construction of fruit and vegetable processing plants, including process layout and sanitary considerations.

4071 Nursery Management (3) F-O Prereq.: BIOL 3060 or equivalent. 2 hrs. lecture; 2 hrs. lab. Required field trips. Principles and practices of nursery management, production, management, and marketing of nursery crops.

4072 Sustainable Ornamental Production (3) S-M Prereq.: HORT 2050 or concurrent enrollment in HUEC 2050. 3 hrs. lecture; 3 hrs. lab. Required. Field trips. Review of U.S. ornamental horticulture, including historical and cultural aspects, and current issues in ornamental production.

4074 Principles and Practices in Plant Science (4) F-M Prereq.: BIOL 4024, PLHL 4062, or equivalent. 2 hrs. lecture; 1 hr. lab. Preparations and environmental needs, shipping and marketing of plants.

4085 Principles and Practices in Fruit and Nut Production (4) S-O Prereq.: HORT 2050 or equivalent. 3 hrs. lecture; 2 hrs. lab. Required field trips. Principles of fruit and nut production, selection, and marketing of horticultural products.

4090 Golf Course Management (3) Prereq.: HORT 2050 or concurrent enrollment in HUEC 2050. 3 hrs. lecture; 3 hrs. lab. Required. Field trips. Prerequisites: plant science, agronomy, and business management.

4096 Postharvest Physiology (4) S-O Prereq.: PLHL 3060. 3 hrs. lecture; 2 hrs. lab. Preparations and environmental needs, shipping and marketing of horticultural products.

6011 Topics in Plant, Environmental and Soil Sciences for Teachers (4) Prereq.: PLHL 7050 or concurrent enrollment in HUEC 7050. 3 hrs. lecture; 2 hrs. lab. Required. Field trips. Topics in plant, environmental and soil sciences for teachers.

7050 Plant Tissue Culture (4) Prereq.: BIOL 4024, PLHL 3060, HORT 2061. 2 hrs. lecture; 6 hrs. lab. Preparations and environmental needs, shipping and marketing of horticultural products.

7070 Advanced Plant Breeding (4) S-E Prereq.: AGRO 7070. 3 hrs. lecture; 3 hrs. lab. Required. Field trips. Prerequisites: plant genetics, plant physiology, and plant breeding.

7071 Plant Genetics (4) S-O Prereq.: AGRI 2072 or equivalent. 3 hrs. lecture; 3 hrs. lab. Required. Field trips. Prerequisites: plant biology, plant physiology, and plant breeding.

7074 Quantitative Genetics in Plant Improvement (3) Prereq.: AGRO 7074. 3 hrs. lecture; 2 hrs. lab. Required. Field trips. Prerequisites: plant biology, plant physiology, and plant breeding.

7075 Animal Tissue Culture (4) S-O Prereq.: AGRO 7075. 3 hrs. lecture; 3 hrs. lab. Required. Field trips. Prerequisites: animal genetics, animal physiology, and animal breeding.

7083 Introduction to Early Childhood Education (3) Prereq.: BIOL 1001. 3 hrs. lecture; 2 hrs. field observations. Preparations and environmental needs, shipping and marketing of horticultural products.

7091 Independent Research and Reading in Human Ecology (1-6) Prereq.: HORT 2050 or equivalent. 1-6 hrs. Credit will be given for a max. of 6 hrs. of credit. Directed individual reading and research in a selected area of human ecology. Preparations and environmental needs, shipping and marketing of horticultural products.

7092 Dissertation Research in Human Ecology (1-2) S-E Prereq.: required of all doctoral students in human ecology. May be taken for a max. of 3 sem. hrs. of credit. Supervised professional experience designed to integrate academic learning with practice.

7093 Advanced Research Methods in Human Ecology (3) Prereq.: HORT 2050, HORT 2072, or equivalent. 2 hrs. lecture; 2 hrs. lab. Required. Field trips. Prerequisites: plant biology, plant physiology, and plant breeding.

7094 Seminar in Human Ecology (1-2 per sem.) Prereq.: permission of department. 1-2 sem. hrs. Credit will be given for a max. of 12 sem. hrs. of credit.

7095 Dissertation Research (1-6 per sem.) Prereq.: permission of department. 1-6 sem. hrs. Credit will be given for a max. of 24 sem. hrs. of credit.

3057 Learning Environments for Infants, Toddlers, and Preschool Children (3) Prereq.: HUEC 2050, 2053, and 3055; concurrent enrollment in HUEC 3058, 3059. 2 hrs. lecture; 3 hrs. field experience. Preparations and environmental needs, shipping and marketing of horticultural products.
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classroom teachers in PK/K settings.
4382 Critical Issues in Early Childhood Education (3) Prereq.: HUEC 2040 or consent of department. Historical and contemporary perspectives on developmental, sociocultural, and pedagogical issues in early childhood education.
7050 Research Seminar in Family, Child, and Consumer Sciences (1) May be taken for a max. of 2 hrs. of credit when topics vary. Reports and discussion of current literature and research.
7051 The Contemporary Family (3) Effects of change on family; child rearing and responses in family lifestyles, roles, and relationships to political, social, and technological change.
7052 Ethics and Issues in Family and Consumer Sciences (3) May be taken for a max. of 6 hrs. of credit when topics vary. Lectures and research on topics not covered in other courses; by consent of instructor.
7053 Infant Behavior and Development (3) Infant person, development, and socialization; major transactions in the infant's life; family and home; child-care facilities and caregivers; support systems within larger societies.
7054 Child Guidance and Behavior (3) Prereq.: HUEC 7006 or consent of instructor. Normal, age-related behavior patterns; child guidance practices and their consequences; techniques and procedures for successful parenting and for improved classroom management; theoretical bases.
7055 Human Nutrition (3) Prereq.: consent of instructor. May be taken for a max. of 6 hrs. of credit when topics vary. Dynamics of human development and practical implications.
7056 Theories of Child Development (3) Research and theory in child development; relation to the major domains in the child's ecological development, the family, services, and the environment.
7057 Theories in Family Science (3) Historical and contemporary theories and conceptual frameworks in family science.
7058 Adulthood and Aging (3) Prereq.: HUEC 4050 and 7051, or equivalent, with emphasis on adulthood; early and middle adulthood, and old age.
7059 Parent Involvement in Early Childhood Education (3) 2 hrs. lecture; 2 hrs. lab. Interpersonal relationships and involvement of parents in early childhood education programs; research and existing models of parent involvement.
7060 Consumer Economics (3) Interrelationships among consumer knowledge and responsibility of the family, consumer legislation and protection, and competitive market processes.
7062 Family Financial Counseling (3) Personal, social, and legal climates affecting family financial decisions; skills designed to assist families to become self-sufficient in money management.
7063 Economics of Aging (3) Determinants and components of the financial status and economic well-being of the elderly household; income, investment, insurance, grants, taxation, assets, time use, resource management, and techniques used to examine the subjects of retirement and survivorship.
7065 Management of Family Resources (3) Management of family resources, including identification and evaluation; principles of family economics and management satisfaction for individuals and families.
7843 Early Childhood Education (3) See EDCI 7843.

HUMAN NUTRITION AND FOOD

General education courses are marked with stars (★).

1021 Dietetics as a Career (1) For dietetics majors only or by consent of instructor. Introduction to the dietetics major at LSU and the dietetic profession; strategies for future practice; development of a professional portfolio.
★ 2010 Nutrition in Health (3) Prereq.: CHEM 1001 or 1201 or BIOI 1001 or 1201. Principles of nutrition and their application in promoting health; guidelines for assessing nutritional status, emphasis upon the adult.
2014 Food Fundamentals (4) F Prereq.: credit or registration in HUEC 2010. 3 hrs. lecture; 3 hrs. lab. For majors and minors only or consent of instructor. Principles of food science, preparation, and management.
2110 Child Nutrition Assessment (3) Prereq.: HUEC 2010. For nutritional sciences majors and minors only, or consent of instructor. Assessment of nutritional status, including growth, body composition, risk of chronic diseases and laboratory analysis using appropriate software, including interpretations of nutritional status indicators and techniques. Nutritional counseling for general risk reduction of chronic diseases.
3010 Nutrition and Wellness (3) F Prereq.: HUEC 2010 and BIOL 1202 or 2101 or KIN 2500 or equivalent. Relationship of diet and activity to health and disease. Nutritional needs and their impact on health; counseling for change.
3012 Human Nutrition During the Life Cycle (3) F Prereq.: HUEC 2201; HUEC 2210; or permission of instructor. Nutritional needs during pregnancy, infancy, early childhood, adolescence, adulthood, and later years.
3013 Nutrition for Special Populations (3) F Prereq.: HUEC 2014, and credit or registration in BIOL 1013 or equivalent. Principles of quantity food procurement, preparation, and service in special groups, nutrition and diet counseling; sanitation and safety; materials and resources management, distribution and service.
3022 Quantitative Introductory Laboratory (2) Prereq.: credit or registration in HUEC 3019. 4 hrs. lab. Principles of quantity food production illustrated by demonstrations, observations, studies, and laboratories; use and care of quantity production equipment, sanitation and safety; materials and resources management; distribution and service.
3116 Public Health Nutrition (3) Prereq.: HUEC 2019, or consent of instructor. Public health policies and programs; designing, assessing, implementing, and evaluating community nutrition programs.
4010 Human Nutrition (3) F Prereq.: grade of C or better in BIOL 2160 or 2153 and BIOL 2083 or 4087 or KIN 3515. Energy metabolism; nutrition sources of nutrients.
4011 Medical Nutrition Therapy I (3) F Prereq.: grade of C or better in BIOL 2160 or 2153 and in BIOL 2083 or 4087 or equivalent; HUEC 2110; credit or registration in HUEC 3012, 4010, or consent of instructor. Nutrition assessment and interpretation; nutrition education; genetics and inherited diseases; biochemical and physiological changes that occur in dental, gastrointestinal, and absorption abnormalities; artificial nutrition; clinical diet modification related to biochemical and physiologic changes during inherited diseases; and dental, gastrointestinal, and absorptive abnormalities that require clinical diet modification; emphasis on case studies.
4012 Medical Nutrition Therapy II (3) S Prereq.: a grade of C or higher in HUEC 4011, or consent of instructor. Biochemical and physiological changes that occur in food allergy, AIDS, and immunological disorders, weight abnormalities, diabetes, cancer, and disorders of the heart or kidney, that require clinical diet modification; nutritional needs during surgery, trauma, and burn.
4016 Cultural Food Patterns (3) S Prereq.: HUEC 2014, 2019, or consent of instructor. Cultural, religious, and historical influences on food, as it relates to nutrition, health, and diet counseling.
4017 Applied Medical Nutrition Therapy II (2) S Prereq.: HUEC 2110; credit or registration in HUEC 4011 or equivalent. 4 hrs. lab. Nutritional assessment; computer nutrient analysis; clinical diet modification relevant to biochemical and physiologic changes during inherited diseases; and dental, gastrointestinal, and absorptive abnormalities that require clinical diet modification; emphasis on case studies.
4018 Applied Medical Nutrition Therapy III (3) S Prereq.: HUEC 2110; credit or registration in HUEC 4011 or equivalent. 4 hrs. lab. Nutrition assessment; computer nutrient analysis; clinical diet modification relevant to biochemical and physiologic changes during inherited diseases; and dental, gastrointestinal, and absorptive abnormalities that require clinical diet modification; emphasis on case studies.
4023 Management in Dietetics (3) S Prereq.: majors only; HUEC 2045 and MATH 1022, or consent of instructor. Management and interpretation of data related to aesthetic, functional, and structural design of textile and apparel products; introduction to fashion illustration and computer-aided design.
4027 Apparel Structure and Fit (4) Prereq.: for students in the Apparel Design concentration only or consent of instructor; credit or registration in HUEC 2041. 2 hrs. lecture; 4 hrs. lab. Fundamental principles of garment assembly and the relationships between garment design, family, consumer behavior, and production processes; analysis of fit; alterations.
4029 Textile Science (3) F,S Basic physical, biological, and chemical characteristics of fibers, yarns, fabrics, selection, maintenance, and performance of textiles.
4031 Textile Science Laboratory (1) F,S Prereq.: credit or registration in HUEC 2040. 3 hrs. lab. Introduction to basic physical and chemical testing of textiles.
4044 Early Experience in the Textile/Apparel Industry (1) 4 hrs. practicum; 32 hrs. of supervised experience. Pass/fail grading. Pre-internship work in a component of the textile/apparel industry. Arranged on individual basis and with permission of the coordinator.
4045 The Fashion Industry (3) F,S Interrelationships of design, production, and distribution; historical aspects and present trends in the apparel industry.
3030 Field Study in Textiles, Apparel, and Retailing (3) May be taken for a max. of 6 hrs. of credit when field site varies. 2 hrs. lecture; 8 hrs. practicum. Offered through Continuing Education, 28 hrs. of on-campus seminars. Fee to cover expenses. Structured educational experiences in major industry centers in the U. S. and abroad.
3032 Textile and Apparel Product Development (3) Prereq.: HUEC 2040, 2045. Processes and issues related to development of textiles and apparel products for consumers.
3037 Intermediate Apparel Product Design (4) Prereq.: HUEC 2047; 2 hrs. lecture; 4 hrs. lab. Principles and applications of two-dimensional or flat pattern design; development of foundation blocks for use in designing various garment styles and details; conceptualization and execution of original hand-drawn designs.
3042 Apparel Merchandise Buying and Management (3) Prereq.: majors only; HUEC 2045 and MATH 1022, or consent of instructor. Buying; management and interpretation of data related to apparel buying and management; role and responsibilities of merchandise buyers; domestic and international merchandise. Retailing strategies and sales.
3043 Apparel Merchandising Strategies and Assortment Planning (3) Prereq.: majors only; HUEC 2045 and computer literacy. 2 hrs. lecture; 2 hrs. lab. Assortment planning and sales strategies; advanced quantitative concepts and procedures used in apparel merchandising and retailing; design and development of retailing and sales.
3045 Visual Merchandising and Promotion Strategies (3) Prereq.: HUEC 2045. Display elements and techniques; aspects discussed.
7004 Molecular and Clinical Nutrition (1) F Prereq.: BIOL 1020; 3 hrs. lecture. Effects of change on health and disease through the use of cellular/molecular tools.
7005 Molecular and Clinical Nutrition II (2) F Prereq.: HUEC 7004. The development of current concepts of nutritional effects on health and disease through the use of cellular, molecular, genetic, and epidemiologic tools.
7010 Food and Nutrition Seminar (1) F May be taken for a max. of 6 hrs. of credit when topics vary. Recent research and developments in food, nutrition, dietetics, or food systems.
7019 Advanced Human Nutrition (3) F Prereq.: BIOL 4087 or 4091, or consent of instructor. Human requirements, evaluation of nutritional status, and problems and principles in the nutrition of various species.
7020 Topics in Micronutrients (2) May be taken for a max. of 8 hrs. of credit when the topic varies. An integrated system of micronutrients, functional roles of vitamins and minerals in nutrition. Epidemiological to molecular
visual merchandising; special events strategies; public relations; Internet promotions.

3230 Pattern 2 hrs. lab. Computer Application (4) S Preq.: HUEC 3073. 2 hr. lecture; 4 hrs. lab. Application of two-dimensional pattern making principles to varied garment styles and the manipulation of original and printed garment design; introduction to proprietary computer software.

3232 Apparel Design Studio (3) Preq.: HUEC 2032, 2037, ART 1847 or 1848. 1 hr. lecture. Fashion illustration techniques; adaptation of inspirational themes to designs for men; pattern making and development; use of an industry-specific CAD system.

4034 Textile and Apparel Production Evaluation (3) F Preq.: HUEC 2004. 2 hrs. lab. Examination of the effects of design, construction, and apparel structure and their relationships to performance and end-use characteristics; textile and apparel product standards and specifications; standard test methods for evaluating physical, aesthetic comfort, performance, and functional aspects.

4035 Apparel Product Design (4) Preq.: HUEC 3230. 2 hrs. lecture; 4 hrs. lab. Principles and application of three-dimensional pattern design.

4041 History of Textiles (3) S-C Social, functional, and technological developments of textiles by selected periods and countries.

4043 Advanced Textiles (3) F Preq.: HUEC 2041. 2 hrs. lecture; 2 hrs. lab. Manipulation of natural and manufactured textile fibers; physical and chemical modifications to meet consumer needs; textile dyes and finishes; methods of fiber identification and chemical testing of textiles.

4044 Global Textile and Apparel Economics (3) F Preq.: HUEC 3032. ECON 2108. Fibers and textiles in international trade and analysis of economic concepts and principles associated with the textiles and apparel industry; overview of global economics and contemporary issues in the apparel production industry.

4045 Synthesis: Textile and Apparel Production Processes (3) S Preq.: HUEC 4057. 1 hr. lecture; 4 hrs. lab. Multifunctional team approach to creative problem solving: apparel product design, development, evaluation, and presentation using advanced pattern making techniques and technology.

4046 Advanced Topics in Apparel Merchandising (3) F Preq.: HUEC 3002 and 3043. Application of principles of product design, marketing, and management of apparel merchandising; current industry issues and trends; emphasis on theory and policy related strategies.

4047 Internship in Textiles, Apparel, and Merchandising (3) or 6 hrs. Prq.: gpa of at least 2.30 on all HUEC classes taken at LSU and permission of department; participation in orientation workshop prior to enrollment. MKT 3401. Internship in Textiles, Apparel, and Merchandising; credit if topics vary.

4050 Entrepreneurship in Human Ecology (3) S Preq.: MKT 1401. 2 hrs. lecture; 3 hrs. lab. An introduction to entrepreneurship with an emphasis on home-based and/or microbusinesses; case studies of successful entrepreneurs.

4071 History of Dress and Adornment Prior to 1700 (3) Emphasis on styles of western civilization; how dress functions for individuals within culture and society; relationships of gender, environment, technology, economics, religion, and aesthetics to dress.

4072 History of Dress and Adornment After 1700 (3) Emphasis on styles of western civilization; how dress functions for individuals within culture and society; relationships of gender, environment, technology, economics, religion, and aesthetics to dress.

7032 Comparative Studies in Dress and Culture (3) F Also offered as ANTH 7032. Relationship between people and dress; relationship of dress to environment, religion, ethnicity, gender, and aesthetics; impact of cultural change and western culture on world dress, ethnic, and folk traditions in dress.

7035 Textile Manufacturing (3) Preq.: HUEC 4045; and one 7000-level statistics course. In-depth study of mass production of apparel; analysis of manufacturing technology, quality control methods, and end-use performance evaluation and application.

7036 Apparel Product Global Expansion (3) Internationalization of apparel merchandising; examination of theoretical foundations, principles, and applications within the apparel industry; electronic commerce (1-6 hrs. lab). Characteristics of global issues that affect apparel merchandising.

7037 Consumer Behavior in the Apparel Merchandising Environment (3) Examination of consumer behavior theories and their applications to apparel purchase and shopping behavior. 2 hrs. lab. Design of selective apparel.

7040 Bio-based Components: Production and Evaluation (3) Bio-based material products and applications, with case studies to illustrate end-use evaluation of related agricultural materials.

7041 Introduction to Research in Textiles, Apparel Design, and Merchandising (3) F Introduction to research and literature in textiles, apparel design, and merchandising. 2 hrs. lab. Design of selective apparel.

7043 Seminar: Textiles, Apparel Design, and Merchandising (1) UNC grading. May be taken for a max. of 3 hrs. of credit if topics vary. Analysis and discussion of current research and creative topics.

7046 Microscopy of Fibers and Polymers (3) Analysis and characterization of fibers and polymers using microscopic techniques; emphasis on textile fibers and fabrics, including modern, historic, and archaeological specimens.

7047 Modern Fiber Science and Technology (3) 2 hrs. lecture; 2 hrs. lab. New techniques for obtaining fiber, textile, and polymer properties from various natural and synthetic resources, such as jute and plant derived polymers; examination of polymeric materials used for the development of high performance fibers for space and other industrial applications.

7048 Thermal Characterization of Fibers and Polymers (3) 2 hrs. lecture; 2 hrs. lab. Analysis and characterization of fibers and polymers using thermal, thermo-mechanical, and thermo-chemical techniques; examination of textile fibers and fabrics including bio-derived materials and classical specimens.

7049 Advanced Individual Field Experience In Textiles, Apparel Design, and Merchandising (3) Preq.: Corgr. or HRE 2724 or 2725. 2 hrs. lab. Design of selective apparel.

7518 Studies in American and European Dress (3) See also THTR 7518. May be taken for a max. of 6 hrs. of credit in HRE 7518 and 7519. Examination of American and European dress; the mechan of fashion and garment design; traditional and contemporary elements of American and European dress; historical development of fashion and dress; relationship between fashion and the social, political, and economic factors of the era; relationship between fashion and the social, political, and economic factors of the era; relationship between fashion and the social, political, and economic factors of the era.

7519 Seminar in American Dress: 19th Century to 1880 (3) See also THTR 7518. May be taken for a max. of 6 hrs. of credit in HRE 7518 and 7519. Examination of American and European dress; the mechan of fashion and garment design; traditional and contemporary elements of American and European dress; historical development of fashion and dress; relationship between fashion and the social, political, and economic factors of the era; relationship between fashion and the social, political, and economic factors of the era; relationship between fashion and the social, political, and economic factors of the era.

7520 Seminar in American Dress: 1880 to the Present (3) See also THTR 7518. May be taken for a max. of 6 hrs. of credit in HRE 7518 and 7519. Examination of American and European dress; the mechan of fashion and garment design; traditional and contemporary elements of American and European dress; historical development of fashion and dress; relationship between fashion and the social, political, and economic factors of the era; relationship between fashion and the social, political, and economic factors of the era; relationship between fashion and the social, political, and economic factors of the era.