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Prairie View, Texas


BULLETIN OF
PRAIRIE VIEW STATE NORMAL AND
INDUSTRIAL COLLEGE

Vol. 31

July 15, 1940

No. 4

ANNOUNCEMENT OF GRADUATE STUDY

FOR

1940-1941

*Thesis handbook revision
consecutive years required for completion
of grad. work.
Sep. 19
Pragueites
for fields?*



Published quarterly by the Prairie View State Normal and Industrial
College, Prairie View College Branch, Hempstead, Texas

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1940-41

ARCHIVE COLLECTION

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COLLEGE CALENDAR

1940-41

First Semester

1940:

September 2	Registration for Nurses
September 11, 12	Entrance Examinations
September 13	Payment of Fees—Dining Room Opens
September 13	Freshman Orientation
September 16	First Semester Begins
September 16	Registration
November 11 (Armistice Day)	Holiday
November 28 (Thanksgiving Day)	Holiday
December 25 (Christmas Day)	Holiday

1941:

January 1 (New Year's Day)	Holiday
January 27-30	First Semester Examinations
January 31	First Semester Ends
January 31	Payment of Fees and Registration

Second Semester

February 1	Second Semester Begins
February 22 (Washington's Birthday)	Holiday
April 21 (San Jacinto Day)	
May 12, 13, 14, 15	Second Semester Examinations
May 17	Baccalaureate Sermon
May 18	Commencement Day
May 19	Second Semester Ends

Summer Session

June 1	Summer Session Begins
August 15	Summer Sessions Ends

ADMINISTRATION

W. R. Banks, A. M., Principal
 O. J. Baker, M. L. S., College Librarian
 W. H. Wiggins, A. B., Registrar
 E. B. Evans, D. V. M., Director of Summer School
 C. W. Lewis, Local Treasurer
 E. M. Norris, Ph. D., Chairman of Graduate Study

CO-ORDINATING OFFICERS

J. J. Abernethy, M. S., Director, Division of Mechanic Arts
 E. B. Evans, D. V. M., Chairman Coordinating Committee
 J. M. Franklin, M. D., Director, Division of Nursing Education
 R. W. Hilliard, Ph. M., Personnel Director
 E. C. May, M. S., Director, Division of Home Economics
 L. A. Potts, M. S. A., Director, Division of Agriculture
 M. E. Suarez, Dean of Women

COMMITTEE ON PLANS FOR GRADUATE STUDY

E. M. NORRIS, B. S., M. S., Ph. D., Chairman; Professor of Rural Education.
 J. J. ABERNETHY, B. S., M. S., Director of Mechanic Arts.
 O. J. BAKER, A. B., B. L. S., M. L. S., Librarian.
 F. G. DAVIS, A. B., A. M., Ph. D., Professor of Economics.
 R. L. JEFFREYS, B. S., A. M., Professor of Education.
 E. C. MAY, B. S., M. S., Director of Home Economics.
 R. P. PERRY, A. B., M. S., Ph. D., Chairman of Natural Science Department.
 L. A. POTTS, B. S., M. S. A., Director of Agriculture.
 E. L. SASSER, B. S., M. A., Ph. D., Head of English Department
 S. E. WARREN, A. B., A. M., Chairman of Social Science Department.

COMMITTEE AND CONSULTANTS ON GRADUATE INSTRUCTION

ABERNETHY, Joseph J., Director of Mechanic Arts Division; 1916. B. S., Kansas State College, 1916; M. S., 1934.
 BAKER, O. J., Librarian. A. B., Morehouse College, 1930; B. L. S., Hampton Institute, 1931; M. L. S., Columbia University, 1936.
 BOOKER, Walter M., Biology; 1929. A. B., Morehouse College, 1928; M. S., University of Iowa, 1932; University of Chicago, 1937-1938, Summer, 1938, 1940.

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- BULLOCK, Henry Allen, Sociology; 1930. A. B., Virginia Union University, 1928; A. M., University of Michigan, 1929; University of Michigan, 1934-35, 1938-39.
- *CARPENTER, Charles E., French, Head of Language Department; 1925. B. L., University of California, 1901; M. L., University of California, 1908; Advanced Work, University of Kansas, Summer, 1932; University of Iowa, Summers, 1937, 1940; Studying toward Ph. D., University of Iowa, 1940-41.
- CORUTHERS, J. M., Agricultural Economics. B. S., Hampton Institute, 1925; M. S., University of Wisconsin, 1928; Ph. D. Cornell University, 1934.
- DAVIS, Frank G., Economics; 1939. A. B., Howard University, 1933; M. A., Ohio State University, 1935; Ph. D., University of Iowa, 1939.
- DOOLEY, Thomas Price, Biology; 1934. A. B., Morehouse, 1927; M. S., University of Iowa; Ph. D., University of Iowa, 1939.
- EVANS, E. B., Veterinary Medicine; 1918. D. V. M., Iowa State College, 1918; Graduate work at Iowa State College, Summers, 1924, 1926, 1934.
- †HARRISON, G. Lamar, Education, Head of Education Department; 1932. A. B., Howard, 1926; B. E., University of Cincinnati, 1927; M. A., 1929; Ph. D., Ohio State, 1936.
- HARRISON, W. R., Agricultural Economics and Rural Sociology; 1931. B. S., Howard University, 1930; M. S., Cornell University, 1931; Cornell University, 1936-37; Studying toward Ph. D. Cornell University, 1940-41.
- †JEFFREYS, Richard L., Education; 1940. B. S., Virginia Union University, 1931; A. M., University of Michigan, 1937; Graduate Work, University of Michigan, 1937-39.
- MAY, Elizabeth C., Home Economics Education, Director of Home Economics Division; 1923. B. S., Kansas State College, 1919; M. S., 1933; Studied toward Ph. D., University of Minnesota, 1938-39.
- PERRY, R. Patterson, Chemistry, Head of Natural Science Department; 1927. A. B., Johnson C. Smith University, 1925; M. S., Iowa University, 1927; Ph. D., Iowa University, 1939.
- POTTS, Lawrence A., Rural Education; 1929. B. S., Iowa State College, 1925; M. S. A., Cornell University, 1932.

*On leave, 1940-41

†Part year

- POWELL, Mayme L., Clothing; 1932. B. S., Hampton Institute, 1929; M. S., Cornell University; 1931; Columbia University, Summers, 1935, 1939.
- PRESTON, Anne C., Education; 1933. B. S., Virginia State College, 1931; M. A., Columbia, 1932, studied toward Ph. D., Columbia, 1938-39 (first semester).
- RANDALL, Albert W., Mathematics, Head of Mathematics Department; 1923. B. S., Alcorn A. & M. College, 1916; A. M., University of Colorado, 1929; University of Iowa, Summer, 1934; University of Colorado, Summers, 1937, 1940.
- SASSER, Earl L., English, Head of English Department: 1928. B. S., Shaw University, 1926; M. A., Cornell University, 1928; Ph. D., Cornell University, 1936.
- SOLOMON, Thomas R., Political Science; 1939. A. B., 1929; M. A., Wayne University, 1933; Ph. D., University of Michigan. 1939.
- WARREN, S. E., History, Chairman of Social Sciences Department 1932. A. B., Allegheny College, 1925; A. M., University of Wisconsin, 1929; University of Wisconsin, 1933-35. Fulfilled residence and language requirements for Ph. D.
- WILSON, C. L., Mechanical Engineering, Superintendent of Buildings and College Utilities, 1932. B. S., in Mechanical Arts, Kansas State College, 1925; M. E., Kansas State College, 1929; M. S., Kansas State College, 1933.

Other persons will be added or revisions made as the need arises.

*Division of Graduate Studies
Spring Session 1942
First Term June 5 - July 9; Second Term
July 10 - August 15*

GENERAL STATEMENT

The principal aim of graduate work at Prairie View State College is two-fold: (1) to provide the student with a comprehensive view of a major field of interest, (2) to train the student for individual or independent investigation in that field of major interest. It is expected that the graduate student seek to develop the power of independent work, to become intensely interested in the true spirit of research and to develop a scientific approach to all problems. It is also expected that the student become widely read in those fields which have direct bearing upon his major work and become familiar with the workers actively engaged in productive research in said fields. A high grade of scholarly work should distinguish the work of the Graduate Department from the fulfillment of routine requirements. The graduate student should supplement and correlate his understanding of his field, study its background and its relationship to other fields and thereby gain a broader and more practical understanding of its significance. He should be able to cast new light on specific phases of the field and in some way enlarge the scope. The graduate student should acquire technique of analyzing a body of data or observation and the power to express an independent and unprejudiced judgement.

Unhampered by the restrictions that necessarily obtain in undergraduate school the graduate student is expected to assume initiative and responsibility in carrying studies on the graduate level. All facilities for study and investigation afforded by the College are open to the graduate student in so far as he is qualified to make use of such facilities. Various opportunities for study, advice and assistance of teachers are regarded simply as aids to the student in acquiring for himself the discipline and method of independent scholarship.

ADMISSION

For admission to the Graduate Division an applicant must have received his baccalaureate degree from a senior college of recognized standing. In addition, his previous record must indicate fitness and ability to pursue advanced study and to do scholarly research.

Two classes of applicants are recognized: Those who plan to work toward a master's degree, and those who wish to broaden their education without reference to a degree. The first group will follow the regulations governing work for advanced degrees. The second group

may take any work for which their preparation is adequate. Every student admitted under the first classification must pass through a probationary period. After nine weeks of residence a student's status in the Graduate Department, upon action taken by the Graduate Faculty, becomes either that of (1) candidate for a degree, or (2) non-candidate. If after one semester a student fails to show progress, the Graduate Faculty may advise such student to withdraw.

Persons seeking admission to the Graduate Division must have the Registrars of their undergraduate institutions file with the Graduate Office complete transcripts of the undergraduate record.

When details of admission have been completed, the prospective student will be given a permit to enter. This permit must be presented at the Graduate Office when the student reports for registration.

An application form, which is furnished free (upon request) by the Graduate Office should be filled in and filed with the Chairman of the Graduate Division at least two weeks in advance of intended registration.

Each graduate student must register on or before the days set aside for registration at the beginning of each term. A student may register at any time during the two weeks immediately preceding the formal registration days. Registration is not complete until fees are paid.

FEES AND EXPENSES

Since all fees are payable as a part of the student's registration no person should come for registration without sufficient money to cover all his fees and deposits.

1. Matriculation for a semester, \$25.00, payable each semester the student is in attendance.

Matriculation for summer term, \$10.00, payable each summer term the student is in attendance.

2. Activity fee (optional) \$5.00 for full session, \$2.50 for second semester enrollees. No fee for summer term.

3. Diploma fee \$10.00

4. Room and board—Graduate students may room in or out of the college dormitories. Graduate students may board in the regular student's dining hall, faculty cafeteria, or in private homes. Rates with the college are as follows:

Dormitory room (regular term, a month)	\$ 6.00
Regular board and room (regular term, a month)	18.00
Special campus room (summer term of 5 weeks)	10.00

Special room and regular board (summer term of five weeks)	25.00
Regular board and room (summer term)	22.50

Board, cafeteria, charged by the meal.

5. Transcript-of-record fee—one transcript of graduate work without charge is issued to or for a graduate student.

A charge of \$1.00, payable in advance, will be made for each subsequent transcript issued to or for a graduate student.

6. For certain courses, student might be required to purchase special materials and supplies.

SELECTION OF MAJOR AND MINOR FIELDS

Each student registered in the Graduate Department must select a **Major Field** to which he intends to devote the larger portion of his time. In addition to a **Major Field** a student must select a **Minor Field** properly related to his **Major**. Students may receive graduate credit for graduate courses and certain advanced undergraduate courses. Certain undergraduate courses may be required without credit allowance toward an advanced degree. Special departmental regulations regarding majors and minors are given with the list of courses in the department concerned.

STUDENT'S ADVISORY COMMITTEE

Each student must select as his advisers a committee composed of not less than three teachers of graduate courses. This committee will be recommended by the Director of Graduate Study in consultation with the student. The personnel of the committee must represent the fields in which the student is taking his major and minor work. A representative of the major field must be chairman of the student's Advisory Committee. This person shall be the chief adviser for the student and the director of the student's research.

A student must file with the Graduate Office, not later than two weeks after registration, a statement showing the consent of his Committee members to serve, together with a statement of major and minor fields selected.

REQUIREMENTS FOR THE MASTER'S DEGREE

The requirements for the degree of Master of Science include (1) satisfactory completion of the minimum residence period, (2) satisfactory completion of certain graduate courses and certain supporting

undergraduate courses, (3) presentation of a satisfactory thesis, and (4) the passing of a comprehensive examination.

1. **Residence**—At least a full academic year or the equivalent must be spent in residence and a minimum of thirty semester hours must be earned at Prairie View. A student shall not present himself for graduation until he has six month's residence to his credit after the date on which the Graduate Faculty approved his candidacy for an advanced degree.

2. **Course credits**—At least thirty semester hours of graduate work, including the thesis, must be completed satisfactorily. Ordinarily, twenty hours of graduate work in the major field and ten hours of graduate work in the minor field will be required.

3. **English usage requirement**—A student who is deficient in English usage but who is otherwise doing satisfactory work will be required to satisfy the Committee on English Usage with regard to his use of the English language, before he is allowed to graduate. Such deficiency might be determined by English Usage Examination or by reports of instructors of courses in which a student is registered.

4. **Thesis**—Candidates for the degree of Master of Science are expected to prepare a thesis as a part of the requirements for the degree. The preparation of the thesis should be begun in a seminar course, but it should be definitely understood that while credit is given in the seminar in which the student may be working on thesis, no semester hour credit is allowed for the thesis itself. The thesis must have the approval of each member of the student's Reading Committee. This work must be acceptable with respect to both scholarship and literary quality. A candidate for an advanced degree must have his thesis subject approved by his Chairman at least six months before the date he expects to present himself for graduation. A statement of this approval must be filed with the Graduate Office. A candidate should complete his thesis not later than three weeks before the date of his intended graduation in order that it may be examined by each member of the Advisory Committee for the student. The following directions should be rigidly followed in the writing of the thesis.

The thesis should be typewritten, doubled spaced on a durable rag bond, $8\frac{1}{2}$ x11 inches, leaving the left hand margin at least an inch and a quarter wide, the right hand margin at least three-quarters of an inch. Set up the title page according to the following form:

TITLE OF THESIS

A Thesis

Presented to the Graduate Division
of Prairie View State College

In Partial Fulfillment of the

Degree of

Master of Science

By

(Author's Name in Full)

(Date on which degree is to be conferred)

Following the title page there must be a biographical sketch of the author, not exceeding 200 words. An outline is furnished by the Graduate Office for this purpose. Further directions for thesis preparation will be placed in the hands of the student at the time needed.

Two copies of the thesis must be bound at the expense of the student and filed in the Graduate Office. One copy becomes the property of the College Library; the other becomes the property of the Graduate Office.

5. **Final Examination**—After the thesis has been completed and filed with the Graduate Office, the Candidate is required to pass a general comprehensive examination which shall be a test of the Candidate's knowledge of the study which he has mainly pursued. This examination may be written or oral or both. This general examination is conducted by the Student's Advisory Committee of which the representative of the major field shall act as chairman, and at least two other examiners to be appointed by the Director of the Graduate School, after consultation with the Student's Advisory Committee. Any member of the Graduate Faculty may attend the examination as a visitor. The report of this committee must be unanimous in order to be considered satisfactory.

A Candidate who fails in his general examination must register in the Graduate School and carry work for an additional semester before an opportunity will be given for a second general examination, unless special permission is granted by the Committee on Graduate Study for an earlier examination at the request of the department concerned.

Time Limit On Work For Master's Degree

A student must complete his master's work within 6 consecutive years after his first enrollment in the Graduate Division.

THE COLLEGE LIBRARY

The Library occupies the entire third floor of the Education Building. In addition to administrative quarters where technical duties are performed, there are three reading rooms for study purposes: (1) main reading room for men and women; (2) separate reading room for women; (3) separate reading room for men. The Library accomodates 200 readers at one sitting. Its collection consists of a well selected group of books and periodicals for reference, collateral, cultural, and recreational reading purposes. These are chosen with due regard for the needs of the College Community as reflected in the demands of: (1) the six major divisions of the College, (2) the extra-curricular activities fostered, and (3) the trends of world affairs. The Library staff serves the students, faculty members and community neighbors with courtesy, patience, and efficiency.

A mimeographed statement on "Student use of the Library" may be secured from the Librarian on request.

Order of Registration for Graduate Students

1. Secure statement verifying graduate status and proposed living arrangement from the Graduate Office.
2. Secure student's card from the Dean of Women (for women students) or the Dean of Men (for men students).
3. Pay registration fee at Treasurer's office.
4. Report to the Graduate Office for registration cards.
5. Select courses to be carried upon advice of student's Advisory Committee.
6. Fill out registration cards and return them to the Graduate Office.

Special Note: Any person reporting for matriculation as a graduate student without having filed an application and other necessary credentials for graduate status (two weeks prior) will be given only tentative graduate status, pending the proper evaluation of undergraduate work. The student should understand that after his credentials have been examined under this tentative arrangement, the institution reserves the right to deny him graduate status even though he has completed all other parts of his registration.

COURSES OF INSTRUCTION

COURSE NUMBERS

Courses numbered 500-699 are, subject to the approval of the instructor, open to advanced undergraduate students as well as graduate students. Courses numbered 700 and above are open only to graduate students who have fulfilled prerequisites.

For first term courses the middle figure of the Course Number is odd, (Example 713, 733, 753). For second term courses the middle figure of the Course Number is even, (Example 723, 743, 763).

The last figure in the course number indicates semester hours of credit which the course yields.

FIELDS FOR MAJORS AND MINORS

Majors and minors may be selected in the following fields.

Agricultural Economics	History
Agricultural Education	Home Economic Education
Biology	*Industrial Education
Chemistry	Mathematics
Economics	Mechanic Arts
Administration and Supervision	Political Science
English	Rural Education
General Education	Rural Sociology
*Home Economics (Technical)	Sociology

LIST OF COURSES

DIVISION OF AGRICULTURE

AGRICULTURAL EDUCATION

Undergraduate work equivalent to the B. S. degree in Agriculture is required.

AGRICULTURAL EDUCATION 501 or 502. Agricultural Education Seminar. Two hours credit. Designed for all graduate students having majors in Agricultural Education. Only candidates for an advanced degree are eligible to take this course.

*May be selected for a minor only. A "split" major may be taken in Home Economics Education and Home Economics combined—with special emphasis devoted to either of the two fields.

AGRICULTURAL EDUCATION 513. Methods of Conducting Part-Time and Evening Schools in Vocational Agriculture. Two credit hours. Teaching experience in Vocational Agriculture. Permission of instructor is required. A course devoted to an analysis of the problems related to part-time and evening schools in Vocational Agriculture and to the development of objectives and procedures in the organization and conduct of such instruction.

AGRICULTURAL EDUCATION 523. Supervised Practice Program Building. Two hours credit. Teaching in Vocational Agriculture. Permission of instructor is required. A study based upon researches in project accounting and analysis.

AGRICULTURAL EDUCATION 533. Extension Organization and Program Determination. Three hours credit. An analytical review of the best procedure to be followed in developing state, county, and community programs of work, and outlining of plans of work looking to the orderly development of specific projects, including a discussion of the place of local leaders in extension teaching. The representative organizations of rural people are studied for the purpose of discovering points of contact and interest for cooperation in the conduct of extension work.

AGRICULTURAL EDUCATION 543. Extension Methods. Three hours credit. Aims and objectives of extension teaching and possible ways of measuring accomplishments in this field are reviewed and critically analyzed. Various means and agencies employed in extension teaching are considered, such as result demonstrations, method demonstrations, meetings, news articles, personal services, bulletins, exhibits and circular letters. They are evaluated from the standpoint of their teaching functions, adaptability, relative influence, cost, inter-relationship and general effectiveness.

AGRICULTURAL EDUCATION 553. Organization and Conduct of 4-H Club Work. Three hours credit. The course includes the development of 4-H Club programs and organization considering: Objectives; psychological groupings; community integration; program content; community, county, state, and federal organization, selection and use of local leaders, annual plans of work, evaluation. It takes into consideration the methods employed in 4-H work, including: Projects, club meetings, demonstrations, judging work, exhibits, achievement days, camps, short courses, and leadership training.

AGRICULTURAL EDUCATION 563. Special Problems in Home Economics Extension. Two or three hours credit. Review of extension research and other data of special significance to the organization and conduct of extension work with rural women. Current problems of home demonstration workers.

AGRICULTURAL EDUCATION 712 or 713. Problems in Agricultural Education. Three hours credit. Study of the Community-program approach to agricultural problems. Procedure includes the scientific approximation of aims, objectives and standards. The course includes participation in field experience and field research.

AGRICULTURAL EDUCATION 722 or 723. Principles of Teaching Methods in Agricultural Education. Three hours credit. The logical and psychological bases for selecting methods of teaching agriculture.

SPECIAL NOTE: Majors in Agricultural Education will be advised to select additional courses in the field of Rural Education.

AGRICULTURAL ECONOMICS

AGRICULTURAL ECONOMICS 503. The Agricultural Industry. Three hours credit. A comparison of Agriculture with other industries. The economic development of Agriculture in the United States. Types of farming and their geographical location. Trips will be arranged to study types of farming in different localities.

AGRICULTURAL ECONOMICS 513. Agricultural Finance. Three hours credit. Financial requirements of individual farmers; emphasis will be placed also on credit institutions serving the farmers. Prerequisite: Principles of Agricultural Economics.

AGRICULTURAL ECONOMICS 523. Marketing of Farm Products. Three hours credit. A study of the principles underlying the successful marketing of farm products. A definite study is made of the various middlemen through which farm products pass from the producer to the consumer. Trips will be arranged for the class to visit and study markets. Prerequisite: Principles of Agricultural Economics.

AGRICULTURAL ECONOMICS 533. Agricultural Accounting. Three hours credit. Principles of accounting applied to the farm business.

AGRICULTURAL ECONOMICS 543. Economic Problems of the Consumer. Three hours credit. The National and family income; the family budget and stretching the consumers' dollar; consumers' goods and services; substitutes; adulteration; legislation in behalf of consumers; consumers' cooperatives and other organizations, the economics of consumption; educational and consumer problems.

AGRICULTURAL ECONOMICS 552. Agricultural Economics Seminar. Two hours credit. Current problems in Agricultural Economics will be discussed. Topics will be reported by students.

AGRICULTURAL ECONOMICS 563. Labor Problems. Three hours credit. Comparison of psychologies of business and labor groups.

Evolution of industrial society and industrial problems. Development of trade unions; industrial disputes; bargaining; trade agreements; wages and workmen's compensation. Labor and the courts. Welfare and labor organizations.

AGRICULTURAL ECONOMICS 573. The Negro in American Labor Movements. Three hours credit. A research and discussion in American labor history, emphasizing the status and role of Negroes from indentured service and slavery to their recent participation in farm labor movements. For social science majors and graduate students.

AGRICULTURAL ECONOMICS 583. Contemporary Economic Problems. Three hours credit. A course dealing with such current problems of our economic system as: economic instability and insecurity; wages, hours and organizations of workers; social waste; finance; and international relations. Prerequisite: a course in Economics, or graduate standing.

AGRICULTURAL ECONOMICS 602. Social Legislation. Two hours credit. Compilation, analysis and application of state and federal laws affecting business, industry, agriculture, education, professional service, labor and consumers. Prerequisites: basic courses in economics, government, sociology and education, or consent of instructor.

AGRICULTURAL ECONOMICS 713. Economics of Agricultural Production. Three hours credit. The principles of production economics applied to the production of major farm products in various areas. Economic geography and agriculture, national production programs and the tariff on agricultural products. Prerequisite: Principles of Agricultural Economics.

AGRICULTURAL ECONOMICS 723. Cooperative Marketing of Farm Products. Three hours credit. A study of the principles underlying the successful operation of cooperative marketing organizations, examples of successful fruit, vegetable, livestock and cotton marketing associations will be studied.

AGRICULTURAL ECONOMICS 733. Advanced Farm Management. Business Organization of Texas Farms. Three hours credit. The use of farm management principles in the organization and operation of Texas Farms. The study of selecting a farm, farm enterprises; planning cropping systems, equipment needs, and capital. Trips to study representative farms will be made by the class. Prerequisite: Principles of Agricultural Economics.

AGRICULTURAL ECONOMICS 743. Land Tenure and Problems. Three hours credit. Land as a factor of production, land utiliza-

tion, tenure and income. Prerequisite: Principles of Agricultural Economics.

AGRICULTURAL ECONOMICS 763. Agricultural Land Use Planning. Local, Regional and National. Three hours credit. A survey of county, state, regional and national land use programs. Sub-marginal, and super-marginal lands will be considered. Work of the Farm Security Administration, Department of the Interior, and National Resources Board will be studied.

RURAL EDUCATION

RURAL EDUCATION 502. Research in Rural Education. Two hours credit. Adaptation of research technique to problems in Rural Education.

RURAL EDUCATION 513. Rural Community Recreation. Three hours credit. A course designed for rural community leaders dealing with leisure time activities for the promotion of the recreational and cultural side of rural life. Special emphasis is placed upon home and school play, picnics, family and social recreation, contest and old time games, artcraft, community fair, drama and music. Opportunity is provided for laboratory practice. A limited number of students may enroll in this course with permission from the instructor.

RURAL EDUCATION 521, 522 or 523. Rural Education Seminar. One to three hours credit. This course deals with current problems in the field of Rural Education. The amount of work accomplished by the student determines the credit given for the course.

RURAL EDUCATION 533. Problems of Rural Health. Three hours credit. (1-4) Open to graduates qualified in Agriculture, Home Economics and Science majors from the Arts and Sciences Division. Laboratory and field practice is required of all students enrolled in this course. A course for rural teachers teachers and leaders which includes a study of advanced Bacteriology, Epidemiology, Sanitation and Hygiene and Health Problems. Prerequisite: Biology 344, Bacteriology,

RURAL EDUCATION 542. Special Problems of Guidance as Applied to Rural Education. Two hours credit. A consideration of the major problems, principles and techniques of guidance as applied to rural situations.

RURAL EDUCATION 553. Orientation for Rural Teachers. Three hours credit. Each Semester. This course serves as a cross-section for rural teachers. It includes four units: (1) The Improvement of Home Living; (2) An Introduction to Simple Agriculture; (3) Home and School Beautification, and (4) Classroom Construction Work. Six hours per week are devoted to laboratory skills.

RURAL EDUCATION 562. Rural Community Health and Recreation. Three hours credit. This course is designed especially for rural leaders for the purpose of furnishing them with information on health and recreational education. Emphasis is placed upon the securing of wholesome environmental conditions for children and adults in the community, protecting them by scientific methods against communicable diseases and the hazards of growth, and the instructions to be given in scientific ways of living. Leisure-time activities are given much consideration.

RURAL EDUCATION 572. Community Forum. Two hours credit. This course serves as an introduction to the work of the community forum. It makes current social and economic issues seem real, supplies new and reliable facts and information and builds attitudes of tolerance for new and unfamiliar ideas. Confidence and poise are developed through active participation.

RURAL EDUCATION 713. Rural School and Community Relations. Three hours credit. Purpose of the course: to consider the place of education, the responsibility of the public school, the curriculum, the reorganization of the educational administrative structure, and the provisions of special educational services, as they relate to child and community needs in the rural environment. Educational needs growing out of the environment and methods for their provision are treated from the standpoint of the whole child and the community as a whole. The community-centered school philosophy is emphasized throughout the course.

RURAL EDUCATION 723. Rural School Supervision. Three hours credit. This course consists of lectures, readings and discussions with weekly observations of teaching in the Demonstration Schools. It deals with those special problems of supervision and necessary adaptation of general supervisory means which results from present conditions in rural areas. Topics from which selection is made on the basis of expressed needs of students enrolled in course are emphasized. The improvement of instruction through the coordination of cooperative agencies, curriculum development, etc., is given consideration. This course is restricted to graduate students unless the applicant is engaged or has been engaged in supervisory work.

RURAL EDUCATION 733. Rural School Problems. Three hours credit. This course affords an opportunity for study of a special problem in the teaching, supervision, or administration of rural schools or in rural sociology and economics. It may be undertaken only in connection with another rural education course and with the permission of instructors.

RURAL EDUCATION 743. The Rural Elementary Curriculum. Three hours credit. For rural school principals, supervisors and teachers specifically concerned with curriculum adaptations in rural elementary schools.

Emphasis on (1) the development of the curriculum in terms of environment, resources, and needs; and (2) specifically adapted organization for schools of one to four teachers. Procedures for discovering environmental resources and needs and conditions in sample rural communities considered in their implications for selection and organization of curriculum materials.

RURAL SOCIOLOGY

RURAL SOCIOLOGY 513. A Study of Rural Society. Three hours credit. A study dealing with origin, nature and development of forms of association in the rural community. A course intended as a basis for special courses. Term paper and periodic reports are required of all students.

RURAL SOCIOLOGY 703. Rural Planning. Three hours credit. Survey of existing and proposed types of planning for rural social organization. Prerequisites: Courses in Rural Sociology and Economics.

RURAL SOCIOLOGY 713. Rural Community Organization. Three hours credit. A study of practical problems of rural community organization. The course is designed to study methods of developing organizations through rural leadership, analyzing needs of the community, building and coordinating community programs. Prerequisite: courses in General Sociology, Rural Sociology and Economics.

RURAL SOCIOLOGY 723. The Rural Church. Three hours credit. This course is designed to present in a systematic way the church as a social institution, its functions, problems and programs. Reports are required of all students on specific case studies of the church.

RURAL SOCIOLOGY 733. The Rural Family. Three hours credit. This course considers the social problems of the family in farm and non-farm areas; the functions of the family; marriage and divorce; relations of parent and child and how the family may be aided. Reports are required of all students on specific case studies of family life.

RURAL SOCIOLOGY 743. Research in Rural Social Organization. Three hours credit. This course is designed primarily for those rural community leaders who would like to carry further investigation on some specific problem based upon the need of their localities. This course will be offered as demand arises.

RURAL SOCIOLOGY 753. Rural Population Problems. Three hours credit. This course is designed to cover such factors as composition, characteristics and movements of rural population.

RURAL SOCIOLOGY 762. Rural Sociology Seminar. Two hours credit. Rural community problems will be discussed by students, faculty members and visiting lecturers.

DIVISION OF ARTS AND SCIENCES

EDUCATION

ADMINISTRATION AND SUPERVISION

ADMINISTRATION & SUPERVISION 512, 513. Vocational Guidance. Two or three hours credit. Open to all graduate students. Surveys required of all students. A study of Vocational Guidance as a means of contributing to major objectives of secondary education. Typical centers, movements, and programs as now carried on. Readings and reports.

ADMINISTRATION & SUPERVISION 523. Administration of Student Personnel. Three hours credit. Open to students of senior and graduate standing. Deals with the common personnel problems of administrators and supervisors such as extra-curricula activities, guidance, student-faculty relationship; health; admissions; discipline; records and reports; etc.

ADMINISTRATION & SUPERVISION 533. High School Administration and Supervision. Three hours credit. For fuller description see current undergraduate catalog, Education 393.

ADMINISTRATION & SUPERVISION 543. Functions and Use of the Library. Two semester hours credit. Open to graduate and advanced undergraduate students. An introduction to the use of books and libraries and to bibliography making. A study of the place of the library in the school and in the community, library extension agencies and their services, and relation of the library to adult education. Lectures, readings, and reports.

ADMINISTRATION & SUPERVISION 713. Fundamentals of School Administration. Three hours credit. Open to graduate students who hold or are appointed to positions as principals, or supervisors, or who have consent of Director. A brief survey of the history, principles, and practices in school administration followed by a more intensive study of problems (general and specific) involved in school administration.

ADMINISTRATION & SUPERVISION 722. Federal Relations to Education. Two hours credit. The history of the development and analyses of the intricate problems of federal aid to public education.

ADMINISTRATION & SUPERVISION 733. Organization and Administration of Adult Education. Three hours credit. Open to all graduate students. A study of agencies for the education of adults. Aside from such topics as extension, correspondence, special forums and parental education; attention is given to organization and administration of the special federal program of adult education.

ADMINISTRATION & SUPERVISION 743. Principles of Curriculum Building. Three hours credit. Open to graduate students who hold positions as principals or supervisors or who have consent of Director. Deals with the principles of curriculum construction in elementary and secondary education; investigates the sources of curriculum materials and methods of evaluating curricula. A study or investigation of some aspect of the curriculum is required of all students desiring credit.

ADMINISTRATION & SUPERVISION 753. Principles and Practices of Supervision. Three hours credit. Open to graduate students who hold or are appointed to supervisory or administrative positions, or who have consent of Director. Some practice in application of principles required of all. Deals with the principles, practices and problems of supervision. Special attention is given to organization for supervision, supervisory programs, research in supervision, cooperation of special agencies, and qualifications for supervisors.

ADMINISTRATION & SUPERVISION 743. Principles of Rural School Administration. Three hours credit. Open to graduate students holding administrative and supervisory positions in rural areas. A study of the principles, practices, and problems of school administration with emphasis upon problems of schools located in rural areas. Reports required of all.

GENERAL EDUCATION

Philosophy and Principles of Education

EDUCATION 703. Modern Educational Tendencies. Three hours credit. A discussion of current educational doctrines and controversies. Fundamental problems in the field of education will be considered with a view to the development of an integrated outlook.

EDUCATION 733. Comparative Education. Three hours credit. A survey of the present school systems of selected countries such as England, France, Germany, Italy, Russia, Denmark, and Mexico in

comparison with that of the United States; and the study of the relation of national and local government to education.

EDUCATION 763. Problems in the Education of Negroes. Three hours credit. This course is a study of special problems in the education of Negroes, which result from segregation and discrimination. Attention is given to such problems as adequacy of public education, equality of opportunities, the general status of Negro schools, educational facilities, etc., also special attention is given to the problem of teaching the democratic way of living to youth who live in democratic America, but do not yet enjoy its full benefits.

Elementary Education

EDUCATION 743. Problems of the Elementary Teacher. Three hours credit. Open to undergraduates who are teachers in service and to graduate students. Special projects, investigations, and reports will be required. Attention will be given to problems presented by members of the class as the outgrowth of their experiences.

EDUCATION 753. Teaching the Language Arts in the Elementary School. Three hours credit. This course is designed for those interested in guiding and directing children of elementary school age in reading and in oral and written composition. Special emphasis will be placed on diagnosis and remedial work in reading.

Special Problems in Elementary Education. Upon demand, a problem course, for graduate credit, may be arranged in connection with any course in Elementary Education that is taught on the undergraduate level.

Secondary Education

EDUCATION 503. Principles of Secondary Education. Three hours credit. See general catalogue for course description, Education 313. Graduate students will be required to develop term papers and give special reports. Prerequisite: Education 113, 333.

History of Education

EDUCATION 713. History of Education in America Prior to 1890. Three hours credit. A study of the historical background of American Education and an analysis of the origin and development of educational practices prior to 1890.

EDUCATION 723. Public Education in the United States Since 1890. Three hours credit. The development of American educational

institutions since 1890 as conditioned by social, political and economic changes in American society.

Psychology and Measurements

PSYCHOLOGY 523. Principles and Practice of Educational Measurement. Three hours credit. The place of tests and measurements in education; selection and construction of the most commonly used tests and measurements. Prerequisite: Education 433. See Education 433 in regular catalogue).

Mental Hygiene

PSYCHOLOGY 563. Three hours credit. (Mental adjustment). A study of personality as an integrated force. The psychology of the unadjusted school child. Prerequisites; Psychology 103.

PSYCHOLOGY 573. Psychology for Students of Education. Three hours credit. See Education 383, of current catalog. General principles of human psychology as they relate to the learning process.

ENGLISH

Admission: For admission to graduate study in English the student should present at least an undergraduate minor, 21 hours or the equivalent, in this field. This undergraduate study should include at least three hours of credit above the sophomore level in each of the following: American Literature, Public Speaking or Argumentation, The Drama or Shakespeare; a period course such as Victorian Literature or Eighteenth Century Literature, or a specialized course such as Chaucer, Byron, Wordsworth.

The course, The English Language (English 513), is prerequisite to all courses. If the student did not take this course while an undergraduate at this college, it is expected that he will register in the course upon admission to the Department.

Requirements for the Graduate Degree: Of the 20 credit hours required for a graduate major in English the following courses are required:

Course Numbers	Credit Hours
English 513 or 713 or 723	3
English 733 and 743	6
English 772 and 782	4
English 812 or 822	2
English 832 or 842	2

Of the 10 credit hours required for the graduate minor in English the following courses are required.

Course Numbers	Credit Hours
English 513	3
English 733 and 743	6
English 772 or 782	2
English 812 or 822, or 832 or 842	2

The Teaching of English, Education (English 523), is required both for the major and the minor.

ENGLISH 502. The Novel. (Social Backgrounds). Two hours a week throughout the year. First term, European; second term, American. (See English 412 and 422, College Catalog).

ENGLISH 513. The English Language (Growth and Development). Three hours credit.

(See English 353 College Catalog).

ENGLISH 523. The Teaching of English. (Literature and Composition). Credit recorded as Education-Method). Second term. Three hours credit. (See English 463, College Catalog).

ENGLISH 533. Nineteenth Century Prose. Study of ideas, political and social conditions as revealed in the writings of chief representatives of the period. Three hours credit. First term.

ENGLISH 543. Romantic Poetry. Study of the type through representative selections from ancient and modern literature. Three hours credit. (See English 333, College Catalog).

ENGLISH 713 and 723. Old English. (Readings in the Language). Three hours credit each term. Throughout the year.

ENGLISH 733 and 743. Speech Arts. Practical work in speech construction, platform delivery, parliamentary procedure, and play production. The student should allow not less than three dollars for the purchase of practice materials. Prerequisite: 513.

ENGLISH 752 and 762. Journalistic Writing and Publicity Methods. Practical work in the forms. Two hours credit each term. Throughout the year.

ENGLISH 772 and 782. Negro Literature. (Social Implications). Two hours credit each term. Throughout the year.

ENGLISH 812 and 822. Principles of Literary Criticism. Wide reading including translations from "classical" literature. Practice in reading aloud. Two hours credit each term. Throughout the year.

ENGLISH 832 and 842. Methods and Materials in Research. Exercises in minor research projects. Two hours credit each term. Throughout the year.

MATHEMATICS

MATHEMATICS 713. Advanced Calculus. Credit three hours. This course is devoted to more advanced topics of the calculus. A study of differential equations is begun in this course. Prerequisites: Differential and Integral Calculus.

MATHEMATICS 723. Analytic Mechanics. Credit three hours. This course deals with statics, the study of equilibrium and dynamics, motion of particles, of rigid bodies, and simple cases of formable bodies under action of forces. Prerequisites: Differential and Integral Calculus.

MATHEMATICS 733. Advanced Algebra. Credit three hours. This course deals with topics not taken up in the elementary course of college algebra. Some of the topics studied are inequalities, theory of probability, summation of series, etc. Prerequisite: College Algebra.

MATHEMATICS 743. Statistics. Credit three hours. This course gives an intensive study of the processes of statistical methods with reference to applications in various fields. Prerequisite: Analytic Geometry.

MATHEMATICS 753. Theory of Equations. Credit three hours. Complex numbers, general calculations of the cubic and the biquadratic, and Horner's and Newton's method are some of the topics studied in this course. Prerequisites: Differential and Integral Calculus.

MATHEMATICS 763. Differential Equations. Credit three hours. Methods of solving type forms and the formulation of practical problems as solutions of differential equations will be the central point of study. Prerequisites: Differential and Integral Calculus.

MATHEMATICS 773. Projective Geometry. Credit three hours. A study of fundamental forms; harmonic sets, perspectivity and projectivity of forms, duality, involution. Prerequisite: the calculus.

MATHEMATICS 783. Differential Geometry. Credit three hours. A study of the curves in the plane and in space, and of surfaces; introduction to the study of curved spaces. Prerequisites: Calculus and Solid Analytic Geometry.

MATHEMATICS 793. Infinite Series. Credit three hours. This course deals with the convergence and divergence of sequences, and series. It concentrates on simple, absolute, and uniform convergence. A few topics on summable series are studied. Prerequisites: Differential and Integral Calculus.

MATHEMATICS 803. Numerical and Literal Solutions of Equations. This course deals with the methods of solving linear, simultaneous, quadratic, cubic, quartic, transcendental, and algebraic equations of higher degree than the fourth for real roots, as well as methods for

complex roots. Prerequisites: Theory of Equations or Consultation with the Head of the Department.

THE NATURAL SCIENCES

BIOLOGY

Zoology

BIOLOGY 504. Embryology. (Undergraduate or graduate credit (2-4) A course dealing with maturation, cleavage, gastrulation and organogenesis, using the chick and pig as examples, Prerequisite: Advanced undergraduate or graduate standing.

BIOLOGY 514. Histological Technique (Undergraduate or graduate credit.) (2-4) A course covering the methods of fixation, staining and preparation of tissues for microscopic examination. Prerequisite: Advanced undergraduate or graduate standing.

BIOLOGY 524. Histology (Undergraduate or graduate credit) (2-4) Dealing with microscopic examination of representative tissues of all body organs.

BIOLOGY 702. Cytology. (2-1) A course dealing with detailed consideration of the cell components and their significance. Prerequisite: Graduate standing.

BIOLOGY 714. General Physiology. (2-4) A course dealing with Physico-Chemical phenomena applied to Biology, such as diffusion, osmotic pressure, cell permeability, salt antagonism, oxidation, reduction, and conductivity. Prerequisite: Graduate standing.

BIOLOGY 724. Endocrinology. 2-4 A course dealing with the Physiology of the glands of internal secretion. Detailed consideration is given the thyroid, the parathyroid, the pituitary, the adrenal, the pancreas, the ovary and the testis. Prerequisite: Graduate standing and a course in Physiology.

BIOLOGY 734. Experimental Embryology. (0-4) A laboratory course considering the influence of temperature, osmotic pressure, mechanical radiation and hormonal factors on the rate of patterns of development of the chick and frog. Some time is given to the estrus cycle in rats, guinea pigs and rabbits. Prerequisites: Graduate standing and a course in Embryology.

BIOLOGY 744. Experimental Genetics. (0-4). A laboratory course in Physiological Genetics, considering factors which affect such phenomena as linkage, etc. Prerequisites: Graduate standing and a course in Genetics.

BIOLOGY 754. Parasitology—A study of the characteristics and life cycles of parasitic protozoan, helminthes and insects common to

domestic animals and man. Emphasis is placed upon control measures and effects of parasitism upon the host. Prerequisites. Graduate standing and a year of General Zoology.

BIOLOGY 804. Special Physiology. of Mammals. (2-4). A Course covering the phenomena and reflex activity of the circulatory, respiratory and nervous systems. Conference, twice a week. Prerequisites: Graduate standing and a course in Physiology.

BIOLOGY 900. Research. (Credit arranged). Research may be carried out in Cytology, Genetics, Embryology, Physiology and Botany.

Botany

BIOLOGY 534. Plant Physiology. (2-4) A course covering the Physiology of Plants, dealing specifically with the Physiology of the roots, the stem and the leaf; the reaction to light; respiration, transpiration and metabolism.

BIOLOGY 544. Plant Physiology. (2-4) Continuation of Biology 534. Prerequisites: Graduate standing and a course in General Botany.

BIOLOGY 764. Plant Anatomy. (2-4) Continuation of Biology 754. Prerequisite: Graduate standing and a course in General Botany.

BIOLOGY 774. Plant Breeding (Genetics) (2-4) A course in the application of the Principles of Genetics to Plants. Prerequisites: Graduate standing and a course in Genetics.

BIOLOGY 782. Plant Taxonomy. Credit arranged (1 semester) A course in the classification of plants. Prerequisites: Graduate standing and a course in General Botany.

BIOLOGY 794. Plant Anatomy. (2-4) Detailed Morphology of representative plants is considered.

CHEMISTRY

CHEMISTRY 513. Microscopy and Microchemical Analysis. (0-6) Three hours credit. Conferences and laboratory work dealing with the technique involved in the microchemical examination of materials. Prerequisite: Chemistry 224.

CHEMISTRY 524, 534. Physical Chemistry. (2-4) Four hours credit. For advanced undergraduates. The topics considered are pressure-volume relation of gases; vapor pressure, boiling point, freezing point, and osmotic pressure of solutions; molecular and ionic theories; electrical transference and conduction; reaction rates and chemical equilibria; phase equilibria and thermochemistry. Prerequisites: Chemistry 224 and College Physics. (See Chemistry 414 and 424 in regular catalog).

CHEMISTRY 543. Agricultural Analysis. (0-6) Three hours credit. Conferences and laboratory studies dealing with the chemical analysis of feeds, fertilizers, soils, insecticides, and fungicides. Prerequisite: Chemistry 224 or 254.

CHEMISTRY 701. Chemical Principles. (1-0) One hour credit. A comprehensive treatment of the fundamental principles and fields of chemistry; their inter-relationship and practical application to industry and allied fields. Designed for persons interested in the teaching of chemistry and a broad view of the field. Prerequisite: Graduate or advanced undergraduate standing.

CHEMISTRY 702. Advanced Analytical Chemistry. (2-0) Two hours credit. A lecture course dealing with chemical principles and advanced analytical theory. Prerequisites: Chemistry 224.

CHEMISTRY 712. Advanced Analytical Laboratory. (0-4) Two hours credit. A laboratory course covering special methods of chemical analysis, including electrometric methods and analyses of selected alloys, minerals, soils, and plant products. The course may be taken separately or along with Chemistry 702. Prerequisite: Chemistry 224.

CHEMISTRY 722. Advanced Organic Chemistry. (2-0) Two hours credit. Lectures, recitations, and assigned readings covering the mechanisms of typical organic reactions. Prerequisite: Chemistry 325, or its equivalent.

CHEMISTRY 732. Quantitative Organic Analysis. (1-4) Two hours credit. Conferences and laboratory work dealing with the quantitative determination of elements and radicals in pure organic compounds. Prerequisite: Chemistry 325, or its equivalent.

CHEMISTRY 753. Food Analysis. (0-6) Three credit hours. Conferences and laboratory work involving the quantitative examination of food products; alcohols, carbohydrates, fats and oils, cereals, nitrogenous bodies, preservatives and colors. Prerequisite: Chemistry 224, or its equivalent.

CHEMISTRY 762. Organic Synthesis. (0-4) Two hours credit. Conferences and laboratory work dealing with the synthesis of complex compounds. Prerequisite: Chemistry 325, or its equivalent.

CHEMISTRY 772. Topics in Organic Chemistry. (2-0) Two hours credit. Lectures and assigned readings dealing with special topics and fields of recent research in organic chemistry. Prerequisite: Chemistry 325.

CHEMISTRY 782. Biochemistry. (2-0) Two hours credit. Lectures, recitations and assigned readings dealing with recent investigations of biochemical phenomena; plant biochemistry; blood; biological oxidations; metabolism, etc. Prerequisite: Chemistry 444, or its equivalent.

CHEMISTRY 802. Electrochemistry Laboratory. (0-4) Two hours credit. Lectures, assigned readings, and laboratory exercises dealing with the fundamental theory of galvanic and electrolytic cells; theory and applications of the electrical properties of solutions and surfaces. Prerequisite: Chemistry 524.

CHEMISTRY 813. Toxicology. (0-4) Two hours credit. Conferences and laboratory studies involving the detection of poisons in plant and animal tissues. Prerequisite: Chemistry 444.

CHEMISTRY 823. Biochemical and Clinical Analyses. (0-6) Three hours credit. Conferences and laboratory studies dealing with the chemical examination of biological fluids and plant and animal tissues. Prerequisite: Chemistry 444.

CHEMISTRY 832. Advanced Physical Chemistry. (2-0) Two hours credit. Lectures, recitations and assigned readings dealing with special topics in physical chemistry; homogeneous and heterogeneous equilibria, theories of solutions and catalysis. Prerequisite: Chemistry 524.

CHEMISTRY 842. Topics in the Chemistry of Nutrition. (2-0) Two hours credit. Lectures, recitations and assigned readings on vitamins, amino acids, proteins, and minerals as related to animal nutrition. Prerequisite: Chemistry 444.

CHEMISTRY 851. Research. (0-2) Problems for investigation may be selected from one of the following fields: 1. Analytical Chemistry, 2. Organic Chemistry 3. Biochemistry.

CHEMISTRY 873. Qualitative Organic Analysis. (1-4) Three hours credit. Lectures, and laboratory work covering the separation and identification of pure organic compounds. Prerequisite: Chemistry 325, or its equivalent.

CHEMISTRY 893. Industrial Organic and Manufacturing Chemistry. (0-6) Three to six hours credit. Conferences and laboratory work dealing with the manufacture of organic compounds of industrial importance. Special emphasis is placed upon farm chemistry and the development of compounds of industrial importance from agricultural products and other natural resources. Prerequisite: Chemistry 325.

THE SOCIAL SCIENCES

Economics, History, Political Science and Sociology

Students planning graduate work in Economics, History, Political Science and Sociology should be able to present prerequisites in their major and minor fields. The undergraduate major consists of twenty-one semester hours in the specific field and thirty-three hours distributed among the remaining social sciences. The undergraduate minor

consists of seventeen semester hours in the specific field selected and six hours in some other field. (See the regular College Catalog).

The twenty hours required for a graduate major and the ten hours required for the minor must be in courses numbered 500 and above. To do satisfactory work the graduate student may be required to pursue certain undergraduate courses without graduate credit. He will be encouraged to master the tools of research and to take courses in allied fields to promote breadth of view.

For course sequences or any other information consult the chairman of the department and the professor offering the course.

Economics

Prerequisites must include foundation courses in Principles of Economics, Political Science, Psychology, European and American History and Sociology

ECONOMICS 504. Economic History of the South. (3-0) Three hours credit. Study of agricultural, commercial and industrial development of the South with emphasis upon conditions in the Southwest

ECONOMICS 513. Economic History of the United States. (3-0) Three hours credit. This course traces the development of agriculture, commerce and industry from colonial times to the present and mentions industrialization, immigration, unionization, industrial conflict, etc. (See Economics 333 in regular catalog).

ECONOMICS 533, 523. Principles of Economics. (3-0) Three hours credit. This course is designed to provide a more thorough and critical consideration of economic principles than is possible in the elementary courses. An attempt will be made to evaluate the economic principles involved in the present economic system.

ECONOMICS 543. Economic Problems of the Southwest. (1-4) Three hours credit. A research and field course to ascertain and analyze major economic problems of this region in terms of their causes, consequences and solutions. Prerequisite: 213, 223 or Rural Economics 213 or graduate standing. (See Economics 343 in regular catalog).

ECONOMICS 563. Economic Problems of the Consumer. (3-0) Three hours credit. Course stressing the importance of consumption to production and the problems of consumers which inhere in our capitalistic system; such as budgeting, substitutes, waste, prices, government inspection, retailing, advertisement, etc.; stresses proposals to solve these problems and the need for spread of consumers' cooperatives and consumer education. (See Economics 323 in regular catalog).

ECONOMICS 573. Labor Problems. (3-0) Six hours credit. Evolution of industrial society; comparison of the psychologies and techniques of groups of employers and workers. Analysis of legislation designed to control labor problems as well as solutions of worker and employer groups. (See Economics 413 in regular catalog).

ECONOMICS 583. Current Economic Problems. (3-0) Three credit hours. Analysis of some of the leading current economic questions, particularly those concerning the expanding economic functions of the Federal government, farm adjustment, utilization of productive factors, and provision for the aged and unemployed.

ECONOMICS 602 Social Science Seminar. (2-0) Two hours credit. Survey of theories and techniques in the different social sciences. Reports on latest developments and contributions and the opportunities for research and employment for Negroes. (See Economics 500 in regular catalog).

ECONOMICS 703. The Negro in American Labor Movements. (2-2) Three hours credit. A research and discussion course in American Labor History, emphasizing the status and role of Negroes from indentured service and slavery to pragmatic, but precarious participation in current labor movements. Prerequisites: Basic courses in Economics and History, or graduate standing, or consent of the instructor. (See Economics 402 in regular catalog).

ECONOMICS 713, 723. History of Economic Thought. (3-0) Three hours. Both semesters. An analysis of the development of economic ideas and principles in the Western World with the purpose of showing their relationship to the economic and political conditions of the times in which they developed.

ECONOMICS 733. Agricultural and Industrial Problems. (3-0) Three hours credit. Comparative study of economic problems proceeding from agriculture and industry—in a dynamic age.

ECONOMICS 743. Economic Problems of Consumers. (3-0) Three hours credit. (Same as Economics 323 except that work will be more advanced and the techniques more scientific). A careful piece of research on one of these problems is required.

ECONOMICS 753. Advanced Money. (3-0) Three hours credit. A study of the role of money in the economic organization; the gold standard; the gold exchange standard; and the leading types of monetary theory. Prerequisites: Economics 343 or equivalent.

ECONOMICS 763. Advanced Banking. (3-0) Three hours credit. A study of the nature and functions of financial institutions; the theories of bank deposits, and the elasticity of bank currency; the discount policy and the interest rate of central banks; the effectiveness of the different methods of regulating credit and business activities.

ECONOMICS 773. Economic Theory and Social Policy. (3-0) Three hours credit. Analysis of economic theories involved in various institutional and government policies, especially those centering around farm control, education, housing, relief, protection of workers and consumers and social security.

ECONOMICS 782, 792. Statistical Analysis. Four hours credit. Both semesters. A general course in statistical methods designed primarily to give the graduate student in economics a clear conception of the value of statistics to economics and business. The course will include a treatment of the methods of collection, tabulation and graphic representation of data, of analysis of statistical series of various kinds together with an interpretation of the final results.

History

The offerings in History on the undergraduate level have been divided into six fields: (1) General and World History; (2) European History; (3) American History; (4) Social and Economic History; (5) The History of the Negro; and (6) Training courses in History. (Consult the regular college catalog).

Students seeking a master's degree in history should present well-chosen courses from three of the fields and pursue further work in one field or a combination of fields.

HISTORY 412. The Negro in Africa. (3-0) Three hours credit. A study of the Negroid peoples of Africa in terms of their origin, dispersion, culture, institutions and influences on surrounding civilizations. Also an analysis of the impact of European culture upon African life and the further dispersion of Negroids throughout Europe and the Americas.

HISTORY 443. Contemporary United States History, 1918-1939. (3-0) Three hours credit. II. Intensive study of the expanding influence of the United States and the internal developments which have contributed to that influence. Historical analysis of the depression and recovery periods. Interpretation of the role of the United States in world affairs. Some attention to regional developments within the country. Prerequisite: Nine hours of history.

HISTORY 4X3. History of the Negro in America. (3-0) Three hours credit. I or II. A general survey course giving the African background of the American Negro and depicting the Negro as slave, freedman and freeman. Stresses his contributions to American civilization.

HISTORY 503. Teaching the Social Sciences. (2-2) Three hours credit. I or II. Required of all majors in the Social Sciences and consisting of an examination of the various principles, materials, methods

and devices of teaching Economics, History, Political Science, and Sociology as well as the various social studies on the secondary level.

HISTORY 512, 522. Historical Methods . (2-0) Two hours credit. I and II. First semester: Historical bibliography, sources and criticism. Steps in choosing a subject, finding and classifying historical sources, criticism of sources. Second semester: Synthesis, exposition and preparation of the manuscript.

To complete the course the student must prepare and present a paper acceptable on the basis of the criteria established in the course.

HISTORY 533. American Foreign Relations, 1775-1940. (3-0) Three hours credit. I. A study of the United States in its relations with Latin America and the rest of the world. Emphasis upon public opinion and the economic, social and political forces that have determined American foreign policy and upon the agencies through which that policy has been executed. Prerequisites: History 313, 323, and any

HISTORY 543. Survival Techniques of American Negroes. (3-0) Three hours credit. II. An advanced course tracing the status and role of Negroes in various societies and the minority techniques they have evolved in majority civilizations. An appraisal of historic attempts at interracial adjustment, especially in the United States. Prerequisites: Two History courses or Sociology 223. course in Political Science.

HISTORY 562. Cultural Contributions of the Negro. (2-0) Two hours credit. Seminar open to English majors as well as History majors. Aims to present the artistic, literary, musical, and scientific contributions of American Negroes to our common culture.

HISTORY 572. The Old World and the New. (2-0) Two hours credit. I. Comparative study of the Old and New Worlds, past and present in terms of the dominant institutions and achievements before the World War. Prerequisites: Twelve hours of History and Political Science 302 or 402.

HISTORY 582. The World Since 1914. (2-0) Two hours credit. II. A survey of world developments since 1914. Open to majors and minors in history and government with sufficient background, and to seniors and graduate students from other departments whose interest and background justify it.

HISTORY 602. Social Science Seminar. (2-0) Two hours credit. I or II. Conducted by the personnel of the department and the Social Science Majors. Designed to survey the theories and methods and authorities in the six fields of social science instruction. Also to stimulate discussion of latest contributions in the fields and fertile areas for advanced study. Reports on professional organizations and their activities.

HISTORY 703. Problems in the Teaching and Study of History (2-2) I or II. Collection and analysis of proposed solutions of the problems which arise in the study and teaching of history on secondary and college levels. Planned research and experiment under actual conditions.

HISTORY 713. History of the South. (1-2) Two hours credit. A social, political and economic history of the South with emphasis upon conditions in the Southwest. Attempt will be made to collect pertinent historical material such as letters, diaries, maps, records, etc.

HISTORY 732. Seminar on the Negro in the Southwest. (2-0) Two hours credit. Research—Discussion course tracing Negroid elements to the Southwest and ascertaining the major contributions to this region and to the country at large.

HISTORY 742. The Negro in History. (2-0) Two hours credit. Comparative discussion of materials on the status and role of Negroes in agricultural and industrial areas of different periods; also a critical appraisal of his participation in the affairs of world powers as well as of colonies and dependencies.

HISTORY 753. Constitutional History of England, France and the United States. (3-0) I. Intensive study of constitutions in the development of three democratic countries.

HISTORY 763. Dictatorships and Democracies. (3-0) II. A Comparative historical study of the conditions, movements and leaders of different states which have produced current attempts to preserve or destroy the democratic forms and processes of government.

HISTORY 772. History and Social Reconstruction. (2-0) I. An analytical study of various historical or social movements, the conditions and leaders and followers which brought them about, and economic, political and social changes resulting therefrom.

HISTORY 802. Economic and Political History of the World. (2-0) I or II. A seminar in world history stressing the distribution of economic resources, the national, regional or international economy built thereon, the institutional arrangements devised to operate and control them, and the effects of the economic and political processes involved upon the people of the world.

Political Science

Students entering upon their graduate studies concentrated in Political Science after June, 1940, must elect Political Science 612, the first semester of residence and at least one seminar offered in Political Science. All students concentrating in Political Science are required to attend the Social Science Seminar, Political Science 500.

POLITICAL SCIENCE 402. Seminar in International Organization. Two hours credit I or II. (Offered in conjunction with Political Science 402 in the undergraduate catalog).

POLITICAL SCIENCE 5X2. Social Legislation. Two hours credit. I or II. Deals with: First, the general nature and objectives of social control and second, the specific content of certain types of social legislation now in operation, such as relief of poverty, social insurance, labor legislation, race relations, marriage, and divorce.

POLITICAL SCIENCE 503. Teaching of the Social Sciences. (3-0) Three hours credit. I or II. Required of all Majors in the Social Sciences. (See Political Science 403 in the undergraduate catalog).

POLITICAL SCIENCE 513 and 523. American National and State Government. (3-0) Three hours credit I or II. Not open to students who have received credit for Political Science 113, 203, or 413 and 423. A survey of the American system of government and the major governmental problems confronting the American Union. Course 513 is a prerequisite for course 523.

POLITICAL SCIENCE 542. Two hours credit. I or II. Seminar in Public Administration paying particular attention to types of administrative organization, processes or methods of administration, and public personnel administration. Course may stress local, national, or international matters, depending upon the interest and background of the students in the course.

POLITICAL SCIENCE 602. Social Science Seminar. (2-0) Required. Two hours credit. I or II. Conducted by the Social Science Faculty and Majors. Participation required of all Social Science Majors. Final survey of the major theories and techniques in the six fields of social science instruction. Reports on the most recent authorities, literature and contributions, and the most fertile fields for advanced study, in these fields. Discussions of social surveys under way and of opportunities for Negroes in allied fields.

POLITICAL SCIENCE 6X3. American Constitutional Law. (3-0) Three hours credit I or II. The principles of American Constitutional Law as seen in the leading cases, with special reference to political theories and national development. Prerequisites: Six hours of Political Science.

POLITICAL SCIENCE 612. Bibliography and Methods of Research. (2-0) Two hours credit I. A survey of the bibliographies, studies in the use of public documents and other source material, investigation and reports on special research problems. This course is required of all candidates for graduate degrees in Political Science during the first semester of residence.

POLITICAL SCIENCE 702. Seminar in Political Theory. (2-0) Two hours credit. I or II. Political thought of contemporary dictatorships: communist, fascist, and national-socialist. Special arrangements will be made for students who wish to pursue investigations in other subjects.

POLITICAL SCIENCE 712. Seminar in Colonial Government and Problems of Imperialism. (2-0) Two hours credit. I. A survey of the great historical imperial systems followed by an intensive study of colonial governments and the problems of imperialism in the world today

POLITICAL SCIENCE 722. Seminar in Political Parties and Electoral Problems. (2-0) Two hours credit II. An intensive study of selected electoral problems in the United States and the Southwest paying particular attention to Negro suffrage and voting participation in Texas. Prerequisites: six hours of Political Science.

POLITICAL SCIENCE 732. Seminar in Governments and Politics of the Far East. (2-0) Two hours credit I or II. A study of the political institutions of China, Japan, and other Far Eastern Countries, and the current problems of the Far East.

POLITICAL SCIENCE 742. Seminar in Comparative Government and Administration. (2-0) Two hours credit I or II. A study of British political institutions and contemporary government forms and functions in Europe and America. A critical estimate of political theories and philosophies.

POLITICAL SCIENCE 752. Public Finance. (2-0) Two hours credit. I. A study of the income and expenditures of government; services rendered by government and the costs of those services; principles of taxation; kinds and amounts of taxes; relation of public finance to political processes, governmental structure and social control. Prerequisites: elementary economics and American history or the consent of the instructor. (See Political Science 353 in the undergraduate catalog).

POLITICAL SCIENCE 762. Seminar in American Local Rural Government. Two hours credit II. An intensive study of governmental organizations and functions of counties, townships, and villages, paying particular attention to rural government and school boards in Texas. Prerequisites: Six hours of Political Science with permission of the instructor.

Sociology

Objectives:

1. A development of knowledge sufficient to make community surveys necessary for the formulation of programs of community organization.
2. Development of interest and ability of the student in the field of scientific sociology.
3. To develop an appreciation and ability to interpret native and folk culture of the nation and the Southwest.
4. To develop the ability to interpret mass behavior so as to make such interpretation functional in leadership.

Requirements

Students seeking the Masters degree in Sociology must have completed at least 9 semester hours in undergraduate sociology. After having met these prerequisites, those who seek to major must complete a minimum of 20 additional semester hours in Sociology. Those seeking to minor in Sociology must complete 10 semester hours or more of graduate courses.

SOCIOLOGY 403. Principles of Sociology. Three hours credit. A study of the underlying principles of general sociology. Especially designed for those students endeavoring to build prerequisites in Sociology.

SOCIOLOGY 503. Teaching the Social Sciences. Three hours credit. See History 503 in the undergraduate catalog).

SOCIOLOGY 513. Development of Social Theory. Three hours credit. A study of the historical development of important sociological theories.

SOCIOLOGY 523. Techniques of Social Research. Three hours credit. A study of the methods and techniques of research and investigation in Sociology. Designed to give the student practice in collecting, classifying, and analyzing data of a sociological nature.

SOCIOLOGY 533. Advanced Rural Sociology. Three hours credit. Continuation of the investigation of rural social phenomena.

SOCIOLOGY 543. Collective Behavior. Three hours credit. A study of collective forms of interaction, mass behavior, and the rise of new orders out of various forms of social unrest.

SOCIOLOGY 573. Social Statistics. Three hours credit. Study of the tabulation, analysis, and interpretation of social phenomena through the application of statistical formulas.

SOCIOLOGY 602. Social Science Seminar. Required of Majors in the Social Sciences.

SOCIOLOGY 613. Cultural Anthropology. Three hours credit. A study of native and folk cultures with special emphasis on the Southwest.

SOCIOLOGY 623. Race and Migration. Three hours credit. A study of the principles of racial contact and the processes underlying such phenomena. Special emphasis is placed on Negro, Caucasian, and Mexican groups.

SOCIOLOGY 723. Community Problems. Three hours credit. A special study of the forms of social disorganization arising out of the community processes.

SOCIOLOGY 743. Rural Population Problems. Three hours credit. An application of the principles of population study to rural phenomena. Emphasis is placed on the causes, extent and effect of rural population mobility.

DIVISION OF HOME ECONOMICS

A split major may be taken in Home Economics Education and General Home Economics; a minor may be selected in either of these fields.

HOME ECONOMIC EDUCATION

HOME ECO. EDU. 502 or 503. Vocational Guidance. Two or three hours credit. (See Education: Administration and Supervision 512 or 513).

HOME ECO. EDU. 513. Rural Community Recreation. Three hours credit. (See Rural Education 513).

HOME ECO. EDU. 523. Organization and Presentation in Home Economics. Three hours credit.

HOME ECO. EDU. 533. Problems of Rural Health. Four hours credit. (See Rural Education 533).

HOME ECO. EDU. 573. Psychology for Students of Education. Three hours credit. (See Psychology 573).

HOME ECO. EDU. 713. Rural School and Community Relations. Three hours credit. (See Rural Education 713).

HOME ECO. EDU. 723. Educational Measurements in Home Economics. Three hours credit.

HOME ECO. EDU. 743. Statistical Technique for Home Economics Students. Three hours credit.

GENERAL HOME ECONOMICS

GENERAL HOME ECO. 703 Foods. Seminar in Food, Nutrition and Health. Three hours credit.

GENERAL HOME ECO. 753. Clothing. Recent Trends in Clothing and Textiles. Three hours credit.

GENERAL HOME ECO. 773. Child Development. Seminar in child development and behavior. Three hours credit.

DIVISION OF MECHANIC ARTS

INDUSTRIAL EDUCATION

INDUSTRIAL EDUCATION 512 or 513. Vocational Guidance. Two or three hours credit. Open to all graduate students. Surveys required of all students. A study of Vocational Guidance as a means of contributing to the major objectives of secondary education, typical centers, movements, and programs now carried on; readings and reports.

INDUSTRIAL EDUCATION 522. Organization of Instructional Material. From material obtained from occupational analysis teachable content is organized. Lesson plans and job sheets.

INDUSTRIAL EDUCATION 532. Coordination, Placement and Follow-up. This course will deal with the problems of coordination, placement and follow-up where a part-time program is operated with either the in or out-of-school student.

INDUSTRIAL EDUCATION 542. Problems in Training for the Diversified Occupations. Preparation of specific courses of study for the individual students in diversified occupations by means of the occupational analysis.

INDUSTRIAL EDUCATION 552. Organization and Administration of Courses in Distributive Occupations. A study of the provisions and interpretations of the George Dean Act relating to distributive occupations.

INDUSTRIAL EDUCATION 572 or 573. Social and Economic Factors Affecting Industrial Education. Two or three hours credit. Open to all graduate students qualified in Industrial Education. Surveys required of all students; a study of social and economic factors affecting industry, including the theories of labor and management, with special emphasis on the economic results of efficient Industrial Education.

INDUSTRIAL EDUCATION 592 or 593. Organization and Presentation of Industrial Arts Subjects. Two or three hours credit. Open to all graduate students qualified in Industrial Education. Research problems required of all students. Individual research problems of organization, presentation and administration of Industrial Arts subjects. The nature of the problems will depend upon the student's major interest. The data obtained may be used as the basis for the Master's thesis.

INDUSTRIAL EDUCATION 702 or 703. Problems in Vocational Education. Two or three hours credit. Open to all graduate students. The solution of some vocational education problems in research or in thesis preparation; problems in administration, supervision, or curriculum building in the varied vocational fields to meet community needs.

INDUSTRIAL EDUCATION 722. Problems in Industrial Education Research and Thesis. Two hours credit. Open to graduate students qualified in Industrial Education. Research problems required of all students. Individual research problems of administration and supervision of industrial educational programs in public schools.

INDUSTRIAL EDUCATION 732 or 733. Problems in Vocational Guidance. Two or three hours credit. Open to all graduate students. Research problems in phases of Guidance which affect better coordination and supervision of the work of Junior and Senior High Schools, and development of part-time and adult education progress.

INDUSTRIAL EDUCATION 742 or 743. Problems of the General Shop in the Junior School. Two or three hours credit. Open to all graduate students qualified in Industrial Education. Construction of general shop projects; organization and methods of presentation suitable for the Junior High School. Laboratory 3. Lecture 1 or 2.

INDUSTRIAL EDUCATION 752 or 753. Occupational and Job Analysis for determining Curricula and Instructional Procedures. Two or three hours credit. Open to all graduate students qualified in Industrial Education. Analysis technique as developed by various leaders in Industrial Arts and trade and industrial subjects; job analysis for the purpose of determining the contents of training for occupation; related content analysis for the purpose of determining what should be taught as classroom material; analysis of industry or of an industrial plant for the purpose of determining the general outline of a program of plant training.

INDUSTRIAL EDUCATION 762 or 763. Industrial Methods and Procedures in Industrial Arts in Secondary Schools. Two or three hours credit. Open to all graduate students qualified in Industrial Education. A study of the factors of success in teaching shop work and drafting; new objectives in Industrial Arts with resulting changes

in curriculum and methods; methods and devices in shop teaching; analysis in learning difficulties and teaching responsibilities in shop and class work; principles of teaching as applied to shop subjects; critical study of shop layouts, organization and management.

INDUSTRIAL EDUCATION 772 or 773. Leaders and Movements in Industrial and Vocational Education. Two or three hours credit. Open to all graduate students qualified in Industrial Education. Brief survey of early movements, experiments, and drawings which prepared the way for the Vocational Educational program of today with a more intensive study of the development since 1876; a comprehensive study of leaders, institutions, and especially the literature of Industrial and Vocational Education; extensive readings and reports; and term papers on assigned topics.

INDUSTRIAL EDUCATION 782 or 783. Changing Conceptions and Objectives in Industrial Education. Two or three hours credit. Open to all graduate students qualified in Industrial Education. A critical study of assumptions and the objectives of Industrial Education; relation of industrial arts to industrial education; and of both to general education; the place of industrial arts and vocational industrial education in a philosophy of education.

MECHANIC ARTS

MECHANIC ARTS 712 or 713. Advanced Thermodynamics. Two or three hours. Open to all graduate students qualified in Mechanic Arts and Mathematics. An advanced course in Thermodynamics consisting of the application of the principles to advanced problems in heat engines, refrigeration machinery, air compressors, together with lectures dealing with engineering phases and the relation of the laws of Thermodynamics to modern physical concepts of matter and energy.

MECHANIC ARTS. 722 or 723. Graphics of Formulas. Credit two or three hours. Open to all graduate students qualified in Mechanic Arts and Mathematics. Simple empirical equations; curve fitting; diagramming of formulas; the construction of alignment charts, and numerical and graphical integration and differentiation.

MECHANIC ARTS 732 or 733. Advanced Kinetics. Credit two or three hours. Open to all graduate students qualified in Mechanic Arts or Mathematics; Movements of inertia of masses. Kinematics; motions of particles and rigid bodies. Kinetics: force, mass, acceleration; work and energy; impulse and momentum.

MECHANIC ARTS 742 or 743. Advanced Statics. Credit two or three hours. Open to all graduate students qualified in Mechanic

Arts and Mathematics. Advanced phases of Statics including mathematical and graphical analysis with applications to engineering problems. The principles of moment distribution, virtual work and the column analogy.

MECHANIC ARTS 752 or 753. Advanced Strength of Materials. Credit two or three hours. Open to all graduate students qualified in Mechanic Arts or Mathematics. Special problems met in engineering, limitations of flexure and torsion formulas, unsymmetrical bending, curved beams, combined stresses, thin tubes, thick hollow cylinders, flat plates.

MECHANIC ARTS 762 or 763. Advanced Descriptive Geometry. Credit two or three hours. Open to all graduate students and undergraduates students qualified in Drawing. The graphical representation and the application of plane and space curves; single curved surfaces (including the convolute), and their developments. The fundamentals of perspective and other pictorial means of representation.

MECHANIC ARTS 772 or 773. Stress Analysis. Credit two or three hours. Open to all graduate students qualified in Mechanic Arts and Mathematics. Mathematical and graphical computation of stresses in framed structures.

ADDENDUM

GRADING SYSTEM FOR GRADUATE STUDENTS

Course work of graduate students is reported as "A" (95-100); "B" (85-94); "C" (75-84); "D" (65-74); "E" (60-64); "F" (below 60); "I" (Incomplete).

No graduate credit is given for courses in which a grade lower than "C" is received. In order to show satisfactory progress toward an advanced degree a student must receive an average grade of "B."

The work of a graduate student performed in connection with his thesis problem is reported as "satisfactory" or "unsatisfactory."

A graduate student may receive a grade of "I"—incomplete, in a course with the privilege of finishing the work at a later date. "Incomplete" work must be made up within twelve months after the close of the term in which the grade was earned, or no credit will be allowed for the course.

Graduate students registered in courses that are opened to advanced undergraduates must do a certain amount of work in addition to that required of undergraduates. The nature of this additional work may be the reading of additional books on the subject and presenting a review of same, the making of reports, or such other work as the teacher in charge of the course may deem wise.