Proposed Catalog Changes

Effective Term (unless otherwise noted) = Summer 2015

Agricultural Economics and Rural Sociology

1. Change the following courses:

   **AgEc 201, 303. Principles of Agricultural Economics (1 cr)**
   Review, discussion and application of basic economic, agribusiness, and natural resource principles as applied to the agricultural economics profession. The principles are reviewed in a game show format. Students will have an opportunity to attend the American Agricultural Economics Association annual meetings and test their knowledge of these principles with students from other universities. Recommended preparation: AgEc 301 and AgEc 302. (Spring only)

   **Prereq:** AgEc 101 and AgEc 278; and Econ 272 or Econ 201 and Econ 202

   **Rationale:** The class is designed to review the principles covered in Econ 201 and 202, AGEC 278, 289, 301, 302, and 356. We have augmented the original course content to focus on and encourage students' command of those principles. By increasing content of the course and changing it to a higher level course number, we hope to encourage more upper classmen who have covered more of the principles to enroll.

Agricultural Education and 4-H Youth Development

1. Transfer ownership of the following subject prefix and associated courses to the specified unit:

   **Ag – Agricultural Science and Technology – Transfer to the general College of Agricultural and Life Sciences ownership**

Animal and Veterinary Science

1. Add the following courses:

   **AVS 268. Companion Animal Diseases (2 cr)**
   Principles of disease resistance, transmission, and prevention; clinical signs, pathogenesis, and control of major diseases in companion animals. Recommended preparation: AVS 222 or equivalent.

   **Prereq:** AVS 109

   **Rationale:** Many of our Pre-Vet option students are interested in becoming small animal veterinarians. We’d like to give our students this learning option to enhance their knowledge in a subject area that interests them. Having AVS 109 as a pre-requisite ensures that the students have the rudimentary knowledge of animal production prior to this course.

   **AVS 318. Beef Calving Management (1 cr)**
   Increase student’s knowledge and experience of the biology, physiology and management of cows and calves before, during and after the birthing process.

   **Prereq:** AVS 109 and AVS 209

   **Rationale:** This course is an excellent hands-on opportunity for students to gain experience of the biology, physiology and management of cows and calves before, during and after the birthing process. In addition, students are engaged in normal and neonatal calf care. This course provides hands-on experience and knowledge to students, which increases their competitiveness and readiness for careers in beef management, veterinary medicine, and agricultural industries. Prerequisites: AVS 109 and AVS 209 to ensure that the students have the rudimentary knowledge of animal science production and husbandry prior to this course.

2. Change the following courses and change the courses’ status from Dormant to Active:

   **AVS 218. Artificial Insemination and Pregnancy Detection (2 cr)**
   Anatomy and physiology of pregnant and nonpregnant reproductive systems; artificial insemination; male reproduction; pregnancy detection in domestic livestock. Two 2-hr labs a wk. Enrollment limited to 20 students. Preregistration required; consult dept administrator. Recommended Preparation: AVS 222. This is a cooperative course available to WSU degree-seeking students.

   **Prereq:** AVS 109; and AVS 222 or AVS 452

   **Rationale:** The AVS department continues to have students, requesting this course. To facilitate the interest of our students we request AVS 218 be removed from the dormant class list. Requiring AVS 109 as a pre-requisite will ensure that the students have the rudimentary knowledge of animal production prior to this course. In addition, student must have the knowledge base about the
physiology of reproduction, reproductive anatomy, estrous cycle, and hormones of reproduction before taking this course. Therefore, AVS 222 or AVS 452 (Reproduction and Breeding or Physiology of Reproduction) is required.

**AVS 274 Beef Feedlot Systems (2 cr)**
Overview of feeding management, feed milling- and batching, animal health, and economics of the commercial cattle feeding business. One 1-day field trip.
Prereq: AVS 109
Coreq: AVS 209

Rationale: The AVS department coordinates the Steer A Year Fundraiser each year. 50 plus steers come to campus, the students gain practical hands on experience that cannot be taught in a classroom setting. AVS Students take care of the steers by feeding, vaccinations, weighing and monitoring the health of the steers while on campus. To facilitate the interest of our students we request AVS 274 be removed from the dormant class list. Requiring AVS 109 as a pre-requisites and AVS 209 as a co-requisite will ensure that the students have the rudimentary knowledge of animal production and handling prior to this course.

**AVS 476 Sheep Science (3 cr)**
Application of principles of genetics, reproduction, nutrition, health, and marketing to the management of commercial and purebred sheep; new developments related to sheep industry; production, evaluation, and use of wool. Two lec and one 2-hr lab a week; one 1-day field trip or equiv time. Recommended Preparation: AVS 222 or equivalent. Cooperative: open to WSU degree-seeking students.
Prereq: AVS 109

Rationale: The AVS department continues to have students, requesting the Sheep Science Course. Moreover, by providing this course, students have more flexibility to choose a course from the species production courses, which are required for the AVS B.S. degree. To facilitate the interest of our students we request AVS 476 be removed from the dormant class list. Requiring AVS 109 as a pre-requisite will ensure that the students have the rudimentary knowledge of animal production prior to this course.

3. Change the following courses:

**AVS 475 Advanced Dairy Management (3 cr)**
Prereq: AVS 305
Coreq: AVS 306 or AVS 411

Rationale: By having AVS 305 as the pre-requisite, we ensure that the students have the basic knowledge of animal nutrition, the physiology of absorption of nutrients, and nutrient metabolism in domestic livestock before this course. Having AVS 306 or 411 as co-requisites will help students to have a better knowledge base and appreciation about feeds, nutrition management and feeding of animals as they are taking AVS 475.

**Family and Consumer Sciences**

1. Drop the following courses:

**FCS 170 Introductory Foods (3 cr)**
Basic concepts and techniques of food preparation; applied sensory evaluation of food. (Fall only)
Prereq: Family and Consumer Sciences major or Permission

Recommended Equivalent Course: None

Rationale: Food and Nutrition faculty are looking for ways to teach required content areas more efficiently and update content to align with current accreditation standards for dietetics education. Currently, 7 credits of foods courses are offered for Food and Nutrition majors – FCS 170 Introductory Foods (3 cr), FCS 175 Introductory Foods Lab (1 cr), and FCS 270 (Intermediate Foods). These three courses will be merged into two courses: FCS 270 Scientific principles of Food Preparation (3 cr) and FCS 275 Experimental Foods (2 cr). Content for all three courses was reviewed to eliminate topics / activities no longer required for dietetics education accreditation. In addition, some topics are covered appropriately in other courses, and some activities are better suited for other courses. In review of the foods classes, faculty determined that FCS 170 could be eliminated. This course will still be offered fall of 2014 and summer of 2014 for students to complete the requirement. Beginning fall of 2015, students will be able to take the revised FCS 270 and 275 foods courses in order to complete food requirements.

**FCS 414 Idaho’s Journey Toward Diversity and Human Rights (1 cr, max 3)**
Off campus traveling workshop on Idaho’s past and current challenges of diversity and human rights.
Prereq: Psy 101, Soc 101, or PolS 101 or Permission

Recommended Equivalent Course: None

Rationale: Course is an elective course and is not required for completion of a degree. The course is no longer being offered.
2. Add the following courses:

**FCS 401 Professional Ethics and Practice in CFCS (1 cr)**
Establishing a professional identity and transitioning to a career in human development and family services. Emphasis on professional presentation and ethical conduct. Explores ethical and philosophical issues; professional development and leadership; and career goals, opportunities, and challenges as they relate to human development and family sciences.

*Prereq:* Major in Child, Family, and Consumer Studies  
*Coreq:* FCS 498

Recommended Short Course Title: Prof Ethics&Practice in CFCS

Rationale: FCS 401 will serve as a collaborative and supportive network for the co-requisite FCS 498 Internship. This will provide the student the opportunity for reflection on ethics and professional skills as they are experienced in the practical setting of the internship. This course will be collaboratively taught by CFCS Faculty with one faculty member serving as instructor of record. Faculty members will take 2-3 sessions to teach and/or coordinate content organized around human and family services competencies and ethics. Guest speakers and specialists from the field will be utilized to present and or support course content. Formative and summative assignments (i.e. presentations, philosophy statements, reflective responses, and professional development tools) will be used to assess student learning. This course will be proposed as a senior experience. End of program surveys, interviews, or focus groups will be incorporated into the course.

**FCS 415 Computer-Aided Pattern Drafting (3 cr)**
This course builds on existing patternmaking skills by applying methods and techniques for developing patterns using computer-aided pattern drafting software and includes grading, markers, and graded spec sheets.

*Prereq:* FCS 324

Recommended Short Course Title: Computer Pattern Drafting

Rationale: Adding this course fulfills University Learning Outcomes 1 Learn and Integrate and 2 Think and Create. This course also fulfills Apparel, Textiles, and Design goals to focus the program on product development. This is a new course and was taught as a 404 during the summer of 2014. This course expands C/ATD student’s understanding of patternmaking, increases their knowledge of industry patternmaking practices and uses the complex patternmaking software that our department has purchased. This course meets our C/ATD Program Outcome goals of both “Product Development” and “Career Development and Professional Skills”. This additional course falls within FCS guidelines for semester credit workload. It also supports C/ATD strategic plan goals to meet the need for more 400-level and above courses for a projected increase in graduate students.

**FCS 476 Textile Structures (1-3 cr, max 3)**
This studio course gives students the opportunity to experiment with transforming two-dimensional textiles into three-dimensional fabric structures at the core level. The service learning project requires solving real-world problems, and culminates with a product that serves a need in the community. This course fulfills Apparel, Textiles, and Design goals to focus the program on product development. It also fulfills the professional need for graduates to achieve a high level of textile competency because within the apparel industry, a working knowledge of textile fabrications is expected. This additional course falls within FCS guidelines for semester credit workload. It also supports C/ATD strategic plan goals to meet the need for more 400-level and above courses for a projected increase in graduate students.

**FCS 477 Surface Design (1-3 cr, max 3)**
This studio course gives students the opportunity to experiment with the texture and appearance of textile fabrications. Techniques may include dyeing and resist methods, subtraction, and embellishment, among others depending on industry trends.

*Prereq:* FCS 123 or Permission

Rationale: Adding this course fulfills University Learning Outcomes 1 Learn and Integrate, 2 Think and Create, and 4 Clarify Purpose and Perspectives. This course builds on skills students have already developed in FCS 123 Textiles and adds new knowledge about textile properties and industry trends. The service learning project requires solving real-world problems, and culminates with a product that serves a need in the community. This course fulfills Apparel, Textiles, and Design goals to focus the program on product development. It also fulfills the professional need for graduates to achieve a high level of textile competency because within the apparel industry, a working knowledge of textile fabrications is expected. This additional course falls within FCS guidelines for semester credit workload. It also supports C/ATD strategic plan goals to meet the need for more 400-level and above courses for a projected increase in graduate students.

**FCS 478 Experimental Construction (1-3 cr, max 3)**
This studio course gives students the opportunity to experiment with transforming two-dimensional textiles into three-dimensional apparel products. Techniques may include tailoring, upcycling, use of non-traditional textiles, and use of fabrics students have produced in other courses, among others dependent on current industry trends.

*Prereq:* FCS 224 or Permission
Rationale: Adding this course fulfills University Learning Outcomes 1 (Learn and Integrate), 2 (Think and Create), and 4 (Clarify Purpose and Perspectives). This course builds on skills students have already developed in the C/ATD curriculum and adds new knowledge about fabric structures and fitting the human subject. This course fulfills Apparel, Textiles, and Design goals to focus the program on product development. It also fulfills the professional need for graduates to achieve a high level of problem-solving competency because within the apparel industry, a working knowledge of fabrication and fit is expected. This additional course falls within FCS guidelines for semester credit workload. It also supports C/ATD strategic plan goals to meet the need for more 400-level and above courses for a projected increase in graduate students.

FCS 493 Design and Development for a Client (3 cr)
Student teams develop a line of apparel for a client from concept to finished prototype; design, patternmaking, construction, tech pack building and presentation skills are all used throughout the course.
Prereq: FCS 323 and FCS 324

Recommended Short Course Title: Design & Develop for a Client

Rationale: Adding this course fulfills University Learning Outcomes 1 (Learn and Integrate) and 2 (Think and Create). This course also fulfills Apparel, Textiles, and Design goals to focus the program on product development. This course has been taught twice as a 404 Special Topic course and now needs an official number. This course is taught on a rotating basis and is not available every year. Design and Development for a Client provides students a team-based approach to applying knowledge gained throughout the program. It meets C/ATD Program Outcomes of: Product Development, Understanding the Consumer, and Career Development and Professional Skills. This additional course falls within FCS guidelines for semester credit workload. It also supports C/ATD strategic plan goals to meet the need for more 400-level and above courses for a projected increase in graduate students.

3. Change the following courses:

FCS 475 – 275 Introductory Foods Laboratory Experimental Foods (1.2 cr)
Exploration of food preparation and application of underlying scientific principles through laboratory experiments. On-line modules focus on food safety, menu planning, food cost control, and cultural and religious influences on food choices. Hybrid course with one 3-hr lab and one web module a week. Laboratory experiences to accompany FCS 170. (Fall, Spring only)
Prereq: Major in the Department of Family and Consumer Sciences or Permission
Prereq or Coreq: FCS 470 270

Rationale: Food and Nutrition faculty are looking for ways to teach required content areas more efficiently and update content to align with current accreditation standards for dietetics education. Currently, 7 credits of foods courses are offered for Food and Nutrition majors – FCS 170 Introductory Foods (3 cr), FCS 175 Introductory Foods Lab (1 cr), and FCS 270 (Intermediate Foods). These three courses will be merged into two courses: FCS 270 Scientific Principles of Food Preparation (3 cr) and FCS 275 Experimental Foods (2 cr). The Experimental Foods course will merge the previous 175 laboratory activities with some of the previous 270 web-assisted activities. Remaining activities from the previous 270 course are either being eliminated based on revised accreditation standards or redistributed to other courses.

FCS 270 Intermediate Foods Scientific Principles of Food Preparation (3 cr)
Exploration of the scientific principles and techniques of food preparation; applied sensory evaluation of food, web-assisted course focusing on food safety, menu planning, and cultural and religious influences on food choices, and role of food in promotion of a healthy lifestyle. Practice in communicating foods information through food demonstrations and news articles. Web-based modules, with one 2-hr face-to-face lab per week. (Spring, Fall only)
Prereq: Major in the Department of Family and Consumer Sciences or Permission
FCS 170, 270

Recommended Short Course Title: Scientific Princ of Food Prep

Rationale: Food and Nutrition faculty are looking for ways to teach required content areas more efficiently and update content to align with current accreditation standards for dietetics education. Currently, 7 credits of foods courses are offered for Food and Nutrition majors – FCS 170 Introductory Foods (3 cr), FCS 175 Introductory Foods Lab (1 cr), and FCS 270 (Intermediate Foods). These three courses will be merged into two courses: FCS 270 Scientific Principles of Food Preparation (3 cr) and FCS 275 Experimental Foods (2 cr). Most of the previous FCS 270 content will be either moved to other courses or covered in the FCS 275 course. The content previously covered in the FCS 170 course (being eliminated) will be moved to FCS 270. This course covers scientific principles of food and is more appropriate for a two-level course.

FCS 492 Nutrition Education in the Life Cycle (2.3 cr)
Principles and theories of learning, curriculum development, evaluation methods, and applied food and nutrition education throughout the life cycle. Practice in delivering nutrition education through food demonstrations. (Spring only)
Prereq: FCS 205 and FCS 275 and FCS 486

Rationale: The FCS foods courses are being revised and some of the content moved to other classes. The food demonstrations are a better fit with nutrition education. This course is being revised to a 3-credit course with the addition of the food demonstration content and presentations. The emphasis of the Coordinated Program in Dietetics is community nutrition. The nutrition education course provides essential content to the community nutrition focus. Adding an additional credit to this course will strengthen the programs emphasis area and better meet the accreditation requirements for dietetics education. The FCS 275 course will include food safety content needed prior to preparing a food demonstration, so it has been added as a pre-requisite.
4. Change the curricular requirements of Child, Family, and Consumer Studies (B.S.F.C.S.):

This major has an interdisciplinary focus on the child, the family as an institution, and families as consumers. The minimum credits required for graduation are 128, including at least 36 credits at the 300-level or above. Required course work includes the university requirements (see regulation J-3) and one of the following options:

A. Child Development/Family Relations Option
The CDFR option allows students to develop individualized programs to meet personal and career goals. Careers include opportunities to provide direct services to children and families through teaching or child care, to fill advocacy roles, or to be involved with parent education.

Comm 101 Fundamentals of Public Speaking (2 cr)
EDSP 300 Educating for Exceptionalities (2 cr)
FCS 105 Individual and Family Development (3 cr)
FCS 205 Concepts in Human Nutrition (3 cr)
FCS 234 Infancy and Early Childhood (3 cr)
FCS 235 Principles and Methods of Child Observation (3 cr)
FCS 240 Intimate Relationships (3 cr)
FCS 333 Developmental Curriculum for Young Children (3 cr)
FCS 334 Middle Childhood-Adolescence (3 cr)
FCS 340 Parent-Child Relationships in Family and Community (3 cr)
FCS 346 Personal and Family Finance and Management (4 cr)
FCS 436 Theories of Child and Family Development (3 cr)
FCS 440 Contemporary Family Relationships (3 cr)
FCS 445 Issues in Work and Family Life (3 cr)
FCS 497 Internship Preschool (9 cr)
H&S 288 First Aid: Emergency Response (2 cr)
Math 130 or higher; or Stat 251 or higher (3 cr)

Courses to total 128 credits for this degree

B. Family Life Option
The Family Life Option provides a general preparation in family science. Students may select to pursue course preparation for Accredited Financial Counselor or Certified Family Life Educator. Career options include jobs in human service organizations, business firms, government agencies, and nonprofit organizations, and business firms. Students are encouraged to declare a minor in Aging. See Advisor for specific coursework to pursue these options.

FCS 105 Individual and Family Development (3 cr)
FCS 123 Textiles (3 cr)
FCS 205 Concepts in Human Nutrition (3 cr)
FCS 234 Infancy and Early Childhood (3 cr)
FCS 240 Intimate Relationships (3 cr)
FCS 329 History of Western Dress (3 cr)
FCS 334 Middle Childhood-Adolescence (3 cr)
FCS 340 Parent-Child Relationships in Family and Community (3 cr)
FCS 346 Personal and Family Finance and Management (4 cr)
FCS 401 Professional Ethics and Practice in CFCS (1 cr)
FCS 419 Dress and Culture (3 cr)
FCS 428 Housing America’s Families (3 cr)
FCS 434 Adulthood and Aging Within the Context of Family (3 cr)
FCS 440 Contemporary Family Relationships (3 cr)
FCS 445 Work and Family Issues (3 cr)
FCS 448 Consumer Economic Issues (3 cr)
FCS 498 Internship (3-5 cr)
Stat 251 Statistical Methods (3 cr)

One of the following (3 cr):
FCS 329 History of Western Dress (3 cr)
FCS 419 Dress and Culture (3 cr)
FCS 340 Parent-Child Relationships in Family & Community (3 cr)
FCS 440 Contemporary Family Relationships (3 cr)

Courses to total 128 credits for this degree

Rationale*: Over the past five years CFCS faculty worked to update courses to reflect the current trends in the field of human and family services. Course content has been reviewed and adapted to incorporate the criteria for several certification programs (i.e. Accredited Financial Counselor and Certified Family Life Educator). This provides CFCS students with the opportunity for enhanced learning and practical professional development. The move to three options more clearly delineates the focus of study for students and strengthens the ability to match degree options with individual student goals. Option A is a change in name only. All requirements remain the same and include CFCS foundational courses, a child development focus and a senior experience internship. Options B and C include the foundational CFCS courses, several courses that create a concentrated focus of study, and a required internship to encourage independent study and collaborative learning in real life settings. Best practice in professional
preparation involves practical experiential learning, the internship reflects best practice. This internship also provides students with experience that will give them a competitive edge in the job market. The internship requires a co-requisite one credit course on professional ethics and practice to support ethical leadership and enhance the integration of prior knowledge into the internship experience. This one-credit course is being proposed to UCGE as a senior experience.

*Editor’s Note: This rationale references two requested name changes to the existing options and the inclusion of a new minor. These changes will appear on a future item(s) when the UCC editor receives them.

5. **Change the curricular requirements of Clothing, Textiles and Design (B.S.F.C.S.):**

*Editor’s Note: There is a proposal to change the name of the major to Apparel, Textiles and Design. Until that change is approved by the SBOE, I have altered references to it to either CTD (in the degree requirements) or A/CTD in the rationales. Rationales do not appear in the catalog and once the SBOE approves the name changes I will update the catalog accordingly.

This major considers clothing, textiles and design as basic human needs, consumer products, historical and cultural artifacts, and communication tools. Career emphasis areas include apparel product development, creative and technical design of apparel, retail buying and selling, and international marketing. Students who wish to graduate in Clothing, Textiles and Design (CTD) must earn a grade of "C" or higher in all required CTD coursework. Students are required to complete an advisor-approved focus area of 18 credits. Students select their focus area at the end of their Sophomore year. Standard program focus areas are Design, Marketing/Merchandising, and Product Development. Students may choose a related focus area by submitting a proposal to ATD Faculty clearly showing the relationship between Apparel, Textiles and Design and their proposed area of focus relative to the industry, career goals, and emerging opportunities. Other focus areas may include Costume Design, Advertising, Business, or International Studies. Upon approval a double major or minor could also be used instead as long as the other content area is relative to Apparel, Textiles and Design.

Required course work includes the university requirements (see regulation J-3) and:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Art 100</td>
<td>World Art and Culture</td>
<td>3 cr</td>
</tr>
<tr>
<td>Bus 321</td>
<td>Marketing</td>
<td>3 cr</td>
</tr>
<tr>
<td>Comm 101</td>
<td>Fundamentals of Public Speaking</td>
<td>2 cr</td>
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<tr>
<td>FCS 105</td>
<td>Individual and Family Development</td>
<td>3 cr</td>
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<tr>
<td>FCS 119</td>
<td>Introduction to Fashion and the Apparel Industry</td>
<td>3 cr</td>
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<td>FCS 123</td>
<td>Textiles</td>
<td>3 cr</td>
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<tr>
<td>FCS 224</td>
<td>Apparel Construction and Assembly Processes</td>
<td>3 cr</td>
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<tr>
<td>FCS 323</td>
<td>Apparel Product Development</td>
<td>3 cr</td>
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<tr>
<td>FCS 324</td>
<td>Patternmaking</td>
<td>3 cr</td>
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<tr>
<td>FCS 329</td>
<td>History of Western Dress</td>
<td>3 cr</td>
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<tr>
<td>FCS 419</td>
<td>Dress and Culture</td>
<td>3 cr</td>
</tr>
<tr>
<td>FCS 424</td>
<td>Apparel Product Line Development: Senior Capstone</td>
<td>(3 cr)</td>
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<tr>
<td>FCS 448</td>
<td>Consumer Economic Issues</td>
<td>3 cr</td>
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<tr>
<td>Psyc 101</td>
<td>Intro to Psychology</td>
<td>3 cr</td>
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<tr>
<td>Soc 101</td>
<td>Intro to Sociology</td>
<td>3 cr</td>
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<tr>
<td>Econ 201</td>
<td>Principles of Macroeconomics</td>
<td>3 cr</td>
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<tr>
<td>Econ 202</td>
<td>Principles of Microeconomics</td>
<td>3 cr</td>
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<td>Econ 272</td>
<td>Foundations of Economic Analysis</td>
<td>4 cr</td>
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<tr>
<td>Anthropology elective</td>
<td>(3 cr)</td>
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<tr>
<td>Computer applications elective</td>
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<tr>
<td>Additional FCS credits outside of the CTD curriculum</td>
<td>(6 cr)</td>
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An area of emphasis selected with the guidance of an advisor (18 cr)

**Courses to total 128 credits for this degree**

Rationale: The program name has been officially changed (effective Fall 2015) to Apparel, Textiles and Design that reflects industry accurate terminology. The requirement of a C or higher in all Apparel, Textiles and Design (C/ATD) coursework assures that C/ATD students possess the necessary understanding of the content presented in these courses in order to continue in the program as well as being an indicator of content knowledge and application. The C/ATD program has always had areas of emphasis as a requirement. We are now formalizing the process for students selecting their area of emphasis as well as allowing students to develop their own specialized area of emphasis based on student interests and career opportunities in the industry. The requirement of a 2.0 GPA to transfer into the program assures that our transfer students are on track for meeting graduation requirements in a timely manner. We are also including our program learning outcomes in our description. The Electrical and Computer Engineering program has done this in their program description. This will allow students to read and understand our program learning outcomes before enrolling in C/ATD.

6. **Change the curricular requirements of Food and Nutrition (B.S.F.C.S.):**
Required course work includes the university requirements (see regulation J-3) and one of the following options.

A. Coordinated Program in Dietetics
Upon acceptance to the professional phase of the CPD during the second semester of the sophomore year, students must maintain a cumulative grade-point average of at least 2.80 to remain in and graduate from the program. Students must also obtain at least a B (80%) in all CPD courses required by the Accreditation Council for Education in Nutrition and Dietetics American Dietetic Association.

Acct 201  Introduction to Financial Accounting (3 cr)
Biol 120 Human Anatomy (4 cr)
Biol 121 Human Physiology (4 cr)
Biol 300 Survey of Biochemistry (3 cr)
FCS 170 Introductory Foods (3 cr)
FCS 175 Introductory Foods Laboratory (1 cr)
FCS 205 Concepts in Human Nutrition (3 cr)
FCS 270 Scientific Principles of Food Preparation (3 cr)
FCS 301 Professional Skills in Dietetics I (1 cr)
FCS 305 Intermediate Foods (3 cr)
FCS 361 Advanced Nutrition (3 cr)
FCS 362 Introduction to Clinical Dietetics (3 cr)
FCS 363 Medical Nutrition Therapy (4 cr)
FCS 364 Clinical Dietetics I (4 cr)
FCS 365 Advanced Nutrition Lab (1 cr)
FCS 384 Quantity Food Production and Equipment (3 cr)
FCS 385 Intro Dietetics Supervised Practice I (2 cr)
FCS 387 Food Systems Management (3 cr)
FCS 388 Food Systems Management Lab (1 cr)
FCS 411 Global Nutrition (3 cr)
FCS 463 Helping Skills in Dietetics (2 cr)
FCS 472 Clinical Dietetics II (8 cr)
FCS 473 Community Nutrition (3 cr)
FCS 486 Nutrition in the Life Cycle (3 cr)
FCS 487 Community Nutrition Supervised Practice (4 cr)
FCS 488 Management Supervised Practice (8 cr)
FCS 491 Research Methods in Food Nutrition (3 cr)
FCS 492 Nutrition Education in the Life Cycle (2-3 cr)
Psyc 101 Introduction to Psychology (3 cr)
Soc 101 Introduction to Sociology (3 cr)
Stat 251 Statistical Methods (3 cr)

One of the following (4 cr):
Chem 101 Intro to Chemistry I (4 cr)
Chem 111 Principles of Chemistry I (4 cr)

One of the following (3 cr):
Chem 275 Carbon Compounds (3 cr)
Chem 277 Organic Chemistry I (3 cr)

One of the following (3 cr):
FCS 105 Individual and Family Development (3 cr)
Psyc 305 Developmental Psychology (3 cr)

One of the following (3-4 cr):
Math 143 Pre-calculus Algebra and Analytic Geometry (3 cr)
Math 170 Analytic Geometry and Calculus I (4 cr)

One of the following (4-5 cr):
Biol 250, Biol 255 General Microbiology and Lab (5 cr)
MMBB 154, MMBB 155 Introductory Biology of Bacteria and Viruses and Lab (4 cr)

2 credits selected from the following:
FCS 305 Nutrition Related to Fitness and Sport (2 cr)
FCS 435 Feeding Young Children in Group Settings (1 cr)
FCS 462 Eating Disorders (2 cr)
FCS 475 Food Preservation (1 cr)

Courses to total 132-128 credits for this degree

B. Nutrition Option
This option prepares students for careers with government agencies, commodity groups, health and fitness agencies and businesses, and some components of the food industry. In addition, the course work would provide excellent background for those wishing to pursue advanced degrees in medicine or nutrition.
Biol 120 Human Anatomy (4 cr)
Biol 121 Human Physiology (4 cr)
Biol 300 Survey of Biochemistry (3 cr)
FCS 170 Introductory Foods (3 cr)
FCS 205 Concepts in Human Nutrition (3 cr)
FCS 270 Scientific Principles of Food Preparation (3 cr)
FCS 275 Experimental Foods (2 cr)
FCS 305 Nutrition Related to Fitness and Sport (2 cr)
FCS 361 Advanced Nutrition (3 cr)
FCS 462 Eating Disorders (2 cr)
FCS 486 Nutrition in the Life Cycle (3 cr)
FCS 492 Nutrition Education in the Life Cycle (3 cr)
Stat 251 Statistical Methods (3 cr)
FCS electives (12 cr)
One of the following (3 cr):
Chem 101 Introduction to Chemistry I (4 cr)
Chem 111 Principles of Chemistry I (4 cr)
One of the following (3 cr):
Chem 275 Carbon Compounds (3 cr)
Chem 277 Organic Chemistry I (3 cr)
One of the following (3 cr):
FCS 105 Individual and Family Development (3 cr)
Psyc 305 Developmental Psychology (3 cr)
One of the following (3-4 cr):
Math 143 Pre-calculus Algebra and Analytic Geometry (3 cr)
Math 170 Analytic Geometry and Calculus I (4 cr)
One of the following (4-5 cr):
Biol 250, Biol 255 General Microbiology and Lab (5 cr)
MMBB 154, MMBB 155 Introductory Biology of Bacteria and Viruses and Lab (4 cr)
Courses to total 120 credits for this degree

Rationale:
1) The American Dietetic Association has changed its name. This Accreditation Council for Education in Nutrition and Dietetics is the correct name for the accrediting body.
2) Food and Nutrition faculty are looking for ways to teach required content areas more efficiently and update content to align with current accreditation standards for dietetics education. Currently, 7 credits of foods courses are offered for Food and Nutrition majors – FCS 170 Introductory Foods (3 cr), FCS 175 Introductory Foods Lab (1 cr), and FCS 270 (Intermediate Foods). These three courses will be merged into two courses: FCS 270 Scientific principles of Food Preparation (3 cr) and FCS 275 Experimental Foods (2 cr).
3) FCS 492 Nutrition Education in the Life Cycle is being changed from 2 to 3 credits. The Food Demonstration content and activity previously in FCS 270 is being moved to this course. More focus is needed on nutrition education to meet the programs community emphasis and satisfy accreditation standards for dietetics education.
4) The total credits for the dietetics option is being dropped to 128. The current credit requirement of 132 includes taking ENGL 101. Most of the dietetic students do not need to take this course. Dropping the credit requirements eliminates the need for extra electives to reach 132 credits.
5) FCS 492 Nutrition Education in the Life Cycle is replacing the requirement of FCS 462 Eating Disorders for students taking the nutrition option. FCS 492 is offered more consistently and the content is more essential for nutrition graduates. FCS 462 is a better fit for an FCS elective course.

Plant, Soil, and Entomological Sciences

1. Drop the following dormant course:
   **Soil 437 Soil Biology (3 cr)**
   Introduction to soil organisms including bacteria, fungi, and macroinvertebrates and the influence of their activities on soil processes. Two lec and one 3-hr lab a wk. Recommended Preparation: Soil 205 and Biol 250. (Alt/ys)

   **Rationale:** Soil 437 has not been offered since 2008. The course suffered from poor enrollment and did not always fill. The instructor (Dr. G. Knudsen) is currently teaching Soil 425/525 Microbial Ecology and Plsc 415 Plant Pathology, these are both important core courses for students in the Ag. LSci.BS program and have strong enrollments. Soil 425/525 and PLsc 415, fulfill Dr. Knudsen’s teaching FTEs, leaving no time for Soil 437. Existing teaching FTEs are not available within the unit to cover the course and the unit does not envision hiring new faculty in this area within the next 2-3 years.
2. Change the following course:

**PlSc 338 Weed Control (3-4 cr)**
Nature and scope of weed problems, identification and biology of weeds, principles, theory, and practice of mechanical, chemical, and biological control of weeds; legal considerations; integration of methods into functional management systems. Two lec and one 2-3 hr lab a wk. Recommended Preparation: PlSc 102 or equivalent.

Rationale: None provided.

3. Change the curricular requirements of **Sustainable Crop and Landscaping Systems** (B.S.Ag.L.S.):

Required course work includes the university requirements (see regulation J-3) and:

**Agricultural and Life Science Core**
- AgEd 406 Exploring International Agriculture (3 cr)
- Soil 205, Soil 206 The Soil Ecosystem and Lab (4 cr)
- Stat 251 Statistical Methods (3 cr)

One of the following (2-3 cr):
- ASM 305 GPS and Precision Agriculture (3 cr)
- ASM 412 Agricultural Safety and Health (2 cr)
- PlSc 207 Introduction to Biotechnology (3 cr)

One of the following (4 cr):
- Chem 101 Introduction to Chemistry I (4 cr)
- Chem 111 Principles of Chemistry I (4 cr)

One of the following (3-4 cr):
- Comm 101 Fundamentals of Public Speaking (2 cr)
- Engl 207 Persuasive Writing (3 cr)
- Engl 313 Business Writing (3 cr)
- Engl 316 Environmental Writing (3 cr)
- Engl 317 Technical Writing (3 cr)

One of the following (3-4 cr):
- Math 143 Pre-calculus Algebra and Analytic Geometry (3 cr)
- Math 160 Survey of Calculus (4 cr)
- Math 170 Analytic Geometry and Calculus I (4 cr)

**Sustainable Crop and Landscape Systems Courses**
- Biol 115 Cells and the Evolution of Life (4 cr)
- Ent 322 General and Applied Entomology (4 cr)
- PlSc 102 The Science of Plants in Agriculture (3 cr)
- PlSc 400 (s) Seminar (1 cr)
- PlSc 415 Plant Pathology (3 cr)
- PlSc 438 Pesticides in the Environment (3 cr)

One of the following (4 cr):
- PlSc 415 Plant Pathology (3 cr)
- Soil 425 Microbial Ecology (3 cr)

One of the following (4 cr):
- Biol 213 Principles of Biological Structure and Function (4 cr)
- PlSc 205 General Botany (4 cr)

One of the following (3 cr):
- Chem 275 Carbon Compounds (3 cr)
- Chem 277 Organic Chemistry I (3 cr)

One of the following (3-5 cr):
- Biol 250, Biol 255 General Microbiology and Lab (5 cr)
- Biol 300 Survey of Biochemistry (3 cr)
- Biol 380 Biochemistry I (4 cr)
- Chem 253, Chem 254 Quantitative Analysis and Lab (5 cr)
- MMBB 154, MMBB 155 Introductory Microbiology and Lab (4 cr)

And one of the following emphases:

**A. Insects and Society**
- Biol 116 Organisms and Environments (4 cr)
- Biol 312 Molecular and Cellular Biology (3 cr)
Biol 313 Molecular and Cellular Laboratory (1 cr)
Biol 314 Ecology and Population Biology (4 cr)
Chem 112 Principles of Chemistry II (5 cr)
Ent 440 Insect Identification (4 cr)
Ent 441 Insect Ecology (3 cr)

One of the following (3-4 cr):
Biol 310, Biol 315 Genetics and Lab (4 cr)
Gene 314 General Genetics (3 cr)

Biotechnology Electives (3 cr)
Entomology Electives (5 cr)
Life Science Electives (6 cr)
Mathematics Electives (4 cr)
Physics Electives (4 cr)

Courses to total 128 credits for this degree

B. Soil and Land Use
Chem 112 Principles of Chemistry II (5 cr)
Geol 101, Geol 101L Physical Geology and Lab or
Geol 111, Geol 111L Physical Geology for Science Majors and Lab (4 cr)
Phys 111, Phys 111L General Physics I and Lab (4 cr)
Phys 112, Phys 112L General Physics II and Lab (4 cr)
Soil 415 Soil and Environmental Physics (3 cr)
Soil 422 Environmental Soil Chemistry (3 cr)
Soil 425 or MMBB 425 Microbial Ecology (3 cr)
Soil 446 Soil Fertility (3 cr)
Soil 454 Pedology (3 cr)
Soil 499 Directed Study (1 cr)

One of the following (3 cr):
CS 101 Introduction to Computer Science (3 cr)
CS 112 Introduction to Problem Solving and Programming (3 cr)

Courses to total 128 credits for this degree

C. Sustainable Cropping Systems
Gene 314 General Genetics (3 cr)
PlSc 338 Weed Control (3 cr)
PlSc 401 Plant Physiology (3 cr)
PlSc 407 Field Crop Production (3 cr)
PlSc 446 Plant Breeding (3 cr)
PlSc 480 Field Trip (1 cr)
Soil 446 Soil Fertility (3 cr)

One of the following (1 cr):
Chem 276 Carbon Compounds Lab (1 cr)
Chem 278 Organic Chemistry I: Lab (1 cr)

One of the following (3 cr):
PlSc 398 Internship (3 cr)
PlSc 499 Directed Study (3 cr)

Professional Support Electives (9 cr):
Accounting
Animal and Veterinary Sciences
Agricultural Economics
Biology
Business
Business Law
Chemistry
Computer Science
Economics
Entomology
Foreign Languages (max 4 credits)
Forest Resources
Landscape Architecture
Microbiology, Molecular Biology and Biochemistry
Physics
Plant Science
Sustainable Cropping Systems Electives (17 cr):
PISc 408  Cereal Science (3 cr)
PISc 410  Invasive Plant Biology (3 cr)
PISc 433  Plant Tissue Culture Techniques (3 cr)
PISc 490  Potato Science (3 cr)
Stat 431  Statistical Analysis (3 cr)

Courses to total **128-120 credits for this degree**

D. Environmental Horticulture
Gene 314  General Genetics (3 cr)
PISc 201  Principles of Horticulture (3 cr)
PISc 300  Plant Propagation (3 cr)
PISc 338  Weed Control (3 cr)
PISc 401  Plant Physiology (3 cr)
Soil 446  Soil Fertility (3 cr)

One of the following (1 cr):
Chem 276  Carbon Compounds Lab (1 cr)
Chem 278  Organic Chemistry I: Lab (1 cr)

One of the following (3 cr):
PISc 398  Internship (3 cr)
PISc 499  Directed Study (3 cr)

Professional Support Electives (9 cr):
Accounting
Animal and Veterinary Sciences
Agricultural Economics
Biology
Business
Business Law
Chemistry
Computer Science
Economics
Entomology
Foreign Languages (max 4 credits)
Forest Resources
Landscape Architecture
Microbiology, Molecular Biology and Biochemistry
Physics
Plant Science
Rangeland Ecology and Management
Renewable Materials
Soils

Environmental Horticulture Electives (15 cr):
PISc 340  Nursery Management (3 cr)
PISc 341  Nursery Management Laboratory (1 cr)
PISc 433  Plant Tissue Culture Techniques (3 cr)
PISc 451  Vegetable Crops (3 cr)
PISc 464  Landscape Maintenance (3 cr)
PISc 490  Potato Science (3 cr)

Courses to total **128-120 credits for this degree**

E. Plant Biotechnology
Chem 112  Principles of Chemistry II (5 cr)
Chem 278  Organic Chemistry I: Lab (1 cr)
Gene 314  General Genetics (3 cr)
MMBB 486  Plant Biochemistry (3 cr)
MMBB 488  Genetic Engineering (3 cr)
PISc 401  Plant Physiology (3 cr)
PISc 433  Plant Tissue Culture Techniques (3 cr)
PISc 440  Advanced Laboratory Techniques (4 cr)
PISc 446  Plant Breeding (3 cr)

One of the following (3-4 cr):
Biol 300  Survey of Biochemistry (3 cr)
Biol 380  Biochemistry I (4 cr)

One of the following (3 cr):
PISc 398  Internship (3 cr)
PlSc 402  Undergraduate Research in Plant Science (3 cr)
PlSc 499  Directed Study (3 cr)

Professional Support Electives (5 cr):
Accounting
Animal and Veterinary Sciences
Agricultural Economics
Biology
Business
Business Law
Chemistry
Computer Science
Economics
Entomology
Foreign Languages (max 4 credits)
Forest Resources
Landscape Architecture
Microbiology, Molecular Biology and Biochemistry
Physics
Plant Science
Rangeland Ecology and Management
Renewable Materials
Soils

Plant Biotechnology Electives (12 cr):
Biol 250  General Microbiology (3 cr)
Biol 255  General Microbiology Lab (2 cr)
Biol 312  Molecular and Cellular Biology (3 cr)
Biol 313  Molecular and Cellular Laboratory (1 cr)
Biol 382  Biochemistry I Laboratory (2 cr)
Biol 444  Genomics (3 cr)
MMBB 409  Immunology (3 cr)
MMBB 485  Prokaryotic Molecular Biology (3 cr)
MMBB 487  Eukaryotic Molecular Genetics (3 cr)
PlSc 338  Weed Control (3 cr)
PlSc 407  Field Crop Production (3 cr)
PlSc 451  Vegetable Crops (3 cr)
PlSc 476  Cell Biology (3 cr)
PlSc 490  Potato Science (3 cr)
Soil 446  Soil Fertility (3 cr)

Courses to total 128. 120 credits for this degree

Rationale:

Option C: Changes include: Add Soil 425, Add Biol 380, Add several courses to recommended list, Drop professional support electives, Reduce total credits to 120.

Soil 425 was added to correct an omission from the last catalog change. Biol 380 was added to maintain uniformity between the three plant science emphasis areas. Courses were added to recommended list to provide students with additional choices to enhance their degree. Professional support electives were eliminated to help reduce total credits from 128 to 120 for the degree. Total credits were reduced to enhance degree flexibility and appeal to students.

Option D: Changes include: Add Soil 425, Add Biol 380, Drop professional support electives, Reduce total credits to 120.

Soil 425 was added to correct an omission from the last catalog change. Biol 380 was added to maintain uniformity between the three plant science emphasis areas. Professional support electives were eliminated to help reduce total credits from 128 to 120 for the degree. Total credits were reduced to enhance degree flexibility and appeal to students.

Option E: Changes include: Add Soil 425, Add Biol 380, Change courses in recommended list, Drop professional support electives, Reduce total credits to 120.

Soil 425 was added to correct an omission from the last catalog change. Biol 380 was moved to maintain uniformity between the three plant science emphasis areas. A course was dropped and another course added to update course options. Professional support electives were eliminated to help reduce total credits from 128 to 120 for the degree. Total credits were reduced to enhance degree flexibility and appeal to students.