. *Elementary Organic Chemistry*. Chemistry 101-2-3, prerequisite. Important classes of organic compounds are presented. Emphasis is placed upon the study of hydrocarbons and their principal derivatives, carbohydrates, proteins, fats and oils, vitamins, and dyes. Two lectures and two two-hour laboratory periods. Four hours credit. Designed for Majors in Agriculture, Home Economics, and Health.

322. *Food and Nutrition Chemistry*. Prerequisites are: Chemistry 101-2-3 and 321. A study of the chemical composition, properties, and nutritional value of foodstuffs. This course includes demonstrations on the calorimetric value and simple analysis of the principal types of foods. An introduction to the fate of foodstuffs in the digestive and metabolic processes is presented. Two lectures and two two-hour laboratory periods. Four hours credit.

323. *Physiological Chemistry*. Prerequisites are: Chemistry 321 and 322. This course is an advanced study of the chemistry of the digestion and metabolism of carbohydrates, fats, proteins, and vitamins. Two lectures and two two-hour laboratory periods. Four hours credits.

324-5-6. *Agricultural Chemistry*. Chemistry 101-2-3 is prerequisite. This course is designed to provide students majoring in Agronomy and Animal Husbandry with the fundamentals of analytical and organic chemistry. The first two quarters are devoted to analytical chemistry; the third quarter to organic. Two lectures and two three-hour laboratory periods. Four quarter-hour credits.

411-2-3 *Physical Chemistry*. Prerequisites are: Chemistry 111-2-3 and 211-2-3, Mathematics 261-2-3, and Physics 211-2-3. Physics 211-2-3 and Chemistry 411-2-3 may be taken concurrently. This course is devoted to a study of the more fundamental theories and laws governing both physical and chemical changes and their application to gases, liquids, solids, solutions, reaction rates, electromotive forces, thermodynamics, and chemical equilibria. Three lectures and two three-hour laboratory periods. Four hours credits each quarter.

451. *Chemical Bibliography*. Chemistry 211-2-3 and 311-2-3 are prerequisites. A study of how to use the chemical journals, reference books, and other sources of chemical information. A systematic search in the chemical literature for information on several compounds and topics will be included. Two conference a week. Three hours credit.

452-3. *Organic Qualitative Analysis*. Chemistry 211-2-3, 311-2-3, and 451 are prerequisites. A systematic study of the solubility and class reactions of the principal classes of organic compounds. It includes also identification of pure organic compounds and mixtures. One lecture and two three-hour laboratory periods. Three hours credits each quarter.

Graduate Program

The Department carries forward a graduate program (leading to the Master of Science degree) for a limited number of students. Enrollment is restricted to students who hold the Bachelor of Science degree with a major in Chemistry or its equivalent in course requirements.

The graduate program aims to train students intending (1) to teach chemistry in secondary schools and colleges, (2) to perform industrial routine and research work, or (3) to become chemical research specialists.

Students who enroll for graduate work leading to the Master's Degree are to meet, in addition to the departmental requirements, the general admission requirements and regulations of the Graduate Division.

Curriculum of Graduate Studies

511-2. *Advanced Analytical Chemistry*. Credit, three quarter hours each quarter. A theoretical discussion of and laboratory experiments on selected topics in qualitative and quantitative analysis, including sampling, indicators, potentiometric and conductometric titrations.

520-1-2. *Advanced Organic Chemistry*. Credit, three quarter hours each quarter. A survey of the more important classes of organic compounds and their reactions; a discussion of selected topics, including tautomerism, electronic interpretation of organic reactions, mechanisms, molecular rearrangements, and stereochemistry.

530-1. *Advanced Physical Chemistry*. Credit, two quarter hours each quarter. A discussion of the theoretical aspect of molecular structure, electro-chemistry, kinetics of chemical reactions, solutions, colloids, and thermodynamics.

533-4. *Advanced Physical Chemistry Laboratory*. Credit, three quarter hours per quarter. Experiments on selected topics.

540-1-2. *Advanced Inorganic Chemistry*. Credit, three quarter hours per quarter. The chemical elements and their compounds are discussed as they appear on the several periodic arrangements. Special attention is given to the relationships between atomic structure and properties.

543. *Inorganic Preparations*. Credit, three quarter hours per quarter. Advanced experimentation leading to preparation of several selected inorganic compounds is included.

550-1-2. *Chemical Research*. Credit, conditioned by quality and quantity of research performed. This course is designed to provide chemical research required of candidates for the Master of Science degree.

570-1. *Quantitative Organic Micro Analysis*. Credit, two quarter hours per quarter. A discussion of and laboratory in micro techniques involved in use of micro balance, carbon and hydrogen combustion analysis, molecular weight determinations, methoxy group analysis, Dumas and Kjeldahl nitrogen determination, and sulfur and halogen analyses.

Chemistry Seminar. No credit. Required of all candidates for advanced degree.

DEPARTMENT OF MATHEMATICS

Suggested Curriculum in Mathematics

FRESHMAN YEAR	Quarter			SOPHOMORE YEAR	Quarter		
	Hours Credit				Hours Credit		
Name of Courses	I	II	III	Name of Courses	I	II	III
English 101-2-3	3	3	3	English 201-2-3	3	3	3
Mathematics 161-2-3	5	5	5	Physics 211-2-3	4	4	4
Zoology 101-2-3	4	4	4	Psychology 211-2	3	3	
Chemistry 111-2-3	4	4	4	Education 243			3
Physical Education 101-2-3	1	1	1	History 201-2-3	3	3	3
	—	—	—	Mathematics 261-2-3	3	3	3
	17	17	17	Physical Ed. 201-2-3	1	1	1
					—	—	—
					17	17	17

Departments of Instruction

JUNIOR YEAR	Quarter			SENIOR YEAR	Quarter		
	Hours Credit				Hours Credit		
Name of Courses	I	II	III	Name of Courses	I	II	III
American Government...	3			Mathematics (Elective)...	3	3	3
Economics	3	3		Education 471-2	3	3	
Education 385			3	Education 342		3	
Mathematics 361-2	3	3		History 411		3	
Mathematics 363			3	Electives (Minors)	6	6	9
Education 341	3			*Mathematics 311-2-3	3	3	3
Education 362		3		Public Relations 313			3
Physical Ed.	1	1	1		—	—	—
History 211-2-3	3	3	3		18	18	18
Electives (Minor)		3	6				
	—	—	—				
	16	16	16				

100. *Fundamentals of Arithmetic and Algebra*. A non-credit course designed especially for students who desire to pursue courses offered by the department but whose proficiency in these subjects would seem to indicate probable failure in the regular courses.

*101. *Arithmetic*. (3) For prospective teachers.

131. *Algebra*. (3) The course pre-supposes a minimum of one unit of high school algebra. Review of elementary operations, factoring, fractions, linear equations, graphs, ratio, proportion, variation, exponents and radicals.

132. *Algebra*. (3) A continuation of 141. Quadratic equations, graphs, binomial theorem, progressions, permutations and combinations. Prerequisite: Mathematics 141.

133. *Plane Trigonometry*. (3) Functions of angles, identities, equations, logarithms, solution of right and oblique triangles with applications, graphs of functions. Prerequisite: Mathematics 132.

141. *Arithmetic*. (3) Designed for majors in the division of agriculture.

142. *Algebra*. (3) The course pre-supposes a minimum of one unit of high school algebra. Review of elementary operations, factoring, fractions, linear equations, graphs, ratio, proportion, variation, exponents and radicals. Prerequisite: Mathematics 141.

143. *Trigonometry*. (3) Functions of angles, identities, equations, logarithms, solution of right and oblique triangles with applications, graphs of functions. Prerequisite: Mathematics 142.

161. *Algebra*. (5) Discussion of topics in simple and quadratic equations, progressions, theory of equations, partial fractions.

162. *Trigonometry*. (5) Functions of the general angle, identities, equations, and the general triangle.

163. *Analytic Geometry*. (5) Properties of the straight line, the circle, the conic sections in the plane.

*This course is not counted toward a major in mathematics.

231. *Analytic Geometry*. (3) —An elementary course including rectangular coordinate system, properties of the straight line, special equations of the second degree. Prerequisite: Mathematics 133.

232. *Analytic Geometry*. (3) A continuation of 241. General equation of the second degree, transformation of coordinates, polar equations of the conics, higher plane curves. Prerequisite: Mathematics 241.

261-2-3. *Calculus*. (9) Differential and integral calculus. Derivative of algebraic, trigonometric, exponential and logarithmic functions with application to problems rising in engineering and the physical sciences; the indefinite and definite integral with applications.

*311. *Fundamentals of Statistics*. (3) A basic course in general statistics, including tabulation of data, charts, a study of frequency distributions, measures of central tendency and dispersion, graphs, normal curve, linear correlation. It is advisable that a student take algebra before enrolling in this course.

*321. *The Teaching of Mathematics*. (3) Prerequisite: Calculus, or the approval of the department.

*322-3 *History of Mathematics*. (3) For prospective teachers and for students wishing to broaden their view of the nature and importance of mathematics.

331-2. *College Geometry*. (6) Modern plane geometry for prospective teachers of high school geometry. Prerequisite: Calculus, or the approval of the department.

361-2. *Calculus*. (6) The indefinite and definite integral with applications, infinite series, approximation computation, partial differentiation, multiple integrals, and an introduction to differential equation.

363. *Advanced Algebra*. (3).

372-3. *Theory of Equations*. (6) Prerequisites: Mathematics 363 and Calculus, or the approval of the department.

421. *Advanced Calculus*. (3)

422-3. *Analytic Geometry of Space*. (6)

451-2-3. *Introduction to Analysis*. (9) Modern advanced calculus, theory of limits, continuity and integration.

MATHEMATICS OF STUDENTS OF BUSINESS ADMINISTRATION

Students in the Division of Business Administration who do not have a good foundation in Mathematics will be required to take Mathematics 101.

171. *Mathematic of Business*. (3) Exponents, radicals, linear equations,

*Courses 321-2-3 will not be accepted toward satisfying the requirements for a major or minor in mathematics for the B.S. degree.

ratio, proportion percentage, progressions, binomial theorem, series, simple interest, discount, partial payments .

172. *Mathematics of Business*. (3) Logarithms, compound interest and discount, annuities.

173. *Mathematics of Business*. (3) A mortiazion, sinking funds, depreciation, bonds, insurance.

GRADUATE COURSES

531-2-3. *Introduction to Advanced Geometry*. (9) Homogeneous coordinates, cross ratio, collineations, perspectivity and projectivity.

551-2-3.—*Introduction to Higher Algebra*. (9) Determinants, theory of equations, symmetric functions, matrices, linear dependence, invariants.

DEPARTMENT OF PHYSICS

Students who plan to major or minor in Physics should consult with the Head of the Department for the required curriculum. Students must demonstrate superior ability in mathematics before acceptance and should have completed a course in Calculus before beginning advanced work.

DESCRIPTION OF COURSES

211. *General Physics—Mechanics*. Elementary mechanics including a study of linear, rotary and periodic motions, force, Newton's Laws, work, energy, machines and the mechanics of fluids. Prerequisite or concurrent Trigonometry. Three lectures and one laboratory per week. Four hours credit. Fee \$3.00.

212. *General Physics—Heat, Sound and Light*. Elementary treatment of heat including thermometry, calorimetry, change of state, transfer of heat and thermodynamics: Sound, including the nature of sound, its propagation, sources of musical sounds and elementary acoustics: Light, including wave motion, reflection refraction, polarization, interference and diffraction. Prerequisite: Physics 211. Three lectures and one laboratory period per week. Four hours credit. Fee \$3.00.

213. *General Physics—Electricity and Magnetism*. An elementary treatment of the principles of electricity and magnetism including electrostatics, electromagnets and magnetic induction, laws of simple circuits, electrolysis, the electrical nature of matter and electrical machinery. Prerequisite Physics 211. Three lectures and one laboratory per week. Four hours credit. Fee \$3.00.

301. *Advanced Mechanics*. Statics and dynamics of rigid bodies with some work on the strength of materials. Mainly for students of Engineering but may be used as a course toward a major in Physics. Prerequisite Physics 211-2-3 and Calculus. Four hours credit. Fee \$3.00.

312. *Introduction of Contemporary Physics*. A course designed to meet the needs of students in Physics and Chemistry for a course in the structure of matter. Prerequisite Physics 211-2-3 and Chemistry 111-2-3. Three hours credit. Fee \$3.00.

NATURAL SCIENCE CURRICULUM

This curriculum in Natural Science offers a combined Major and Minor in the sciences. It is designed primarily for students who wish to qualify for high school science teaching in several fields. Seventy-two quarter hours in science are required.

The basic science courses required for majors in this curriculum include: (Chemistry 111-2-3) (Zoology 101-2, and Botany 111) (Physics 211-2-3) (Mathematics 151-2-3, or Mathematics 161-2-3) (12 hours of advanced chemistry) (12 hours of advanced biology) and electives in science or mathematics to complete the 72 hours). Other non-science course requirements are the same as those prescribed in either of the departments in the Division of Science.

SURVEY SCIENCE AND SCIENCE EDUCATION COURSES

Science 101-2-3. *Science for Elementary Teachers.* Required for all elementary education majors. Three hours credit.

Science 111-2-3. *Introductory College Science.* A general course dealing with the nature of living things and the physical universe. Special considerations are given to the physical make-up of the earth, with utilization of matter and energy, general make-up of organisms, biological and physical dynamics. The above principles are interpreted in terms of man's relationship to the universe. Recommended for students in Business. Two hours and one hour laboratory. Three hours credit.

Science Ed. 421. *Teaching of the Sciences in Secondary Schools.* For Science majors desiring to qualify for teaching of science subjects in the secondary schools. Three hours credit.

PROVISION FOR PROFESSIONAL COURSES IN MEDICINE, DENTISTRY AND NURSE TRAINING

The State Board of Education of Tennessee and Meharry Medical College have entered into an agreement whereby students classified as residents and citizens of Tennessee will be granted facilities for the study of medicine, dentistry and nursing at Meharry Medical College equivalent to the opportunities offered to students at the University of Tennessee. Residents of Tennessee who meet the proper qualifications will be charged the same tuition in medicine, dentistry and nursing at Meharry Medical College as is charged to students in these professional fields at the University of Tennessee.

PREPARATION FOR THE STUDY OF MEDICINE, DENTISTRY, NURSING and LABORATORY TECHNOLOGY

Two-year curricula preparatory to the study of Medicine, Dentistry, and Nursing are offered at Tennessee A. and I. State College.

Curricula preparatory to the study of Medicine, Dentistry, Nursing, and Clinical Laboratory Technology are also offered at Tennessee A. and I. College

in cooperation with Meharry Medical College. These curricula lead to the degrees of Bachelor of Science and Bachelor of Arts.

PRELIMINARY STUDY OF MEDICINE

Pre-Medical Curriculum.

This curriculum is designed to give students who wish to study medicine two years of college work necessary for entrance into approved medical colleges. This curriculum meets the minimum requirements of the Council on Medical Education of the American Medical Association for admission to approved medical colleges.

Curriculum

FRESHMAN YEAR	Quarter			SOPHOMORE YEAR	Quarter		
	Hours	Credit			Hours	Credit	
<i>Name of Courses</i>	I	II	III	<i>Name of Courses</i>	I	II	III
Chemistry 111-2-3	4	4	4	Chemistry 311-2-3	4	4	4
Zoology 101-2-3	4	4	4	Physics 211-2-3	4	4	4
Mathematics 151-2-3	3	3	3	Social Science or French			
English 101-2-3	3	3	3	201-2-3	3	3	3
Social Science or French				Psychology 211-2-3	3	3	3
101-2-3	3	3	3	Zoology 211, 232-3	4	4	4
Physical Education 101-2-3	1	1	1	Physical Education			
	—	—	—	201-2-3	1	1	1
	18	18	18		—	—	—
					19	19	19

Science-Medical Curriculum

This curriculum requires four years of study. The first two years of this curriculum are pursued at Tennessee A. and I. State College and is composed of the following courses:

Curriculum

FRESHMAN YEAR	SOPHOMORE YEAR
Chemistry 111-2-3	Physics 211-2-3
Zoology 101-2-3	Chemistry 311-2-3
English 101-2-3	Zoology 232-3 (Comp. Anat)
Foreign Language	Foreign Language
Physical Education	Psychology 211-2-3
Mathematics 151-2-3	Physical Education 211-2-3
	Bacteriology 241
54	57

The second part of this curriculum is offered at the Meharry Medical College. Upon completion of the two programs of study, and with the approval of the two institutions, the student is awarded the Bachelor of Science degree at the Tennessee A. and I. State College.

ARTS-MEDICAL CURRICULUM

Regular students at the Tennessee A. and I. State College who have chosen the following electives: Mathematics 151, 152, 153 (nine quarter hours); Physics 211, 212, 213 (twelve quarter hours); general chemistry (twelve quarter hours); organic chemistry (twelve quarter hours); Zoology 101, 102 and Botany 111 (twelve quarter hours); and who have completed the first three years of the prescribed Bachelor of Arts or of Science curriculum, including at least one-half the required hours of a major and minor, may apply for participation in this plan. Upon successful completion of forty-seven quarter hours of work at the Meharry Medical College in courses acceptable at Tennessee A. and I. State College may become candidates for the Bachelor of Arts or of Science degree. Upon joint recommendation of the two institutions, the degree will be awarded at the Tennessee A. and I. State College.

PRELIMINARY STUDY OF DENTISTRY

Pre-Dental Curriculum.

The Pre-Dental Curriculum provides two years of college work necessary for entrance into approved schools of dentistry. This curriculum meets the minimum requirements of the Council on Medical Education of the American Medical Association for admission to approved schools of dentistry.

Curriculum.

FRESHMAN YEAR	Quarter			SOPHOMORE YEAR	Quarter		
<i>Name of Courses</i>	<i>Hours Credit</i>			<i>Name of Courses</i>	<i>Hours Credit</i>		
	I	II	III		I	II	III
Chemistry 111-2-3	4	4	4	Chemistry 311-2-3	4	4	4
Zoology 101-2-3	4	4	4	Physics 211-2-3	4	4	4
English 101-2-3	3	3	3	Economics 211-2-3	(3)	(3)	(3)
Mathematics 151-2-3.....	3	3	3	Economics 211-2-3	3	3	3
French 101-2-3 or Social Science	3	3	3	Physical Ed. 201-2-3.....	1	1	1
Physical Ed. 101-2-3.....	1	1	1	French 201-2-3 or Sociol- ogy 211-2-3	3	3	3
	—	—	—	Psychology 211-2-3	3	3	3
	18	18	18		—	—	—
					18	18	18
					Or		
					19	19	19

Science-Dental Curriculum

This curriculum required four years of study. The first part of the curriculum is taken at Tennessee A. and I. State College. The course of study is as follows:

Curriculum

FRESHMAN YEAR	Quarter			SOPHOMORE YEAR	Quarter		
<i>Name of Courses</i>	<i>Hours Credit</i>			<i>Name of Courses</i>	<i>Hours Credit</i>		
	I	II	III		I	II	III
Chemistry 111-2-3	4	4	4	Physics 211-2-3	4	4	4
Zoology 101-2-3	3	3	3	Chemistry 311-2-3	4	4	4
English 101-2-3	3	3	3	Zoology 332-3; Bacteri- ology 241	4	4	4
French or German	3	3	3	French or German	3	3	3
Mathematics 151-2-3	3	3	3	Psychology 211-2-3	3	3	3
Physical Education	1	1	1	Physical Ed. 201-2-3.....	1	1	1
	—	—	—		—	—	—
	18	18	18		19	19	19

The second part of the curriculum is taken during the first two years in the School of Dentistry at the Meharry Medical College. Upon successful completion of the prescribed courses at Tennessee A and I State College and Meharry Medical College the student becomes a candidate for the Bachelor of Science degree. The degree will be awarded at the Tennessee A and I State College with the approval of the two participating institutions.

Art-Dental Curriculum

The first three years of this curriculum are identical to the first three years of the Art-Medical Curriculum and are offered at Tennessee A and I State College.

The second part of the Art-Dental Curriculum is given at Meharry Medical College. Upon successful completion of the first year of Dentistry, the student becomes a candidate for the Bachelor of Arts degree; and, with the approval of the two institutions, is awarded that degree at Tennessee A and I State College.

PRELIMINARY STUDY OF NURSING

Pre-Nursing Curriculum

The Pre-Nursing Curriculum offers the necessary work to preparation for entrance into approved schools of nursing. A student after having successfully completed this curriculum is prepared to enter nurse training leading to a diploma or the Bachelor of Science Degree in Nursing. The curriculum is composed of the following courses:

FRESHMAN YEAR	Quarter			SOPHOMORE YEAR	Quarter		
	Hour Credits				Hour Credits		
	I	II	III		I	II	III
Chemistry 101-2-3	4	4	4	Chemistry 311-2-3 or			
Zoology 101-2-3	4	4	4	Physics 211-2-3	4	4	4
English 101-2-3	3	3	3	History 201-2-3	3	3	3
Mathematics 151-2-3	3	3	3	Sociology 211-2-3	3	3	3
Physical Education 101-2-3	1	1	1	Psychology 211-2-3	3	3	3
Social Science	3	3	3	Physical Education 201-2-3	1	1	1
	—	—	—	Economics 211-2-3	3	3	3
	18	18	18		—	—	—
					17	17	17

Science-Nursing Curriculum

The Science-Nursing Curriculum is divided into two parts. The first part requires two years of preliminary study at the Tennessee A. & I. State College.

Pre-Nursing Curriculum

FRESHMAN YEAR	SOPHOMORE YEAR
English	Psychology
Zoology	Sociology
History, Economics, or Mathematics	Chemistry or Physics
Electives	Electives
Physical Education	Physical Education
	48 or 51
	48 or 51

The second part of this curriculum is offered in the School of Nursing at the Meharry Medical College. Upon the successful completion of the prescribed curriculum in Nurse training at Meharry Medical College, the student becomes candidate for the Bachelor of Science degree; and, with the approval of the two institutions, the degree is awarded at Tennessee A and I State College.

CLINICAL LABORATORY TECHNOLOGY CURRICULUM

(Leading to the B.S. degree in Clinical Laboratory Technology)

Clinical Laboratory Technology Curriculum

The first two years of this curriculum are given at the Tennessee A. & I. State College.

FRESHMAN YEAR	SOPHOMORE YEAR
English 101-2-3	Chemistry 311-2-3
Zoology 101-2-3	Physics 211-2-3
Chemistry 101-2-3	Bacteriology 241-2
Mathematics 151-2-3	English 201-2-3
Art 101	Social Science or
French or German	Social Science or Education or
Physical Education	French or German
	Physical Education
57	—
	53

The second part of this curriculum is offered at the Meharry Medical College. Upon the completion of the two-year course in Clinical Laboratory Technology at Meharry Medical College with the approval of the two institutions, the degree Bachelor of Science will be awarded at Tennessee A and I State College.

THE GRADUATE DIVISION

ADMISSION TO THE GRADUATE DIVISION

Graduates of A. and I State College and of other recognized institutions doing similar work are eligible for admission to the Graduate Division. An applicant who is not a graduate of A. and I. State College must submit complete official transcripts of all previous college work.

The faculty of the Graduate Division is composed of members of the teaching staff who offer courses designed as being primarily for graduate students. Such persons hold at least the academic rank of associate professor.

ADMISSION TO CANDIDACY FOR A MASTER'S DEGREE

Admission to the courses given in the Graduate Division does not necessarily mean that a student will become a candidate for an advanced degree. Some students may desire to take work in the Graduate Division that is not intended to fulfill requirements for an advanced degree. If a student is not prepared to take graduate work at once, he may pursue the undergraduate courses best adapted to fit him for the advanced work, but such courses will not, of course, be credited toward a Master's degree. Admission to candidacy for a Master's degree is dependent upon (1) approval by the Committee on Graduate Study of the student's general undergraduate training as shown by an official transcript, (2) certification by the professors in charge of the major and minor subject that the student has sufficient prerequisites for the proposed graduate courses, (3) approval by the Committee on Graduate Study of the graduate program as outlined by the student after conference with the professors in charge of his major and minor subject, (4) certification by the professors in charge of the student's graduate work that he has demonstrated satisfactorily his ability to do work of graduate character, and (5) attainment of a B average by the end of the second quarter or twenty-four hours of formal classwork (6) a satisfactory score on the Graduate Record Examination. Application for admission to candidacy for a particular degree must be made not later than the first week of the third quarter preceding the date on which the degree is to be conferred. Action upon this application will not be taken until the student has completed two quarters (twenty-four hours) of resident study. In case a student fails to qualify for candidacy under conditions (5) above, he will be placed permanently on the list of those not seeking an advanced degree.

DEGREES CONFERRED

The degree of Master of Arts is conferred upon students who major in liberal arts subjects such as Economics, English, Foreign Languages, History and Social Science. The degree of Master of Science is conferred upon students who major in Agricultural subjects, Biology, Business Education, Education, Industrial Education, Home Economics, Mathematics, Physical Education and Health, and Physical Science. The degree of Master of Education is conferred upon students who major in Education.

THE THESIS

All candidates for a Master's degree are required to write a thesis which must show scholarly attainment and an ability to do independent research. The credit for the thesis, toward the completion of the forty-five quarter hours required for the degree, shall not exceed nine quarter hours. A thesis seminar will be offered in each of the Divisions of the College to acquaint students with research problems, techniques and acceptable methods to be used in preparing the thesis.

The title of the thesis shall be submitted to the Committee on Graduate Study not later than six weeks after the student has begun graduate work. However, on the written recommendation of the professor in charge of the major subject, the selection of a subject and work on a thesis may be postponed until such a time as the student, in the judgment of the professor, shall be qualified to proceed with the thesis. Four copies of the completed thesis and abstract shall be submitted by the student to the Dean of the College at least three weeks before the date on which the degree is to be awarded. They must be typewritten, on paper of approved quality, in final form, and ready for binding.

EXAMINATIONS

It should be clearly understood that the requirements for a Master's degree are not to be measured solely in terms of accumulated credits. A candidate for a Master's degree is expected to acquire such a mastery of a particular field of knowledge as may reasonably be expected of an adequately prepared student who has devoted three quarters of full-time study to that field. He will be expected also to have developed a spirit of sound scholarship and powers of independent, scientific research. Accordingly, each candidate must pass, not later than three weeks before the day on which he expects to receive the degree, a general oral examination. This examination will cover the general field of his major work, his thesis, and his major and minor courses. The examination will be conducted by a committee of not less than three members of the faculty, appointed by the Dean of the College. The dates for the examinations will be announced publicly and members of the Committee on Graduate Study and members of the College faculty may attend. When necessary, a written examination may be substituted for the oral examination. In case of failure the candidate may not appear for re-examination until approximately one quarter has elapsed. The result of the second examination is final.

GRADUATES

JUNE, 1947

IN THE DIVISION OF AGRICULTURE

With the degree of Bachelor of Science in Agriculture

EXZENE ELIZABETH BYNUM, of Nashville
 THOMAS W. FLOWERS, of Dickson
 WILLIAM EDDIE HUBBARD, of Shelby
 JOHN WILLIAM HUMPHREY, of Brownsboro, Alabama
 TALMADGE T. MITCHELL, of Hampton, Virginia

IN THE DIVISION OF BUSINESS

With the Degree of Bachelor of Science

EVELYN CORNELIA BOYKIN, of Chattanooga (Business Education)
 RUTH EVELYN RAMSEY BRAYBOY, of Nashville (Business Education)
 WILLIAM A. BURNETT, JR., of Milan (Business Administration)
 GENEVA M. CLAYBOURNE, of Shelbyville (Business Education)
 IONA EARLINE CRAWFORD, of Nashville (Business Education)
 EMMA LEE CROFT, of Chattanooga (Business Education)
 With Distinction
 MARY INEZ CRUTCHFIELD, of Watertown (Business Administration)
 With Distinction
 OBEIDA CUNNINGHAM, of Memphis (Business Education)
 BENJAMIN H. EDWARDS, of Nashville (Business Administration)
 IRENE FRANCES GARRETT, of Clarksville (Business Education)
 WALTER W. GIBSON, of Chicago (Business Administration)
 FRED L. GOODWIN, of Memphis (Business Administration)
 MARGUERITE GOREE, of Chattanooga (Business Administration)
 KATHRYN JACQUELYN GUION, of Miami, Fla. (Business Education)
 LORRAINE OCTAVIA HARRISON, of Knoxville (Business Education)
 MARGUERITE W. HAYNES, of Cowan (Business Education)
 ALZTA C. HENRY, of Louisville (Business Administration)
 ADDIE LEE JACKSON, of Nashville (Business Education)
 MABEL J. WILLIAMS JENKINS, of Jackson (Business Administration)
 MILDRED ARONEL JOYNER, of Nashville (Business Education)
 DORIS WILLIA MAE KIMBLE, of Baton Rouge, Louisiana (Bus. Ed.)
 MARTHA E. KINNEBREW, of St. Louis, Missouri (Business Education)
 With Distinction
 CALLIE MADELINE LENTZ, of Nashville (Business Education)
 With Distinction
 WILMA BERNICE LIGGETT, of Nashville (Business Education)
 DOROTHY M. MCKEE, of Birmingham, Alabama (Business Education)
 With Distinction

ERNEST LEE MCKINNEY, of Johnson City (Business Administration)
 With Distinction
 CATHYNE ANNIE MOODY, of Trenton, Kentucky (Business Education)
 MAGNOLIA CLEOPATRA MURRAY, of Ripley (Business Education)
 VARON E. OWENS, of Jackson, Mississippi (Business Administration)
 NELLIE MAI PATTON, of Nashville (Business Education)
 ODESSA LEON PERRY, of Birmingham, Alabama (Business Education)
 DONIA LOUISE PREWITT, of Aberdeen, Mississippi (Business Education)
 CATHERINE FRANCES RAY, of Union Springs, Alabama (Business Administration)
 ODIESTINE RAYBORN, of Murfreesboro (Business Administration)
 TOMMY LOUISE SCOTT, of Nashville (Business Administration)
 MAJOR SKEENS, of Nashville (Business Administration)
 FRANCES MACEL SMITH, of Nashville (Business Education)
 With Distinction
 HELEN ALICIA TUCKER, of Chattanooga (Business Education)
 With Distinction
 RICHIE VERA TURPIN, of Tuskegee, Alabama (Business Administration)
 EMMA MILDRED TURRENTINE, of Murfreesboro (Business Administration)
 LUCILE WILLIAMS, of Nashville (Business Education)

IN THE DIVISION OF EDUCATION

With the Degree of Bachelor of Science

VESTA JEAN BARNETT, of Toledo, Ohio (Elementary Education)
 ELIA MAE BLAKE, of Fayetteville (Elementary Education)
 ELZE EUGENE BOGAN, of Morris Chapel (Elementary Education)
 ZILPHIA COOK BOWMAN, of Clarksville (Elementary Education)
 DOROTHY DEAN BUTTS, of Bowling Green, Kentucky (Elementary
 Education)
 ELLIOTT ALLISON CALDWELL, of Nashville (Art)
 FRANCES VIOLA CAMPBELL, of Franklin (Elementary Education)
 ETRULIA PAULINE CUNNINGHAM, of Asheville, North Carolina (Music and Art)
 LEORA EARLY, of Nashville (Elementary Education)
 GERALDINE ANITA FERGUSON, of Athens (Elementary Education)
 ETHELYNE FERRELL, of Cowan (Elementary Education)
 DOROTHY ELIZABETH FLUDD, of Nashville (Elementary Education)
 LAURA LEONA FRAZIER, of Louisville, Kentucky (Elementary Educ)
 MARTHA ANN GREENE, of Columbia (Elementary Education)
 ETTA MAE GRIFFIN, of Chattanooga (Elementary Education)
 THELMA HAWKINS, of Nashville (Elementary Education)
 GERALDINE C. WOODS-HOFFMAN, of Nashville (Music and Fine Arts)
 DOROTHY MAXINE JACKSON, of Shreveport, Louisiana (Music and Art)
 LUCY ELIZABETH JENKINS, of Clarksville (Elementary Education)
 SARAH CECELIA JORDAN, of Huntington (Elementary Education)
 MARION ELIZABETH KNOX, of Chattanooga (Elementary Education)
 AUDRA LANE, of Memphis (Music)
 With Distinction

CLARA BELLE McADAMS, of Nashville (Health and Physical Education)
 LURLIE McCULLOUGH McCAIN, of McKenzie (Elementary Education)
 BEATRYCE MAYBERRY, of Centerville (Elementary Education)
 LUCY S. MAYS, of Murfreesboro (Elementary Education)
 EDNA WAYNE WALKER MOSS, of Jackson (Music)
 JOHNNIE MAI MUMPHREY, of Nashville (Elementary Education)
 OTIE MARY BAXTER OFFICER, of Savannah (Elementary Education)
 With Distinction

LUCILLE LOIS RHINE, of Memphis (Secondary Education)
 LAWRENCE EUGENE SIMMONS, of Nashville (Physical Education)
 JOHN LUTTRELL SLAUGHTER, of Nashville (Elementary Education)
 KATHERINE MARAGREE SMITH, of Huntingdon (Elementary Education)
 GERALDINE IVA SPRIGGS, of Cleveland (Elementary Education)
 LEAH ELIZABETH STOCKARD, of Nashville (Elementary Education)
 KNOX JONES TUCKER, of Nashville (Health and Physical Education)
 BEULAH FRANCES WILSON, of Nashville (Elementary Education)
 With Distinction

NETTIE LAVINA DUMAS, of Nashville
 BARBARA LAVERNE EDDINS, of Memphis
 IRIS ELOISE EVERETT, of Nashville
 LENA PEARL GRAVES, of Nashville
 ALMA REE HARMON, of Lexington
 HELEN LORETTA HOLMES, of Memphis
 MARY LOUISE HOPKINS, of Henderson
 EZELE LUCILLE JACKSON, of Bigstone Gap, Virginia
 LILLIE BELLE JOHNSON, of Memphis
 With Distinction

EULA LAVERNE KING, of Nashville
 ETHEL VERNONIA MURRELL, of Oakland
 IDA BELLE NABRITT, of Memphis
 With Distinction
 MINERVA NORMENT, of Whiteville
 ADDIE MARYLINDA PRIMM, of Nashville
 HAZEL JUANITA RYAN, of Mason
 LENORA VIOLA SAMUEL, of Shreveport, Louisiana
 MARGARET ANN SEAY, of Nashville
 HILDA PORTER TRAVIS, of Paris

IN THE DIVISION OF HUMANITIES

With the Degree of Bachelor of Arts

ADA FRANCES DOTSON, of Nashville (French)
 ARLETTE ANTHONY HARKINS, of Nashville (French)
 KATHRYNE PARRISH, of Franklin (English)
 ARTHUR ARDENIA RAMBEAU, of Nashville (French)
 With Distinction
 EDWINA LEONA WELLS, of Nashville (English)

GRANVILLE MORGAN SAWYER, of Austin, Texas (Speech and English)
 With Distinction
 REBECCA ELMARIE WILLIAMSON, of Jackson (English)

With the Degree of Bachelor of Science

LAURA MAI DEADERICK, of Nashville (English)
 JULIUS ELBERT HIGGINS, JR., of East St. Louis, Ill. (English)
 SIDNEY LANIER, of Dickson (English)
 RUTH ALVA SHARP, of Sweetwater (English)
 HELEN MAE WASHINGTON, of Nashville (English)

IN THE DIVISION OF POLITICAL AND SOCIAL SCIENCE

With the Degree of Bachelor of Science

GEORGIA SOPHRONIA COLEMAN, of Chattanooga (Political Science)
 LUCY MAE DOVE, of Fernandina, Florida (Sociology)

IN THE DIVISION OF SCIENCE

With the Degree of Bachelor of Science

WILLIAM CLAUDIA BISHOP, of Greenwood, Mississippi (Chemistry)
 With Distinction
 HOWARD M. DRIVER, of Pulaski (Mathematics)
 With Distinction
 JOHN ALLEN GREGORY, of Detroit (Biology)
 SAMUEL HUGHES GREGORY, of Detroit (Natural Science)
 SAMUEL MELVIN HAYDEN, of Nashville (Natural Science)
 MAURICE B. HICKMAN, of Los Angeles (Pre-Medic)
 HENRY ALLEN McCLARON, of Nashville (Biology)
 WILLIAM A. McKISSACK, JR., of Gallatin, (Pre-Medic)
 With Distinction
 FULTON R. STOCKELL, JR., of Louisville, Kentucky (Biology)
 JOSEPH THOMAS, of Gadsden, Alabama (Chemistry)
 JANET MARIE WILSON, of Pulaski (Elementary Education)
 EULA DEAN WITCHER, of Cedartown, Georgia (Elementary Education)
 JEANETTE IRENE YOUNG, of Nashville (Elementary Education)

IN THE DIVISION OF ENGINEERING AND INDUSTRIAL EDUCATION

With the Degree of Bachelor of Science

JAMES MAJOR BELLE, of Normal, Alabama (Industrial Education)
 WILLIE L. HARLEY, of Nashville (Industrial Education)
 DAVID ELLIOTT ULMER, of Laurel, Mississippi (Industrial Education)

IN THE DIVISION OF HISTORY AND GEOGRAPHY

With the Degree of Bachelor of Arts

BENNIE MICHAEL BATTS, of Grand Rapids, Michigan
 FLORA ESTABELLE BOWEN, of Clarksville
 MARY ELIZA COSBY, of Nashville
 LATISHA HARVEY, of Oxford, Mississippi
 DAISY KATHRYN MCGILL, of Nashville
 ALVIN J. McNEIL, of Jackson, Mississippi
 With Distinction
 MARTHA LORAIN NICHOLS, of Jackson
 GWENDOLYN GOODEN PAGE, of Nashville
 CHARLES JAMES SMITH, III, of Hampton Institute, Va.

With the Degree of Bachelor of Science

GLENN WAGNER ATKINS, of Martin
 SOPHIA MAE BARNER, of Nashville
 JAMES HOUSTON CALDWELL, of Nashville
 LAURETTA GLORIA CANTRELL, of Hammond, Indiana
 WILLIAM PINCKNEY FALLS, of Mt. Mourne, North Carolina
 VERA FOWLER, of Southbend, Indiana
 JERRY GORDON HUGHES, of Nashville
 MONROE EMERSON LANE, of Mansfield, Louisiana
 ROBERT EUGENE PINCHAM, of Athens, Alabama
 FRANCES LEVONZELL PRICE, of Memphis
 JOHN HILL RANDLE, of Hendersonville
 LILA VIVIAN REID, of Chattanooga
 JESSE WILLIAM SCOTT, of Newbern
 ANNIE BELLE EVANS SMITH, of Nashville
 BEATRICE SARRAH SMITH, of Nashville
 WALTER RUFUS TEASE, of Nashville
 ALBERT UMPHREY, of Indianapolis, Indiana
 WILLIA MAE WASHINGTON, of Birmingham, Alabama
 WALTER WEST, of Memphis

IN THE DIVISION OF HOME ECONOMICS

With the Degree of Bachelor of Science

MILDRED AMELIA BAILEY, of Nashville
 LILLIE B. BREWSTER, of Chattanooga
 NELDA RUTH CLARK, of Jackson, Mississippi
 MAYME LOIS CURTIS, of Alton, Illinois
 ELLIE JEWELL DAVIS, of Rose Hill, Mississippi
 MARY HENRIETTA DOTSON, of Nashville
 QUINCE ANN DOTSON, of Brownsville

GRADUATES

AUGUST, 1947

IN THE GRADUATE DIVISION

With the Degree of Master of Science

- VIVIAN Y. BROOKS, (B.S., A. and I. State College, 1939) of Warrenton, Georgia
 Major: Home Economics. Thesis: "Analysis of Complexion Tones as an aid in Clothing Selection."
 HAZO WILLIAM CARTER, (B.S., A. and I. State College, 1943) of Nashville.
 Major: Agronomy. Thesis: "The Effect of Varying the Phosphorous Content of Commercial Fertilizer for Certain Garden Crops in the A. & I. College Garden for 1947."
 HARRY T. CASH, (B.S., LeMoyne College, 1937) of Memphis.
 Major: Education. Thesis: "A Descriptive Study of Methods and Procedures Used in Teaching Illiterates by the Army Throughout the Several Special Training Units with Special Reference to Fort Benning, Georgia."
 OPHELIA COPE DANIELS, (A.B., Johnson C. Smith University, 1940) of Johnson City.
 Major: The Teaching of History. Thesis: "The Formative Years of Johnson City, Tennessee, 1885-1900—A Social History."
 HENRY L. HARDISON, (B.S., A. and I. State College, 1946) of Columbia.
 Major: Education. Thesis: "A Study of the Academic Failures of Veterans at Tennessee A. and I. State College."
 LAVERNE H. HOLLAND, (B.S., Samuel Huston College, 1939) of Nashville.
 Major: Education. Thesis: "A Study of the Results and Implications of the Chemistry Tests Given Freshmen at Tennessee A. and I. State College."
 RUTH DUVAL MCALPIN, (B.S., A. and I. State College, 1940) of Nashville
 Major: The Teaching of English. Thesis: "An Analysis of the Introductory Literature Course in Twenty-Two Representative Negro Colleges."
 VERNON E. MCCAIN, (B.S., Langston University, 1931) of Nashville
 Major: Education. Thesis: "A Study of the Status of the Negro High School Athletic Coaches of Oklahoma."
 HARRY MAE SIMONS, (A.B., LeMoyne College, 1932) of Memphis
 Major: Education. Thesis: "A Study of Health Services Available to the Negro Public School Children of Memphis, Tennessee."
 FRED E. WESTBROOKS, (B.S., A. and I. State College, 1946) of Brunswick
 Major: Agronomy. Thesis: "The Comparative Base Exchange Capacity of Soils on A. and I. State College Farm."

IN THE DIVISION OF AGRICULTURE

With the Degree of Bachelor of Science in Agriculture

DONALD K. BENTLEY, of Nashville
 BENJAMIN DONELL CRAIN, of Franklinton, Louisiana
 KEY HOLLAND, of Hartsville
 MARVELL SNEED, of Collierville
 JAMES WILLIAMSON, of Denmark
 MOSES E. WOODS, of Whiteville

IN THE DIVISION OF BUSINESS

With the Degree of Bachelor of Science in Business

JOLA BROWNING, of Humboldt (Business Education)
 DOROTHY A. JOHNSON, of Daytona Beach, Florida (Business Education)
 ELIZABETH M. KING, of Nashville (Business Education)
 MARTHA M. LIGON, of Nashville (Business Education)
 ROSE M. MOORE, of Mobile, Alabama (Business Education)
 CLARA LUCILLE PEGRAM, of Nashville (Business Education)
 HELEN L. PORTER, of Dickson (Business Education)
 LUCILLE ROBERTS, of Memphis (Business Education)
 MILDRED SANFORD, of Quincy, Florida (Business Education)
 EUGENE W. WASHINGTON, of Memphis (Business Administration)
 SERAPHINE WILLIAMS, of Nashville (Business Education)

IN THE DIVISION OF EDUCATION

With the Degree of Bachelor of Science in Education

MYRTLE BAKER, of Gallatin (Elementary Education)
 LEONELL BUSBY BALLOON, of Highland Park, Michigan (Elementary Education)
 BARBARA BARNES, of Nashville (Health and Physical Education)
 CONSTANCE BELL, of Nashville (Elementary Education)
 ETHEL JAMES BOSWELL, of Nashville (Elementary Education)
 With Distinction
 WILLA MAE COATES, of Kansas City, Kansas (Elementary Education)
 With Distinction
 DOROTHY N. DEWEES, of Nashville (Health and Physical Education)
 IRENE L. FLIPPEN, of Nashville (Elementary Education)
 ANNIE LOUISE GIBSON, of Cincinnati, Ohio (Health and Physical Education)
 BLOOMIE DAVIS GORE, of Ripley (Elementary Education)
 GLADEYS PERRY HALE, of Johnson City (Elementary Education)
 MATTIE B. HATCHER, of Lewisburg (Elementary Education)
 SATIE WILLIAMS JONES, of Murfreesboro (Elementary Education)
 With Distinction
 THOMAS H. JONES, of Columbia (Elementary Education)
 MAE ETTA McCAIN, of Nashville (Elementary Education)

GERALDINE NESBITT, of Nashville (Elementary Education)
 HELEN L. PRUITT, of Dickson (Elementary Education)
 PEARL SANDERS, of Union City (Elementary Education)
 DOROTHY M. SIMON, of Shreveport, Louisiana (Health and Physical Education)
 JULIA SMITH, of *Huntingdon* (Health and Physical Education)
 MARGOREE C. WILLIAMSON, of Ripley (Elementary Education)

IN THE DIVISION OF ENGINEERING

With the Degree of Bachelor of Science in Industrial Education

LAVERNE EUGENE CRAWFORD, of East St. Louis, Illinois
 HENDERSON MASSEY, of Nashville
 THOMAS L. WILLIAMS, of Chattanooga
 PHILMON H. WOODARD, of Nashville

IN THE DIVISION OF HISTORY AND GEOGRAPHY

With the Degree of Bachelor of Arts

CATHERINE L. DORSEY, of Nashville (History)
 With the Degree of Bachelor of Science
 FRANK H. BLEVINS, of Selma, Alabama (History)
 RAYMOND E. GAINES, of South Pittsburg (History)
 ALPHONSO H. HARRIS, of Wartrace (History)
 OLLIE B. JOHNSON, of Memphis (History)
 JOHN W. STEPHENS, of Memphis (History)
 ELIZABETH WATSON, of Memphis (History)
 ALEXSYNE WORKE, of Nashville (History)

IN THE DIVISION OF HOME ECONOMICS

With the Degree of Bachelor of Science

SUSIE AVENT, of Murfreesboro
 ONETHA BATES, of Birmingham, Alabama
 LILLIE BELLE BREWSTER, of Knoxville
 JOYCE LAVERNE CHAMBERS, of Knoxville
 LUEIZA DAY, of Mercer
 AUDREY B. DOUGLAS, of Nashville
 ELEANOR L. GRAY, of Cowan
 VIRGINIA B. HEARD, of Nashville
 SARAH J. HILL, of Nashville
 CARRIE JOHNSON, of Murfreesboro
 ROSA V. MCKISSICK, of Spring Hill
 ESTHER LOUTRELL MORTON, of Nashville
 THELMA M. NICHOLSON, of Columbia

MYRTLE PITT, of Cedar Hill
 MARY BELLE PRICE, of Limestone
 ALBERTA N. REID, of Thomasville, Georgia
 PEARLENE STEWART, of Birmingham, Alabama

IN THE DIVISION OF HUMANITIES
 With the Degree of Bachelor of Arts

LOIS REID FLAGG, of Brownsville (English)
 With the Degree of Bachelor of Science
 LENA PEARL FARRELL, of Mount Pleasant (English)
 JOSEPH HENRY HARDEN, of Rome, Georgia (English)
 With Distinction

IN THE DIVISION OF POLITICAL AND SOCIAL SCIENCE
 With the Degree of Bachelor of Science

WERTIE MAE JOHNSON, of Nashville (Sociology)
 EUGENIA P. TURNER, of Nashville (Sociology)
 With the Degree of Bachelor of Arts
 WILLIAM A. McALLISTER, of St. Louis, Missouri (Sociology)
 With Distinction

IN THE DIVISION OF SCIENCE
 With the Degree of Bachelor of Science

EUGENE P. CARUTHERS, of Nashville (Natural Science)
 YANCEY F. GRIGGS, of Warren, Ohio (Chemistry)
 With Distinction
 ARTHUR E. HORNE, of Memphis (Natural Science)
 FINLEY D. JORDAN, of Nashville (Biology)
 THERON W. NORTHCROSS, of Memphis (Biology)
 With Distinction
 WILLIAM J. POLK, of Nashville (Biology)
 FRANK E. THOMAS, of Nashville (Natural Science)
 WILLIAM C. TURNER, of East St. Louis, Illinois (Science)
 ISAAC WATSON, of Memphis, (Natural Science)

AWARDS AND SCHOLARSHIPS

DEAN'S AWARD IN EDUCATIONAL RESEARCH:
 ALMA O. COPE-DANIELS, Johnson City
Honorable Mention: VIVIAN Y. BROOKS, Nashville

YEARLY SUMMARY 1947-48

DIVISION	Grad		Senior		Junior		Sophomore		Freshman		Uncl		Special		Sp-Tr		Total		Grand Total	Percentage
	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W		
Agriculture.....	31	0	26	0	37	1	63	0	55	0	14	0	10	1	0	0	236	2	238	6.28
Business Administration and Education.....	2	4	16	64	36	82	63	65	109	142	32	18	9	6	0	0	267	381	648	17.10
Education Art.....	0	0	0	0	1	0	1	1	5	2	0	0	2	1	1	0	10	4	14	.37
Education and Psychology.....	48	51	4	3	4	15	6	12	7	8	2	19	21	22	0	0	92	130	222	5.86
Elementary Education.....	4	20	5	81	12	123	8	88	17	80	2	32	1	11	0	0	49	435	484	12.77
Music.....	0	0	1	3	4	2	11	10	14	9	4	0	3	0	0	0	37	24	61	1.61
Health and Physical Education.....	5	1	5	13	25	15	36	18	58	19	23	2	3	1	0	0	155	69	224	5.91
Total Education.....	57	72	15	100	46	155	62	119	101	118	31	53	30	35	1	0	343	662	1005	26.62
Engineering General Engineering.....	14	0	14	0	22	0	39	0	65	0	22	1	9	2	0	0	185	3	188	4.96
Trades.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	288	1	289	7.63
Total Engineering.....	14	0	14	0	22	0	39	0	65	0	22	1	9	2	0	0	473	4	477	12.69
History and Geography.....	5	8	20	20	35	11	49	17	60	20	10	4	2	2	0	0	181	82	263	6.94
Home Economics.....	0	26	0	53	0	57	0	65	0	73	0	15	0	5	0	0	0	204	204	7.76
Humanities English.....	4	15	5	11	3	17	4	14	5	14	1	6	7	6	0	0	29	83	112	2.96
Foreign Languages.....	0	0	0	2	0	1	1	2	4	5	0	0	2	0	0	0	7	10	17	.45
Speech and Drama.....	0	0	0	1	2	1	0	1	4	0	1	0	0	0	0	0	7	3	10	.26
Total Humanities.....	4	15	5	14	5	19	5	17	13	19	2	6	9	6	0	0	43	96	139	3.67

Political and Social Science.....	3	5	3	11	16	26	18	25	26	31	6	3	1	1	0	0	73	102	175	4.02
Science	3	1	12	4	11	9	8	7	7	2	4	2	2	1	0	0	47	26	73	1.93
Biology.....	1	1	2	1	4	2	6	4	9	3	0	2	4	1	0	0	26	14	40	1.06
Chemistry.....	2	1	10	0	3	0	3	2	7	0	2	1	4	1	0	0	31	5	36	.95
General Science.....	0	0	0	1	0	0	5	1	3	0	1	0	0	0	0	0	9	2	11	.29
Lab Technology.....	2	0	4	5	5	3	7	0	11	4	4	2	1	3	0	0	34	17	51	1.35
Math.....	0	0	2	0	6	0	17	2	43	1	12	1	7	0	0	0	87	4	91	2.40
Pre-Dental.....	1	0	5	1	17	0	40	6	98	6	19	0	9	0	0	0	189	13	202	5.33
Pre-Medical.....	0	0	0	0	0	1	0	9	1	31	0	0	0	4	0	0	1	45	4	1.21
Pre-Nursing.....	9	3	35	12	46	15	86	31	179	47	42	8	27	10	0	0	424	126	556	14.52
Total Science.....	125	133	134	274	243	366	385	349	608	450	159	108	97	68	289	1	2040	1749	3789	100.00
TOTAL.....																				

Less Counted twice.....

452 223 675

1588 1526 3114

Date_____

Application for
R E - E N T R A N C E
to
Tennessee A. and I. State College

19_____

1. Check Quarter () Fall () Winter () Spring () Summer I; Summer II
2. If veteran, check status: P. L. 346 () ; P. L. 16 () ; Rehabilitation ()
3. Name _____ Sex _____
Last First Other
4. Home address _____
Street and number or R F D
5. _____
City State County
6. Occupation _____ Married _____ Single _____
7. Residence status desired: Campus () City ()
8. I withdrew for the reason that _____

9. Dates last in attendance _____
10. Classification _____
11. Name of Major Adviser _____
12. Major _____ in Division _____
13. List schools attended since you were last in attendance here.
Name of School Location Attendance Dates
_____ 19__ to 19__
_____ 19__ to 19__
_____ 19__ to 19__
14. Have you filed with us transcripts of your record at the school you last attended?
_____ Date filed _____
(See below items 20 and 21)
15. Have you ever requested of us issue of a transcript of your record? _____
State approximate date _____
16. How long do you plan to continue residence? _____
17. Are you wholly responsible for all of your financial support? _____
18. Do you plan to earn of your expenses while in attendance? _____
How? _____
19. Do you plan to become a candidate for a degree? _____

20. This applicant must receive notice of approval and acceptance before coming. All high school and college transcripts must be on file in the Registrar's Office before approval and acceptance.

21. This application will be acted upon by the Committee on Admission, ONLY when your official transcript has reached this office. You should request your school to send us your transcript immediately.

22. Approved by _____ Date _____ Date to report
 Registrar _____
 for registration _____

Do Not Write Below This Line

Committee Reaction

Clip a small un-
 mounted photograph
 here. It is a necessary
 part of your applica-
 tion.

TENNESSEE A. & I. STATE COLLEGE
 OFFICE OF VETERANS' AFFAIRS
 NASHVILLE 8, TENNESSEE
 VETERANS' APPLICATION FORM

Appl. recd. _____
 by mail _____
 in person _____
 Date _____
 Decision _____

Full Name _____
 Last First Middle Sex

New Student _____ Former student _____ Date of last attendance at Tenn. State _____

Permanent address _____
 Street City and zone State

Birth date _____ Marital status: Single _____ Married _____
 Divorced _____ Dependents _____

War Service Record:

From	Date To	Branch of Service	Rating	Theatre of Operation	Decoration or Citations

Educational Record: _____ Circle highest grade completed
 In elementary and secondary In college Graduate work
 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 1 2 3 4

Name the last elementary school, secondary school, or college attended
 Name of school City and zone State

What course did you take _____ Date of leaving _____
 You should request that the Registrar at the last school attended, forward to the Office of the Registrar, Tennessee State College, a transcript of previous scholastic records.

If admitted, in what Division would you desire to be enrolled ?

- | | |
|---|----------------------------------|
| 1. Agriculture _____ () | 6. Home Economics _____ () |
| 2. Business Administration _____ () | 7. Humanities _____ () |
| 3. Education _____ () | a. English _____ () |
| a. Elementary _____ () | b. Romance Languages _____ () |
| b. Secondary _____ () | c. Speech and Drama _____ () |
| c. Health & Phys. Ed. _____ () | 8. Science _____ () |
| 4. Industrial Ed. & Phys. Ed. _____ () | a. Biology _____ () |
| 5. Vocational Trades* _____ () | b. Chemistry _____ () |
| a. Auto Mechanics _____ () | c. Mathematics _____ () |
| b. General Woodwork _____ () | d. Physics _____ () |
| c. Brick and Stone Masonry _____ () | e. Pre-Medical _____ () |
| d. Plumbing _____ () | f. Pre-Dental _____ () |
| e. Electricity _____ () | g. Pre-Nursing _____ () |
| f. Drafting _____ () | h. Clinical Lab. Tech. _____ () |
| g. Machine Shop Practice _____ () | 9. Graduate _____ () |
| h. Arc Elec. Welding _____ () | a. Education _____ () |
| i. Sheet Metal _____ () | b. Agriculture _____ () |
| j. Painting & Decoration _____ () | c. Liberal Arts _____ () |
| | d. Business Education _____ () |

*Veterans who have not completed high school are eligible to enroll in Vocational Trade courses not leading to a degree.

Geometry—Solid										
Trigonometry										
Music										
Physical Training										
Sciences										
Biology										
Botany										
Chemistry-Recitation										
Chemistry—Lab.										
General Science										
Geography										
Physics—Recitation										
Commercial Bookkeeping										
Shorthand										
Typewriting										
Domestic Art										
Domestic Science										
Manual Arts										
Manual Training										
Other subjects										

		Approved Subjects	Required Units	Elective Units
Vocational Work				
Languages				
		English -----	4	
		Foreign -----		4
Mathematics				
		Algebra -----	1	1
		Plane Geometry -----	1	
		Solid Geometry -----		½
		Music -----		1
Sciences				
		Any (with Laboratory) -----	1	3
Social Sciences				
		American History -----	1	
		Any Other -----		3
		Home Economics (for Girls) -----	1	2
		All Other Work -----		3
		Maximum Totals -----	9	8

Passing grade in school----- Grade required for recommendation to College ----- Length of Recitation Period ----- Minutes. Mark (L) any subject occupying double periods. Please fill out the blank completely, using typewriter if convenient. Do not fail to state the Department of the College the applicant wishes to enter. The Principal should send his recommendation DIRECTLY to the College and not to the applicant. Additional copies of this blank may be obtained from A. and I. State College, Nashville, Tenn.

Date-----, 19-----.

School Official's Signature -----



