

- 468: Readings in Scientific and Technical Communications.** 0-3-3. Preq., ENGL 303. Study of the current material written about technical communication, with a reading and critical analysis of various technological journals. (G)
- 469: Graphics in Technical writing.** 0-3-3. Preq., ENGL 303. Theory and practice of illustrating texts, with emphasis on electronic media to integrate nonverbal and written materials.
- 470: Linguistics.** 0-3-3. Preq., ENGL 201 or 202. Systematic study of language acquisition, change, and variation; application to teaching grammar, writing, and/or literature. Also listed as FLNG 470. (G)
- 475: Special Topics.** 0-3-3 (6). Seminar with topic to be designated by the instructor. (G)
- 480: Science Fiction.** 0-3-3. Study of science fiction within the context of modern literature, including short stories, novels, and films. (G)
- 482: Folklore Studies.** 0-3-3. Study of folklore theory and genres in culture and literature with topics ranging from verbal arts to ritual and belief. (G)
- 484: Advanced Creative Writing.** 0-3-3. Preq., ENGL 384 or instructor's permission. Workshop format includes intensive criticism of student writing in short fiction and/or poetry with emphasis on submission for publication. (G)
- 491: Advanced Expository Writing.** 0-3-3. Writing essays and reports for professional publication; focus on style, format, and editing manuscripts. (G)
- 500: Teaching College Composition.** 0-3-3. Preparation for teaching Developmental English and Freshman English; includes theory, research, technology, and pedagogy related to college composition.
- 515: Shakespeare Seminar.** 0-3-3 (6). Preq., ENGL 415 or its equivalent. Study of Shakespeare texts and background writings of the Elizabethan and Jacobean Periods; repeatable once for credit with different instructor and/or course content.
- 520: Seminar in Composition.** 0-3-3 (6). Selected reading and research topics in composition studies; repeatable for credit with different instructor and/or course content.
- 560: Seminar in Technical Writing.** 0-3-3 (6). Preq., ENGL 303 or equivalent. Selected reading and research topics in technical writing theory and practice; repeatable once for credit with different instructor and/or course content.
- 575: Special Topics.** 0-3-3 (6). Graduate seminar with topic to be designated by instructor.
- 583: Seminar in British Literature.** 0-3-3 (6). Reading and research topics in British Literature; repeatable once for credit with different instructor and/or course content.
- 584: Seminar in American Literature.** 0-3-3 (6). Reading and research topics in American Literature; repeatable once for credit with different instructor and/or course content.
- 585: English Teachers' Workshop.** 0-3-3. A course designed primarily for school teachers of English.
- 591: Literary Research and Bibliography.** 0-3-3. Focuses upon methodology of scholarship, stressing various kinds of literary problems and approaches to their solutions; emphasis on descriptive and analytical bibliography.

ENVIRONMENTAL SCIENCE (ENSC)

- 200: Introduction to Environmental Sciences.** 0-3-3. Basic laws, principles and issues related to the causes, effect and controls of environmental problems. Man-environment interaction.
- 275: Aquatic Bioassays.** 0-1-1. Internet-based course centering on governmental regulations concerning bioassays to test for toxicity in waste effluents released into natural waters in the United States. Also listed as BISC 275.
- 300: Agricultural Pollution.** 0-3-3. Study of various agricultural practices as they relate to the causes and solutions to environmental impact of agriculture on the air, water, and soil.
- 310: Soil Science.** 0-3-3. Preq., CHEM 100, 101, 102. A general study of soil science, emphasizing the relation of soil properties and processes to plant growth. Also listed as PLSC 310.
- 311: Soil Science Laboratory.** 3-0-1. Preq. or Coreq., ENSC 310. Laboratory exercises to elaborate fundamental principles of soil properties, soil testing, and soil survey reports. Also listed as PLSC 311.
- 313: Ecology.** 4 1/4-2-3. Preq., BISC 132, 133. An overview of the interactions of plants, animals, and non-living factors as they influence individuals, populations, communities, and ecosystems.
- 400: Environmental Science Seminar.** 0-1-1(3). Reviews, reports, and discussions of current problems relating to environmental science.

- 421: Epidemiology.** 0-3-3. Methods of data collection and analysis to determine the frequency, distribution and cause of disease and/or injury in human and non-human populations.
- 422: Occupational Health and Safety.** 0-3-3. The design and implementation of occupational health and safety services to including fitness-to-work evaluations, health monitoring, hazard evaluation and response to emergencies involving hazardous substances. (G)
- 444: Environmental Microbiology.** 4-2-3. Preq., BISC 260. Basic and contemporary aspects of soil, water, and industrial microbiology.
- 446: Instrumentation.** 3-2-3. Preq. 12 hours of BISC or CHEM. Emphasizes the operational theory, use, and maintenance of instruments appropriate to biological investigation through didactic and laboratory exercises.
- 456: Environmental Chemistry.** 0-3-3. Preq., one year of college chemistry and junior standing. Chemical principles that regulate and affect the environment. (G)
- 458: Environmental Law.** 0-3-3. Preq., BISC 130, 131, or approval of instructor. A review and analysis of state and federal laws, conventions, and international treaties that influence natural resource management. (G)
- 477: Cooperative Education Work Experience.** 1-6 hours credit (9). (Pass/Fail). On site, supervised, structured work experiences located within a 100 mile radius of Ruston. Application and supervision fee required.
- 478: Cooperative Education Work Experience.** 1-6 hours credit (9). (Pass/Fail). On site, supervised, structured work experiences located within a 101-200 mile radius of Ruston. Application and supervision fee required.
- 479: Cooperative Education Work Experience.** 1-6 hours credit (9). (Pass/Fail). On site, supervised, structured work experiences located beyond a 201 mile radius of Ruston. Application and supervision fee required.

FAMILY & CHILD STUDIES (FCS)

- 100: Marriage and Family Relations.** 0-3-3. Significant factors for successful marriage, marital adjustment, and family relations.
- 101: Skills for Marriage.** 0-3-3. Designed to provide students with information and skills necessary to facilitate an enduring and satisfying marriage.
- 200: Parenting.** 0-3-3. Study of the parenting role. Emphasis on parent-child interaction as it influences child growth and development.
- 201: Introduction to Child and Family Development.** 0-3-3. Basic principles and sequences in human development from prenatal period through aging years. Emphasis on developmental tasks, forces influencing development, and the family life cycle.
- 210: Family Interpersonal Relationships.** 0-3-3. The study of interaction between individuals with application to family dynamics, personal relationships, professional interaction, and job competency.
- 221: Parent Involvement in Preschool Education.** 0-2-2. Introduction to the theories and methods of parent involvement in early childhood (preschool) education.
- 276: Children's Near Environments.** 0-3-3. An examination of issues related to the near environment of children including child nutrition, food preparation and activities, housing, equipment, and clothing needs.
- 277: Guiding Infants and Young Children.** 0-2-2. Principles and techniques of positive guidance emphasizing a problem solving philosophy and a child-centered approach.
- 280: Hospitalized Children and Youth.** 0-3-3. Study of issues involved in childhood illnesses and hospitalization.
- 291: Orientation to Child Life Programs.** 0-3-3. A study tour of child life programs and services.
- 301: Early Childhood Development.** 3-2-3. Preq., FCS 201. The development of young children. Theory and practice are correlated through readings, class discussions, and nursery school laboratory experiences.
- 311: Literacy Development in Early Childhood Education.** 0-3-3. Preq. or Coreq., Admission to Teacher Education Upper Division or consent of instructor. Development of early language skills. Emphasis on the preschool language arts curriculum as preparation for language development.
- 320: Family Theory.** 0-3-3. Preq., FCS 100, 201 or consent of instructor. An overview of theoretical frameworks in family science with primary emphasis given to application of constructs.
- 321: Methods in Early Childhood Education.** 3-2-3. Preq., Admission to Teacher Education Upper Division and FCS 301 or consent of instructor.

Important factors in planning for preschool children. Emphasis on objectives, planning nursery school experiences, and evaluation.

- 331: Infant Development.** 3-2-3. Preq., FCS 201 or consent of instructor. Survey of influences on prenatal and infant development. Theory and practice correlated through readings, class discussion and laboratory experiences.
- 341: Issues and Applications in Middle Childhood and Early Adolescence.** 3-2-3. Preq., FCS 201 or consent of instructor. A survey of middle childhood and early adolescent years as they relate to children's development and family interaction; includes observation and laboratory experiences.
- 355: Advanced Interpersonal Skills for the Family & Child Advocate.** 0-3-3. Preq., FCS 100, 210. Examination of interpersonal skills for the family and child helping professional or advocate. Discussion of traditional helping paradigms.
- 361: Observation and Assessment Techniques of Children.** 0-2-2. Preq., FCS 201, or consent of instructor. Skills and strategies needed to observe and assess children's development in a clinical setting.
- 380: Understanding Childhood Diseases and Disorders.** 0-3-3. Overview of childhood diseases/disorders, diagnostic tests, and treatment, with emphasis on effects of illness on normal growth and development and family functioning.
- 395: Research Methods in Family and Child Studies.** 0-3-3. Preq., FCS 201 or consent of instructor. Examination of methods, implications, and ethics of child and family research. Theory based research and competency in reading empirical studies will be emphasized.
- 400: Contemporary Family Issues.** 0-3-3. Selected issues related to family interaction and adjustment from an ecosystem perspective.
- 401: Curriculum and Organization of Early Childhood Education Programs.** 0-3-3. Preq., Admission to Teacher Education Upper Division and FCS 321 or consent of instructor. Organization of preschool programs with emphasis on creative activities, materials and facilities. (G)
- 410: Multi-Cultural Family Studies.** 0-3-3. Cross-cultural survey of family patterns and their implications for professionals in the community and workplace.
- 420: Issues in Family Life Education.** 0-3-3. Preq., FCS 321, or consent of instructor. Methodology of teaching current family issues in family education programs. Development of family life educator skills with emphasis on parent education and marital enrichment. (G)
- 421: Student Teaching in Early Childhood Education: Nursery School.** 16-1-6. Preq., Admission to Teacher Education Upper Division and FCS 321, consent of instructor, preregistration and application required. An intensive practical experience in supervised nursery school teaching.
- 432: Children Under Stress.** 0-3-3. Preq., FCS 301 or consent of instructor. In-depth study of issues relating to the identification, understanding, and intervention in childhood stress.
- 435: Family Coping.** 0-3-3. Designed to help students recognize and adapt to stressors of everyday living. Particular attention is placed on understanding family involvement in coping with stress. (G)
- 447: Issues in Gerontology.** 0-3-3. Preq., FCS 201 or PSYC 408 or consent of instructor. Issues that impact older age adults including public policy, close relationships, sexuality, housing, nutrition and apparel. (G)
- 451: Theory, Guidance, and Therapeutic Value of Play.** 0-3-3. Preq., FCS 301 or consent of instructor. Study of play in teaching, therapy, and creativity for children and youth.
- 461: Administration of Programs for Young Children.** 0-2-2. Preq., FCS 301 and 331 or consent of instructor. Planning and administration of programs for young children.
- 471: Family Law and Public Policy.** 0-3-3. Preq., FCS 100 and 400 or consent of instructor. The study of the legal system and public policy as they relate to family structure and function. (G)
- 480: Families with At Risk Children, Birth Through Preschool.** 0-3-3. Preq., FCS 320 or consent of instructor. Application of family theory to families with special needs children, birth through preschool. Appropriate for child life, early childhood education, early intervention professionals. (G)
- 481: Team Functioning for Family and Child Studies Professionals.** 0-3-3. Team development and functioning including processes, barriers and interdisciplinary collaborations. (G)
- 482: Nutrition and Medical Management of Infants At Risk.** 0-3-3. Preq., FCS 331 or consent of instructor. Overview of nutritional and medical care issues associated with infants and young children at risk for or with disabilities. (G)

- 490: Perspectives in Family and Child Studies.** 0-3-3 (9). Preq., FCS 201 and 210 or consent of instructor. An in-depth study of current trends and issues that relate to strengthening children and families.
- 501: Contemporary Issues in Infancy and Preschool Years.** 0-3-3. Seminar in current research in child development with emphasis on the infancy and preschool years.
- 502: Advanced Child Development.** 0-3-3. An in-depth exploration into social/emotional, cognitive and physical development of children from birth to 8 years of age.
- 510: The Family in Middle and Later Years.** 0-3-3. Study of changes, needs and adjustments during the middle and later years of the family.
- 520: Interpersonal and Family Dynamics.** 0-3-3. Study of dynamics of family interaction and relationship functioning. Emphasis on current research and issues confronting contemporary families.
- 521: Family Crisis.** 0-3-3. Origins, development, and coping responses to predictable and unexpected crises of family systems in varied ecological settings.
- 522: Family Life Education Programs.** 0-3-3. Study of theory and methods used in developing programs to reduce mental health risks and build strengths of families.
- 530: Early Childhood Programs.** 0-3-3. Survey of early childhood program models.
- 540: Parent Involvement.** 0-3-3. Theories, issues and public policy of parent involvement in the educational process of children.
- 561: Advanced Administration of Early Childhood Programs.** 0-3-3. An in-depth study of administering and organizing programs serving young children.

FINANCE (FINC)

- 100: Family Financial Management.** 0-3-3. Specific family financial decisions, including budgeting, insurance, home purchase or rent, consumer rent, personal income tax, lifetime financial planning.
- 318: Business Finance.** 0-3-3. Preq., ECON 202 or 215, ACCT 202, and junior standing. An introduction to the principles of financial management including the role of the financial manager, problems of liquidity vs. profitability, budgeting of capital expenditures, management of short-term and long-term funds, and management of assets.
- 319: Intermediate Financial Management.** 0-3-3. Preq., FINC 318. Advanced practices of financial management are developed. Financial models used in decision-making and their application to major areas of business finance are emphasized.
- 330: Risk and Insurance.** 0-3-3. A comprehensive study of riskbearing, including insurance and non-insurance methods of handling a risk; introduction to the fields of life, disability, property, and casualty insurance.
- 401: Internship in Finance I.** 3 hours credit. (Pass/Fail) Preq. consent of instructor and senior standing. On site, supervised, structured work experiences in the field of business.
- 402: Internship in Finance II.** 3 hours credit. (Pass/Fail) Preq. consent of instructor and senior standing. On site, supervised, structured work experiences in the field of business.
- 412: International Finance.** 0-3-3. Preq., FINC 318. A study of the various modes of financing international trade, including international financial organizations, an analysis of exchange rates, foreign investments, multinational firms, and international banking. (G)
- 414: Investments.** 0-3-3. Preq., FINC 318. Analyses of investments in common stocks, bonds, and other financial assets; sources of information for the investor; analysis of firms' financial statements; classes of investments. (G)
- 421: Portfolio Risk Management.** 0-3-3. Preq., FINC 414. Examine concepts in portfolio theory. Evaluate the implications of portfolio building, security selection, and risk-management techniques, including the use of derivatives.
- 422: Bank Management.** 0-3-3. Preq., FINC 318. Problems in organization, operation, and management of commercial banks, with special emphasis on credit banking. (G)
- 423: Bank Management: Cases, Policies and Practices.** 0-3-3. Preq., FINC 318. Application of decision-making procedures to bank financial management situations, including evaluation of bank performance, capital acquisition, liquidity, and loans.
- 425: Money Markets, Capital Markets and Financial Institutions.** 0-3-3. Preq., FINC 318. A survey of the markets in which funds are traded; a survey of the lending and investing characteristics of selected financial institutions. (G)

- 430: Advanced Financial Management.** 0-3-3. Preq., FINC 318. The case method is used to apply decision-making procedures to realistic problems in financial management.
- 431: Life Insurance.** 0-3-3. A comprehensive study of personal and group life, accident and health, hospitalization, old age, survivors and disability insurance and annuities.
- 432: Property Insurance.** 0-3-3. A comprehensive study of fire, burglary, robbery, forgery, liability, inland and ocean marine insurance, and surety and fidelity bonds.
- 435: Private Pensions, Group Insurance and Estate Planning.** 0-3-3. Analysis of pension regulations, design, and funding, actuarial considerations, integration with Social Security benefits, survey of group insurance, and implications for estate planning.
- 442: Principles of Real Estate and Land Economics.** 0-3-3. Land utilization, city growth, land development, legal processes and transactions, real estate marketing, financing and financial institutions, taxes, condemnation, planning and zoning.
- 443: Appraisal.** 0-3-3. Application of value theory and principles to real estate values; professional appraisal principles methodology. Corresponds to Appraisal I, the Appraisal Institute.
- 444: Appraisal of Urban Properties.** 0-3-3. Preq., FINC 443. Appraisal case studies and practices in appraisal of commercial and industrial properties; generally corresponds to Appraisal II, Urban Properties, and the Appraisal Institute.
- 445: Real Estate Finance.** 0-3-3. Preq., FINC 318. Finance principles applied to real estate. Sources of funds, legal and financial instruments, and analytical methods for decision-making. (G)
- 511: Risk Management.** 0-3-3. The economic concept of risk and various techniques utilized in the discovery, evaluation and treatment of a business pure risk.
- 515: Financial Management.** 0-3-3. Preq., ACCT 505 or consent of instructor. The study of a financial manager's role in financial planning, acquisition and management of funds for a business firm.
- 516: Financial Management: Policies and Practices.** 0-3-3. Preq., FINC 515 or consent of instructor. Application of decision-making procedures to financial management problems. Student is required to solve case problems and manage the financial affairs of computer simulated firm.
- 517: Capital Budgeting Seminar.** 0-3-3. Preq., FINC 515 or consent of instructor. A systematic and thorough treatment of the theory and practice of capital expenditure management, emphasizing financial modeling and employing a quantitative format.
- 518: Advanced Commercial Banking.** 0-3-3. FINC 515 or consent of instructor. Advanced studies in contemporary banking practices with special emphasis in credit analysis. Structuring of loans in specialized commercial lending areas as well as the entire credit granting decision process will be examined.
- 525: Seminar in Investments.** 0-3-3. FINC 515 or consent of instructor. Study of the theories and techniques of investment analysis for purposes of evaluation and selection of investments.
- 550: Directed Study in Finance.** 1-3 hours credit. Hours and credits to be arranged. Consent of instructor and approval of department head required. Special problem or specific area of finance.
- 610: Seminar in Financial Theory I.** 0-3-3. Preq., FINC 515 (also, desirable that student has had an intermediate or advanced economics course). Examination and application of contemporary financial theory and analysis relating to business finance.
- 611: Risk Management.** 0-3-3. Requires Doctoral standing. May require additional class meetings. The economic concept of risk and various techniques utilized in the discovery, evaluation and treatment of a business pure risk. Credit will not be given for FINC 611 if credit is given for FINC 511.
- 615: Seminar in Financial Theory II.** 0-3-3. Preq., FINC 610. Requires Doctoral standing. Detailed study of both classic and contemporary literature that provides students with a cross-section of modern theoretical developments in the field of business finance.
- 616: Financial Management: Policies and Practices.** 0-3-3. Preq., FINC 515 or consent of instructor. Requires Doctoral standing. May require additional class meetings. Application of decision-making procedures to financial management problems. Student is required to solve case problems and manage the financial affairs of computer simulated firm. Credit will not be given for FINC 616 if credit is given for FINC 516.
- 617: Capital Budgeting Seminar.** 0-3-3. Preq., FINC 515 or consent of instructor. Requires Doctoral standing. May require additional class meetings. A systematic and thorough treatment of the theory and practice

of capital expenditure management, emphasizing financial modeling and employing a quantitative format. Credit will not be given for FINC 617 if credit is given for FINC 517.

- 618: Advanced Commercial Banking.** 0-3-3. FINC 515 or consent of instructor. Requires Doctoral standing. May require additional class meetings. Advanced studies in contemporary banking practices with special emphasis in credit analysis. Structuring of loans in specialized commercial lending areas as well as the entire credit granting decision process will be examined. Credit will not be given for FINC 618 if credit is given for FINC 518.
- 625: Seminar in Investments.** 0-3-3. FINC 515 or consent of instructor. Requires Doctoral standing. May require additional class meetings. Study of the theories and techniques of investment analysis for purposes of evaluation and selection of investments. Credit will not be given for FINC 625 if credit is given for FINC 525.
- 650: Directed Study of Finance.** 1-3 hours credit. Hours and credits to be arranged. Consent of instructor and approval of department head required. Special problem or specific area of finance.
- 685: Comprehensive Exam in Finance.** No credit. Doctoral standing required. Required for all business administration doctoral students seeking to take the comprehensive exam in finance. Successful completion is a prerequisite to the oral comprehensive exam for those seeking a primary field or examined minor in finance. Requires consent of graduate director.

FOOD & NUTRITION (FNU)

- 103: Human Nutrition and Weight Control.** 0-1-1 (3) Pass/Fail. Personalized weight control program based on recommended nutrients, behavior modification and energy balance.
- 203: Human Nutrition.** 0-3-3. Functions of various nutrients and their interrelationships in children and adults with emphasis on personal food habits and selection.
- 220: Life Cycle Nutrition.** 0-3-3. Evaluation of variations in nutrition requirements in all stages of the life cycle, including prenatal, infant, childhood, adolescent, adult, and geriatric nutrition.
- 223: Nutrition Education.** 0-2-2. Basic principles of nutrition with special emphasis on the school-age child. Techniques of presenting nutrition information to children (Planned for non-majors).
- 232: Basic Food Science.** 3-2-3. Use of food science principles in food selection and preparation procedures. Introduction to food science research.
- 233: Creative Experiences in Nutrition.** 3-0-1. Preq., or Coreq., FNU 223 or 203. Food preparation and nutrition activities for young children.
- 253: Sports Nutrition.** 0-3-3. Nutrient needs and food related issues in exercise for wellness and training for competitive athletes.
- 274: Introduction to Dietetics.** 0-3-3. An introduction to dietetics, trends affecting the profession, and the research process, including computer applications.
- 302: Quantity Foods Field Experience.** 4-2-3. Preq., BISC 214, FNU 352. Equipment and production in the food service industry; field experience in food service facilities.
- 305: Nutrition Education Methods.** 0-2-2. Preq. or Coreq., FNU 203 or 253. Principles and methods of teaching in nutrition education.
- 343: Health Care Delivery Systems.** 0-2-2. Preq., upper division standing or permission of instructor. Aspects of current health care delivery systems in the United States, with a focus on the delivery of nutrition care services.
- 352: Food Systems Management I.** 0-3-3. Preq., BISC 214, FNU 232, dietetic major or consent of the instructor. Study of the principles of organization and management applied to institutional food service.
- 402: Human Nutrition Biochemistry I.** 0-3-3. Preq., FNU 203, BISC 227 and 228, CHEM 252. Food sources and utilization of carbohydrates, proteins, and fats in humans.
- 403: Community Nutrition.** 0-3-3. Preq., FCS 201; FNU 203. Prevention and treatment of nutrition problems common to individuals, families, and communities. Includes survey of federal, state, and local nutrition programs for various age groups.
- 404: Human Nutritional Biochemistry II.** 0-3-3. Preq., FNU 402. Food sources and utilization of vitamins, minerals, and water in humans.
- 412: Advanced Food Science.** 3-2-3. Preq., FNU 232, CHEM 252 or consent of instructor. Study of the chemical and physical nature of foods. Individual investigations of selected problems.

- 414: Nutrition Assessment.** 3-2-3. Preq., FNU 402. Planning, implementation, and evaluation of nutrition needs and provision of individualized client care.
- 423: Medical Nutrition Therapy I: Diabetes, Cancer, & Heart Disease.** 3-2-3. Preq. or Coreq., FNU 414. Medical nutrition therapy for cardiovascular disease, diabetes, cancer, food allergies, and AIDS.
- 443: Medical Nutrition Therapy II: GI, Renal Disease, and Nutrition Support.** 3-2-3. Preq. or Coreq., FNU 423. Enteral and parental nutrition; medical nutrition therapy for gastrointestinal, liver, and kidney diseases.
- 463: Medical Nutrition Therapy III: Clinical Applications.** 3-2-3. Preq. or Coreq. FNU 443. Structured experiences in nutrition and dietetics to develop assessment, interviewing, and nutrition education skills.
- 472: Food Systems Management II.** 0-3-3. Preq., FNU 302 and 352. Study of the principles of organization and management applied to institutional food service.
- 480: The Art & Science of Italian Cuisine.** 0-3-3. A survey of Italian foods, from the marketplace to the table.
- 492: Supervised Practice in Nutrition-Dietetics.** 3-8 hours credit (27). Preq., Completion of approved didactic program in dietetics. Application required.
- 503: World Nutrition Problems.** 0-3-3. A study of world wide nutritional problems with special emphasis on recent research and contributing factors. Open to non-majors.
- 512: Food Science and Technology.** 0-3-3. Recent developments in science and technology underlying current practices in quality preservation, and problems in nonbacterial spoilage mechanisms of food. Includes survey of freeze-drying, irradiation, antibiotics, antioxidants, enzymes, food additives, and packaging.
- 517: Graduate Seminar for Supervised Practice Students.** 3-0-1 (3). Co-requisite, FNU 492. Seminar designed to promote effectiveness of professional written and oral communications, increase knowledge of research, and review content information in selected topics in dietetics.
- 523: Recent Advances in Medical Nutrition Therapy.** 0-3-3 (12). Preq., FNU 443 or consent of instructor. Current developments in normal nutrition, nutrition assessment, and diet therapy.
- 525: Nutrition for Educators.** 0-3-3. U.S. Dietary Guidelines based nutrition information and resources for preschool through high school age individuals. No prerequisites.
- 526: Maternal & Infant Nutrition.** 0-3-3. A study of current nutritional issues related to pregnancy, lactation, and infancy.
- 527: Issues in Weight Management.** 0-3-3. Critical thinking applied to the issues of weight and health.
- 528: Nutritional Management of Cardiovascular Disease.** 0-3-3. The role of diet in the prevention, development, and treatment of cardiovascular disease.
- 529: Nutritional Management of Diabetes.** 0-3-3. Preq., FNU 443 or consent of instructor. Study of issues related to diabetes including assessment and the role of diet in diabetes management.
- 530: Nutritional Assessment.** 0-3-3. Nutritional assessment of patient with medical problems.
- 531: Nutrition & Renal Disease.** 0-3-3. A study of nutritional issues related to renal disease.
- 532: Nutrition & Aging.** 0-3-3. A study of the nutritional issues related to the aging process.
- 533: Vitamins and Minerals in Human Nutrition.** 0-3-3. Preq., FNU 404 or consent of instructor. Sources, properties and functions of vitamins and minerals in human nutrition.
- 543: Nutrition and Worksite Wellness.** 0-3-3. The role of wellness programs in community and clinical settings, including assessment, planning, implementation, and evaluation of programs.
- 553: Clinical Management and Private Practice in Dietetics.** 0-3-3. Techniques in dietetics-nutrition service settings to develop, manage, and evaluate private practice.
- 562: Trends in Food Systems Administration.** 0-3-3 (12). Preq., FNU 472 or consent of instructor. Seminar on current topics in food systems administration with emphasis on student's area of interest.
- 603: Nutritional Diagnosis Theory.** 0-3-3. Preq., FNU 523 or consent of instructor. Application of outcome-based research and medical nutrition theory as it applies to the nutritional diagnosis of clients.
- 604: Research Methods in Dietetics and Human Nutrition Services.** 0-3-3. Preq., HEC 504 or the equivalent. Study of quantitative and qualitative research methods, design, and analysis in dietetic research.

- 613: Clinical Nutritional Diagnosis.** 3-2-3. Preq., FNU 603. Case study approach to the nutritional assessment, diagnosis, and documentation of nutritional problems.
- 651: Research and Dissertation.** 0-3-3 (12). Preq., FNU 604 and STAT 507.

FOREIGN LANGUAGES (FLNG)

- 101: Special Offerings in Less Commonly Taught Languages: Elementary 1.** 0-3-3. Introduction to a foreign language not listed in other departmental offerings; emphasis on communicative competence for contemporary languages and on reading competence for classical languages.
- 102: Special Offerings in Less Commonly Taught Languages: Elementary 2.** 0-3-3. Preq., FLNG 101. Introduction to a foreign language not listed in other departmental offerings; emphasis on communicative competence for contemporary languages and on reading competence for classical languages.
- 201: Special Offerings in Less Commonly Taught Languages: Intermediate 1:** 0-3-3. Preq., FLNG 102. The more complex structures of a language not listed in other departmental offerings; emphasizes communicative competence for contemporary languages and reading competence for classical languages.
- 202: Special Offerings in Less Commonly Taught Languages: Intermediate 2:** 0-3-3. Preq., FLNG 201. The more complex structures of a language not listed in other departmental offerings; emphasizes communicative competence for contemporary languages and reading competence for classical languages.
- 203: Special Offerings in Less Commonly Taught Languages: Intermediate 3:** 0-3-3. Preq., FLNG 202. The more complex structures of a language not listed in other departmental offerings; emphasizes communicative competence for contemporary languages and reading competence for classical languages.
- 453: Foreign Language Teaching Methods.** 0-3-3. Preq., 12 hours of a foreign language. Study of a broad range of foreign language teaching methods; examination of underlying theories and practical applications. Also listed as EDUC 453. (G)
- 470: Linguistics.** 0-3-3. Preq., ENGL 201 or 202. Systematic study of language acquisition, change, and variation; application to teaching grammar, writing, and/or literature. Also listed as ENGL 470. (G)
- 489: Special Topics.** 0-3-3 (6). Preq., advanced standing and permission of Department Head. Topic to be designated by the instructor. (G)
- 494: Independent Studies in Foreign Languages.** 1-3 credit hours (9). Preq., advanced standing and permission of Department Head. Topics in foreign languages, literature and linguistics for independent study in the student's curriculum specialty.

FOREIGN STUDIES (FSTU)

- 101: Special Academic Studies.** 1-3 hours. Special academic studies conducted in foreign countries.
- 201: Special Academic Studies.** 1-3 hours. Special academic studies conducted in foreign countries.
- 301: Special Academic Studies.** 1-3 hours. Special academic studies conducted in foreign countries.
- 401: Special Academic Studies.** 1-3 hours. Special academic studies conducted in foreign countries.
- 501: Special Academic Studies.** 1-3 hours. Special academic studies conducted in foreign countries.

FORESTRY (FOR)

- 101: Introduction to Forest Resources.** 4-0-1. An introduction to forest resources management and utilization.
- 201: Microcomputer Applications.** 0-3-3. Introduction to microcomputers with specific applications in filing conventions, word processing, spreadsheets, electronic communications, and other topics.
- 202: Forest Fire.** 0-2-2. Fire; its' role in ecosystems, use in management, and control.
- 205: Dendrology.** 3-1-2. Preq., BISC 130 or 134. The identification, classification, characteristics, and distribution of the principal forest trees of the United States, with emphasis on conifers.
- 206: Dendrology.** 4-0-1. Preq., FOR 205. A continuation of FOR 205, with emphasis on hardwoods and spring and summer characteristics.
- 211: Forest Recreation.** 0-2-2. Forestry and non-forestry majors. Recreational use of forests and wild lands. Social, physical, and spiritual

benefits of forest recreation. Forest recreation in the economy of the nation.

- 215: Forests and Society.** 0-3-3. For non-forestry majors. Forestry and its role in today's economic and environmental issues; factors influencing the future of forest resources in the region and nationally.
- 301: Forestry Ecology.** 4-2-3. Preq., FOR 205. Ecological factors affecting the growth and development of trees and stands.
- 302: Silviculture.** 4-2-3. Preq., FOR 301 or BISC 313. An in-depth study of practices used in forest stands to regenerate, cultivate, and harvest them.
- 303: Regional Silviculture.** 0-2-2. Preq., FOR 302. An assessment of the significant biological, physical and economic qualities of the forest regions of the U.S. and their effect on silvicultural practices.
- 306: Forest Measurements.** 4-2-3. Preq., MATH 101 or higher. Principles of sampling and measuring trees, area, forest stands, growth, and land productivity.
- 312: Forest and Forest Products Entomology.** 0-2-2. Study important insects affecting pine, hardwood, and urban trees in the South, including a basic overview of insects in relation to the Animal Kingdom.
- 313: Forest and Forest Products Pathology.** 4-2-3. The important diseases of forests and forest products.
- 314: Wildlife Habitat Evaluation and Management.** 4-2-3. Habitat requirements, evaluation, and management for wildlife.
- 315: Forest Measurements.** 3 credit hours. Preq., FOR 306 and MATH 212. Execution of forest surveys; techniques of growth measurement; determination of volume of trees and stands.
- 317: Aerial Photo Interpretation.** 0-2-2. Principles of recognition and classification of vegetative types on large-scale imagery, including forest inventory techniques.
- 318: Forest Operations.** 3-2-3. Study of mechanized forest operations including all functions from timber felling to delivery of product to mill. Logging safety. Machinery costs. Forest road engineering.
- 319: Forest Products Manufacturing.** 3-0-1. An in-depth look at the manufacturing processes used to produce the major forest products and tours of selected production facilities.
- 320: Field Silviculture.** 8-0-2. Preq., FOR 302. The practice of silviculture field procedures used in the southern forest to regenerate and grow tree stands.
- 322: Bottomland Hardwoods.** 4-1-2. Preq., FOR 320. Silviculture and utilization of bottomland hardwoods.
- 324: GPS in Natural Resource Management.** 4-1-2. Preq., Junior standing or consent of instructor. Introduction to GPS applications in natural resource management.
- 340: Wood Machining Processes.** 3-2-3. Preq., FOR 404 or consent of instructor. Machinery, milling methods, and methods for conversion of trees into usable products.
- 341: Bonding and Finishing of Wood** 3-2-3. Preq., FOR 404 or consent of instructor. Adhesive and cohesive properties of glues and finishes and their use in the forest products manufacturing.
- 355: Introduction to Geographic Information Systems (GIS).** 3-2-3. Preq., junior standing or above or consent of instructor. An introduction to geographic information systems focusing on geographic concepts, spatial data manipulation and analysis, and understanding and application of GIS software.
- 401: Forest Management.** 4-2-3. Preq., Forestry Field Session excluding FOR 319. Managing forest properties to meet landowner objectives using growth and yield models, optimization techniques, best management practices, and sound business principles.
- 402: Watershed Management.** 3-2-3. Preq., FOR 301 and 405, or permission of instructor. Water resources and problems. Emphasis on the forest hydrologic system and its management. (G)
- 404: Wood Technology and Products.** 3-2-3. Preq., BISC 130 or 134; FOR 205. Formation, structure, identification and properties of commercial woods plus an overview of the manufacturing processes used to produce the major forest products. (G)
- 405: Forest Soils.** 3-2-3. Preq., CHEM 100 or 120, or permission of instructor. Physical, chemical and biological properties of forest soils and associated management problems with an emphasis on site productivity and sustainability. (G)
- 406: Forest Economics/Valuation.** 4-3-4. Preq., ECON 201/202 or 215, and junior standing. Economics and financial principles as a basis for decision making in forestry. (G)
- 408: Seasoning and Preservation.** 3-2-3. Preq., FOR 404. Theory and practice of air seasoning and kiln drying of forest products. The basis of wood preservation, preservatives, and methods of application. (G)

- 410: Forest Policy.** 0-3-3. Preq., Forestry Field Session excluding FOR 319. The basic principles, policies, and professional ethics of federal, state, and private forestry. (G)
- 412: Forest Tree Improvement.** 0-2-2. Methods of improvement of forest trees by use of modern plant breeding techniques. (G)
- 413: Professional Practice.** 6-0-2. Preq., Forestry Field Session and FOR 401. Data accumulation and analysis; development of forest resource management alternatives and recommendations. A comprehensive state licensure examination or the GRE is mandatory.
- 414: Wood Products Processing.** 3-2-3. Preq., FOR 404. Hardwood and softwood lumber grades. Manufacture of lumber, veneer, plywood, laminated products and reconstituted panels. (G)
- 418: Land Resource Management.** 0-3-3. The socioeconomic-political policies and programs concerning the allocation of land and the management of natural resources. (G)
- 420: Problems.** 1-3 semester hours credit (9). Special problems in forestry and wood utilization correlated with management of land and natural resources.
- 422: Seminar** 0-1-1. Preq., Senior standing. Development of professional oral communication skills.
- 425: Forest Growth & Yield Modeling.** 0-2-2. Preq., FOR 306, MATH 212, and AGSC 320 or QA 233, or MATH 200 or PSYC 300. Concepts, theories, and parameters involving the development and use of forest growth models; emphasizing applications to forest growth projections and management.
- 428: Wetland Ecology.** 0-3-3. Study of wetland characteristics and the ecological processes occurring within wetlands. Wetland delineation, restoration, construction and regulation will also be covered. Also listed as BISC 428.
- 445: Forest Ecosystem Management.** 4-2-3. Preq., junior standing or higher, or consent of instructor. Forest ecosystems of the South, their history, function, components, protection, and management. (G)
- 450: Natural Resource Economics.** 0-3-3. Tools for economic decision-making applied to the use and allocation of natural resources associated with agriculture. Costs and benefits of various approaches to natural resource management. (G)
- 455: Intermediate Geographic Information Systems.** 4-2-3. Preq., FOR 355 or consent of instructor. Intermediate geographic information systems technology focusing on theoretical, technical, and applied aspects of analytical GIS.
- 477: Practica/Internship/Cooperative Education in Forestry.** 1-9 hours credit (9). (Pass/Fail). Preq., Sophomore standing, 2.0 cumulative GPA, and approval of Forestry Experiential Education Coordinator. On site, supervised, structured work experiences located within a 100 mile radius of Ruston. Application and supervision fee required.
- 478: Practica/Internship/Cooperative Education in Forestry.** 1-9 hours credit (9). (Pass/Fail). Preq., Sophomore standing, 2.0 cumulative GPA, and approval of Forestry Experiential Education Coordinator. On site, supervised, structured work experiences located within a 101-200 mile radius of Ruston. Application and supervision fee required.
- 479: Practica/Internship/Cooperative Education in Forestry.** 1-9 hours credit (9). (Pass/Fail). Preq., Sophomore standing, 2.0 cumulative GPA, and approval of Forestry Experiential Education Coordinator. On site, supervised, structured work experiences located beyond a 201-mile radius of Ruston. Application and supervision fee required.
- 526: Rocky Mountain Forest Resource Management.** 4-2-3. Preq., consent of instructor. A study of ponderosa pine and spruce-fir ecosystems with respect to issues unique to the Central Rocky Mountains.
- 528: Advanced Wetland Ecology.** 0-3-3. Study of wetland characteristics and the ecological processes occurring within wetlands. Wetland delineation, restoration, construction and regulation will also be covered. Cross-listed as BISC 528.

FRENCH (FREN)

- 101: Elementary French.** 0-3-3 each. Conversation, reading and grammar.
- 102: Elementary French.** 0-3-3 each. Preq., FREN 101. Conversation, reading and grammar.
- 201: Intermediate French.** 0-3-3 each. Preq., FREN 102 or equivalent. Conversation, reading, grammar and culture.
- 202: Intermediate French.** 0-3-3 each. Preq., FREN 201 or equivalent. Conversation, reading, grammar and culture.
- 301: French Conversation and Composition.** 0-3-3 each. Preq., FREN 202 or permission of department head. Required for major in French.

- 302: French Conversation and Composition.** 0-3-3 each. Preq., FREN 202 or permission of department head. Required for major in French.
- 304: Survey of French Literature.** 0-3-3. Preq., FREN 202 or permission of department head. Required for major in French. A survey of French literature from the Middle Ages.
- 305: Survey of French Literature.** 0-3-3. Preq., FREN 202 or permission of department head. Required for major in French. A survey of French literature from the Middle Ages.
- 308: French Civilization.** 0-3-3. Preq., FREN 202 or permission of department head. Lectures and reading in history, geography, language, arts, general culture of French lands.
- 390: Francophone Children's Literature.** 0-3-3. Preq., FREN 304 or 305 or permission of department head. A study of French-speaking children's stories, songs, rhymes and games.
- 400: The Drama in France.** 0-3-3. Preq., FREN 304 or 305 or permission of department head. A study of the drama in France up to 1914, with reading of selective works.
- 404: Contemporary French Literature.** 0-3-3. Preq., FREN 304 or 305 or permission of department head. A study of French literature from 1914 to the present with reading of selective works.
- 417: The Novel in French.** 0-3-3. Preq., FREN 304 or 305 or permission of department head. A study of the novel in France, with reading of selective works.
- 428: French Literature in English Translation.** 0-3-3 (9). Representative works of French literature from the Middle Ages to the 20th century; repeatable for credit with different course content. May not be counted towards a major or minor in French. Also listed as ENGL 428. (G)
- 450: The French Language.** 0-3-3. Preq., 21 hours French or consent of instructor. General characteristics of the language and intense review of grammar.
- 470: French Phonetics and Oral Reading.** 0-3-3. Preq., FREN 301-302 or permission of department head. Required for major in French.
- 480: Commercial French.** 0-3-3. Preq., FREN 450 or consent of instructor. Study of business practices and regulation of France and Canada with emphasis on common commercial forms.

GEOGRAPHY (GEOG)

- 203: Physical Geography.** 0-3-3. Fundamentals of physical and biogeography. Topics include surface and fluvial geomorphology, weather, climate, and biogeography..
- 205: Cultural Geography.** 0-3-3. Discussion of the spatial patterns of the human world; people, their culture, their livelihoods, and their imprints of the landscape.
- 210: World Regional Geography.** 0-3-3. Introduction to place and spatial relationships around the globe, with an emphasis on the developing world.
- 290: Geography of Popular Culture.** 0-3-3. Examines the patterns and processes of American popular culture. Topics include the geography of sports, music, television, movies, and popular architecture.
- 300: Historical Geography of the United States.** 0-3-3. Preq., Sophomores, Juniors, and Seniors. Study of the evolution of the cultural landscape of the United States during the historical period.
- 307: Geography of the Western United States.** 0-3-3. Field and classroom study of the physical and human geography of the western half of the United States.
- 310: Geography of Louisiana.** 0-3-3. Open only to junior, senior and graduate students. The climate, natural regions, and resources of Louisiana; cultural development, sources and distribution of the population; settlements and agriculture.
- 321: American Landscapes.** 0-3-3. Folk, vernacular, and popular landscape items are explored. Special attention is given to developing student's ability to "read" the American landscape as text.
- 380: Geographic Information Systems (GIS) and Computer Cartography.** 0-3-3. Elements of map interpretation and construction; creation, manipulation, and analysis of spatially defined data.
- 440: Economic Geography.** 0-3-3. A spatial perspective is used to examine economic principles. Topics include transportation, retail and industrial site location analysis, and the political/space economy.
- 470: Urban Geography.** 0-3-3. Patterns and processes of large North American cities are examined. Topics covered include urban politics, race, government housing policy, urban revitalization and gentrification.
- 480: Advanced Geographic Information System and Spatial Analysis.** 0-3-3. Preq., GEOG 380 or permission of instructor. Advanced techniques

in Geographic Information Systems, integrated with intermediate level spatial analysis.

- 490: Perspectives on Place and Space.** 0-3-3. Preq., GEOG 205 or 290, or permission of instructor. This course introduces advanced students in the social sciences to "new cultural geography" perspectives, critical theory, and cultural studies approaches to place and space.
- 501: Physical and Cultural Elements of Geography.** 0-3-3.

GEOLOGY (GEOL)

- 111: Physical Geology.** 0-3-3. Igneous, sedimentary, and metamorphic rocks; erosion of the earth by streams, oceans, winds, glaciers; phenomena of mountains, volcanoes, earthquakes; and the earth's interior.
- 112: Historical Geology.** 0-3-3. Preq., GEOL 111. History of the earth as revealed in the character and fossil content of rocks.
- 121: Physical Geology Laboratory.** 3-0-1. Preq., registration or credit in GEOL 111. Identification of minerals and rocks. Study of topographic maps and physiographic features shown thereon.
- 122: Historical Geology Laboratory.** 3-0-1. Preq., registration or credit in GEOL 112 and 121. Introduction to fossils, geologic maps, and the geologic history of selected portions of North America.
- 200: Introduction to Oceanography.** 0-3-3. A survey of the oceans; their nature, structure, origin, physical features, circulation, composition, natural resources, and relationship to the atmosphere and solid earth.
- 201: Physical and Historical Geology of the National Parks.** 0-3-3. Physical processes and earth history of the U. S. National Parks. Topics include: rock types, volcanism, plate tectonics, glaciation, shoreline processes, weathering, erosion, and cave formation.
- 209: Mineralogy.** 3-2-3. Preq., GEOL 111, 121, CHEM 102, 103. Crystallography and descriptive mineralogy. Occurrence, associations, and uses of minerals.
- 211: Petrology.** 3-2-3. Preq., GEOL 210. Introduction to the formation and classification of rocks. Identification of rock types in hand specimen and in thin section under the petrographic microscope.
- 289: Special Topics.** 1-4 hours credit. Selected topics in an identified area of geology. May be repeated for credit.
- 299: Cooperative Education Applications.** 40-0-1 (7). Preq., Admission to the College of Engineering and Science Cooperative Education Program.
- 302: Introduction to Paleocology.** 3-2-3. Preq., GEOL 112, 122. Survey of invertebrate paleontology, phylum Protozoa through phylum Arthropoda. History of the science, rules of nomenclature, and environment of lower animals.
- 303: Sedimentology** 3-2-3. Preq., GEOL 111, 112, 121. Origin, composition, properties and classification of sediments and sedimentary rocks. Fluid flow, sedimentary structures and diagenesis.
- 305: Stratigraphy.** 0-3-3. Preq., GEOL 303. Depositional environments, sedimentary facies, correlations, basin analysis and plate tectonics.
- 315: Structural Geology.** 3-2-3. Preq., GEOL 111, 112, 121, MATH 112 or 241, and ENGR 151. The recognition, representation, interpretation, and mechanics of rock deformation.
- 316: Map Interpretation.** 6-0-2. Preq., GEOL 305 and 315. Interpretation of topographic maps, aerial photographs, geologic maps and geologic cross sections.
- 318: Environmental Geology.** 0-3-3. Preq., GEOL 111 or consent of instructor. Discussion of natural and human hazards affecting the environment, including flooding, slope stability, earthquakes, coastal hazards, resource development, water pollution, and waste disposal.
- 320: Summer Field Course.** 6 hours credit. Preq., GEOL 211, 302 and 316, ENGL 303. Course work at the Louisiana Tech Geology Camp.
- 420: Directed Study of Geologic Problems.** 1-3 hrs credit. Preq., senior standing. Special topics within the student's field of interest. Maximum 3 hours credit.
- 421: Micropaleontology.** 3-2-3. Preq., GEOL 302. Study of microfossils used in correlation of well cuttings and outcrop samples, especially foraminifera.
- 422: Environmental Remediation.** 0-3-3. Evaluation of alternative surface and subsurface cleanup technologies with emphasis on site assessments, pilot studies, treatment techniques, and the preparation of corrective action plans. (G)
- 442: Geophysical Methods.** 3-2-3. Preq., PHYS 210, GEOL 305, 315, 408, MATH 241. Introduction to the elementary theory, computation fundamentals, and basic field practice for gravity, seismic, magnetic, and electrical methods of geophysical exploration.
- 450: Seminar.** 0-1-1. Preq., senior standing in geology. Written or oral reports in various phases of geology.