College of Agricultural and Life Sciences

Proposed Catalog Changes

Effective Term (unless otherwise noted) = Summer 2016

AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY

1. Add the following course

**AgEc 489L Applied Commodity Market Analysis Lab (1 cr)**
Short course title: COMMUNITY MARKETS LAB
The lab builds upon agricultural marketing risk-management concepts introduced in AgEc 89 – “Understanding Futures and Options Markets”. Students will develop spreadsheets containing historical supply and demand data along with actual cash and futures price series on chosen commodity sectors. Appropriate tools and methodologies will then be applied to analyze historical patterns, parameters, basis, seasonality and charting techniques. Lab material coverage will coincide with homework assigned in AgEc 89. Dataset, analytical tools, and actual futures trading platform will then be utilized to develop an applied risk-management hedging program.

**Coreq:** AgEc 489

Available via distance: No
Geographical Area Availability: Moscow

**Rationale:** Applied commodity market analysis that utilizes excel based tools is warranted for the Futures and Options, AgEc489 course; however, there is not enough time to cover the hands-on modeling in the regular 3 credit course. Thus, a lab would allow exploring full application the concepts learned in class in a hands-on practical setting.

The lab will also increase readiness, effectiveness, and chances for employment of our students. The activities in the lab meet the stakeholders’ wishes and suggestions for the key and necessary skills that students should have. Grain trading corporations and farm credit companies appreciate our students being able to perform this type of analysis.

Student’s performance will be assessed using lab assignments, participation, and the research, report and presentation in the hedging program.

2. Change the following course

**AgEc 414 Financial Analysis of Agricultural Firms (13 cr)**
Short course title: FINANCIAL ANALYSIS AG
Applying cost analysis and three financial statements analysis to the management of an agricultural business. Evaluating relative performance of agricultural firms by using financial ratios, ride-on investment evaluation (by employing NPV and IRR), leasing vs buying, and financial modelling (proforma statement) for agricultural firms. Examination of cost and accrual based income statement for tax and management decisions. Create a cash flow statement for agricultural firms based on the income and balance sheet statements. Five-week course. Three hours of lec per week. (Fall only)

**Prereq:** Acct 201 and AgEc 278; or Permission
Available via distance: No  
Geographical Area Availability: Moscow  
Rationale: The material addition is responsive to the stakeholders’ suggestions and wishes of what they expect students’ skills to be upon entrance to agricultural and ag. financial firms. The material will better equip students to be more attractive in the job market. Three credit listing of this course is also consistent with other national programs around the country. Students will be assessed using homework assignments, quizzes, and a final exam.

AGRICULTURAL AND EXTENSION EDUCATION

1. Add the following courses

**AgEd 258 Experiential Learning and SAE Programs (1 cr)**  
Short course: EXPER LEARN & SAE PROGRAMS  
This course addresses the role of experiential learning in Agricultural Education programs. A sound understanding and application of these programs is essential to the success of the local program. The emphasis of the course will be to provide students with supervised experience in agriculture. Record keeping skills will be developed to assist the student in planning, decision-making, and reporting.

Available via distance: Yes  
Geographical Area Availability: State-wide through Dual Credit  
Rationale: High School Agriculture Teachers are required; as a part of a “Total Agricultural Education Program” to incorporate SAE (Supervised Agricultural Experience Programs) into their high school agriculture programs. Ideally, every student should have an SAE. In Idaho, we have found that the definition of SAE has not been followed well. As a result, many of our students in Agriculture Education have never had a true SAE program where they kept records and therefore do not have the experience required to teach their students. Additionally, the use of Proficiency Awards in Idaho has been limited due to the lack of knowledge. This course will require all teacher education students to have an agriculturally based experience. Students will keep records utilizing the AET- Agricultural Experience Tracker, a software program widely used in Agricultural Education.

Students will be assessed through a series of AET assignments and the completion of Proficiency Award applications.

**AgEd 561 Beginning Teacher Induction in Agricultural Education II (1 cr)**  
Short course: VEG TEACHER INDUCTION  
This course is designed to develop an understanding and application of teaching agriculture using the three-circle model. The course is taught using on-site clinical supervision, technical assistance, leadership, follow-up and support to beginning teachers of secondary agricultural education program. (Spring only)

Available via distance: Yes  
Geographical Area Availability: State-wide  
Rationale: The Department of Agricultural and Extension Education is in the process of reviewing our graduate degree courses. We are planning on offering more courses on-
line using Bb Learn and Adobe Connect technology for place-bound graduate students across Idaho who cannot travel to Moscow or Boise to complete graduate courses.

Traditionally, beginning high school Agriculture teachers have enrolled in AGED 560-Beginning Teacher Induction; for the fall and spring semesters. The addition of this course in the spring will make the program more sequential and solve the problem of offering the same course for different credit in two semesters. This and the 560 course are a part of the Idaho Beginning Teacher Induction program for Agriculture teachers and the first components of our MS program.

Students will be assessed through a series of assignments designed to assist them as a first year teacher; primarily the IQPS or Idaho Quality Program Standards assessment. This state assessment requires teachers to evaluate their programs and collect pertinent data in an effort to facilitate systemic program improvement.

1. Change the following courses

AgEd 560 Beginning Teacher Induction in Agricultural Education (1 cr, max 21 cr)
Short course: BEG TEACHER INDUCTION AGED I
On-site clinical supervision, technical assistance, and leadership to beginning teachers of secondary agricultural education programs.
This course is designed to develop an understanding and application of teaching agriculture using the three-circle model. The course is taught using on-site clinical supervision, technical assistance, leadership, follow-up and support to beginning teachers of secondary agricultural education program. (Fall only)

Available via distance: Yes
Geographical Area Availability: State-wide
Rationale: The Department of Agricultural and Extension Education is in the process of reviewing our graduate degree courses. We are planning on offering more courses on-line using Bb Learn and Adobe Connect technology for place-bound graduate students across Idaho who cannot travel to Moscow or Boise to complete graduate courses.

Traditionally, beginning high school Agriculture teachers have enrolled in AGED 560-Beginning Teacher Induction; for the fall and spring semesters. Changing this course to a fall only and reducing the credit to 1, as well as the addition of AGED 561 in the spring will make the program more sequential and solve the problem of offering the same course for different credit in two semesters. This and the 561 course are a part of the Idaho Beginning Teacher Induction program for Agriculture teachers and the first components of our MS program.

Students will be assessed through a series of assignments designed to assist them as a first year teacher; primarily the IQPS or Idaho Quality Program Standards assessment. This state assessment requires teachers to evaluate their programs and collect pertinent data in an effort to facilitate systemic program improvement.

AgEd 562 Instructional Methods in Agricultural Education History and Philosophy of Agricultural and Extension Education (3 cr)
Short course: HISTORY & PHIL OF AG&EXT EDUC
Innovations and advanced principles in teaching methods and materials.
This course will review the development and growth of land-grant universities, agricultural experiment stations, the cooperative extension system, secondary and post-secondary agricultural programs, and the 4-H and FFA youth development organizations. Participants will conduct historical research and prepare a historical research manuscript for publication.

Available via distance: Yes
**Geographical Area Availability:** State-wide  
**Rationale:** The Department of Agricultural and Extension Education is in the process of reviewing our graduate degree courses. We are planning on offering more courses online using Bb Learn and Adobe Connect technology for place-bound graduate students across Idaho who cannot travel to Moscow or Boise to complete graduate courses.

Undergraduate students in agricultural education get an introduction into the history and philosophy of agricultural and extension education in Ag Ed 180 and Ag Ed 351. However, they do not get a full understanding of the complete history, philosophy, and development of the comprehensive system of agricultural and extension education. This graduate level class will be required for all graduate students completing their Masters of Science degree in Agricultural Education. This course will provide them a solid philosophical foundation of how land-grant universities, extension education, agricultural research, vocational education/CTE, and secondary agricultural education was created and developed over the past 150 years.

In order to better sequence our graduate course offerings, we would like to use the Ag Ed 562 course number. This course would follow Ag Ed 560 that is currently being offered and the new Ag Ed 561 course. The content of the former Ag Ed 562 Instructional Methods in Agricultural Education will be incorporated into another new Ag Ed course-AGED 565.

Students will be assessed through periodic quizzes, tests and a final project for the course which will be a qualitative historical research paper.

**ANIMAL AND VETERINARY SCIENCE**

1. Add the following courses

   **AVS 517 Macronutrient Metabolism (3 cr)**
   Upon completion of this class students will be familiarized with many aspects of digestion, absorption and metabolism of macronutrients in a detailed level. The emphasis will be on interrelationship and regulation of macronutrients utilization at cellular and organ levels. It is assumed that graduate students have a good knowledge of physiology and biochemistry. Pertinent research manuscripts will be discussed in a round-table fashion.
   **Prereq:** AVS 305, or AVS 411, or similar course

   **Available via distance:** No  
   **Geographical Area Availability:** Moscow  
   **Rationale:** All of our graduate students work on a research project toward completion of their degree. We would like to equip our graduate students with necessary tools and skills that allow them to better understand and interpret nutrient metabolism as it relates closely to growth, development, and lactation. Within this context, students are exposed to examples from cellular to tissue and organ level metabolism. Students will be assessed as follows: two quizzes (total of 20%); two exams (total of 30%); participation (25%), and a presentation/discussion of a pertinent research manuscript in a journal club fashion (round-table discussion) (25%). As majority of our graduate students are in physiology (growth, reproduction, lactation) or nutrition related areas, it is expected that graduate students will also develop an appreciation for research methods used to study various aspects of macronutrient metabolism.

   **AVS 531 Practical Methods in Analyzing Animal Science Experiments (3 cr)**
   **Short course:** Analyzing Animal Experiments  
   Upon completion of this class students will be able to manage and analyze data obtained from animal experimentations. This is a “hands-on” type of training, specifically designed for AVS graduate students and intends to provide our graduate students with a better understanding of
designs commonly used in animal science experiments, advantages and potential pitfalls associated with each design, data processing and analysis, data tabulation, and graphic illustration, and data interpretation.

**Prereq:** 400 level statistics course

**Available via distance:** No

**Geographical Area Availability:** Moscow

**Rationale:** All of our graduate students work on a research project toward completion of their degree. We would like to equip our graduate students with necessary tools and skills that allow them to better understand, analyze and interpret animal experiments and their findings. Within this context, students are exposed to examples from basic as well as applied animal science experiments. Final grades are based on two equally important components: 1) homework (50%) and 2) take-home exams (50%). Students are expected to submit homework assignments on regular basis throughout the course. Two take-home examinations will be conducted (week 8 and final week) for which questions will be provided prior to each exam.

2. Change the following courses

**AVS 218317 Artificial Insemination and Pregnancy Detection (3 cr)**

Short course: AI & PREGNANCY DETECTION

Anatomy and physiology of pregnant and non-pregnant reproductive systems; artificial insemination; male reproduction; pregnancy detection in domestic livestock.

**Prereq:** AVS 109; and AVS 222 or AVS 452, Junior/Senior Standing OR instructor permission

**Available via distance:** No

**Geographical Area Availability:** Moscow

**Rationale:** AVS 218 is a very popular hands-on certificate course. With limited number of cattle available for this course, it is desired that student gain the full benefit from the course and gain sufficient hands-on experience. The course is offered the last half of the spring semester. Changing the course to a 300 level and adding Junior/Senior standing will assure students have animal production and reproductive biology background to fully capitalized in this course. Given that AVS 318 (Beef Calving Mgt.) is an existing course, we would like to change the course from AVS 218 to AVS 317.

**AVS 452 Physiology of Reproduction (4 cr)**

Physiology of reproduction; growth, structure, development, endocrinology, and control of reproductive function with emphasis on farm animals. Three lec and one 2-hr lab a wk.

**Cooperative:** open to WSU degree-seeking students.

**Prereq:** AVS 109 and BIOL 115 or equivalent

**Available via distance:** No

**Geographical Area Availability:** Moscow

**Rationale:** This a junior/senior course. The focus and objective of AVS 452 is to expand and instruct our students in animal reproduction of domestic livestock. By having AVS 109 and BIOL 115 as prerequisites, we’ll insure that the students have the rudimentary knowledge of animal production and the principles of the biology of organisms and cells, and hence are better prepared to perform in AVS 452.

**AVS 463 Growth and Lactation (3 cr)**

Principles of growth and lactation. Hormonal, nutritional, and metabolic control of bone, muscle, adipose, and mammary tissue development; regulation of lactation.

**Prereq:** AVS 109 and BIOL 115

**Coreq:** AVS 305
Available via distance: No
Geographical Area Availability: Moscow
Rationale: The focus and objective of AVS 463 is to expand and instruct our student’s knowledge in the growth and lactation of domestic livestock. Adding AVS 109 and BIOL 115 as prerequisites, will insure that the students have the rudimentary knowledge of animal production and the principles of the biology of organisms and cells. Also, by adding AVS 305, Animal Nutrition, as a co-requisite we’ll increase the students understanding of muscle and mammary gland nutrient absorption and metabolism.

1. Make the following curricular changes to the Animal Science Minor

   AVS 109 The Science of Animals that Serve Humanity (4 cr)
   AVS 209 Science of Animal Husbandry (4 cr)

   One of the following (3 cr):
   AVS 222 Animal Reproduction and Breeding (3 cr)
   AVS 452 Physiology of Reproduction

   Six credits from the following AVS 300-level or higher courses:
   AVS 305 Animal Nutrition (3 cr)
   AVS 306 Feeds and Ration Formulation (4 cr)
   AVS 330 Genetics of Livestock Improvement (3 cr)
   AVS 363 Animal Products for Human Consumption (4 cr)
   AVS 411 Ruminant Nutrition (3 cr)
   AVS 471 Animal Disease Management (3 cr)

   Three credits of the following:
   AVS 466 Equine Science and Management (3 cr)
   AVS 472 Dairy Cattle Management (3 cr)
   AVS 474 Beef Cattle Science (3 cr)
   AVS 476 Sheep Science (3 cr)

   Courses to total 20 credits for this minor

   Distance education: Less than 50% of curricular requirements can be completed via distance

   Geographical Area Availability:
   Rationale: AVS 476, Sheep Science: was removed from the dormant list in 14-15. This course is shown as active in the UI catalog under Courses; but isn’t yet active in our Department curriculum or on the student degree audit We would like to add the course to the species specific courses in our Minor Option curriculum.

BIOLOGICAL AND AGRICULTURAL ENGINEERING

2. Make the following changes to the Agricultural Systems Management Major (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 The Soil Ecosystem and Lab (4 cr)
   Soil 206
   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)

Agricultural Systems Management Courses
Acct 201   Introduction to Financial Accounting (3 cr)
Acct 202   Introduction to Managerial Accounting (3 cr)
AgEc 278   Farm and Agribusiness Management (4 cr)
AgEc 289   Agricultural Markets and Prices (3 cr)
AgEc 356   Agricultural and Rural Policy (3 cr)
ASM 107   Beginning Welding (2 cr)
ASM 112   Introduction to Agricultural Systems Management (3 cr)
ASM 2001  Seminar (1 cr)
ASM 202   Agricultural Shop Practices (2 cr)
ASM 305   GPS and Precision Agriculture (3 cr)
ASM 315   Irrigation Systems and Water Management (3 cr)
ASM 331   Electric Power Systems for Agriculture (3 cr)
ASM 409   Agricultural Tractors, Power Units and Machinery Management (4 cr)
ASM 412   Agricultural Safety and Health (2 cr)
ASM 433   Agricultural Processing Systems (3 cr)
BAE 491   Senior Seminar (1 cr)
Biol 102   Biology and Society (3 cr)
Bus 190   Integrated Business and Value Creation (3 cr)
BLaw 265  Legal Environment of Business (3 cr)
Comm 101  Fundamentals of Public Speaking (2 cr)
Econ 202   Principles of Microeconomics (3 cr)
PlSc 102   The Science of Plants in Agriculture (3 cr)

Agricultural and Technical Electives (13 cr)

Life Science Elective (3 cr)

One of the following (2-3 cr):
Engr 105   Engineering Graphics (2 cr)
CTE 267   Computer Aided Drafting/Design (3 cr)

One of the following (4 cr):
Phys 100,  Fundamentals of Physics and Lab (4 cr)
Phys 100L
Phys 111,  General Physics I and Lab (4 cr)
Phys 111L

Phys 211,  Engineering Physics I and Lab (4 cr)
Phys 211L

Three credits from the following (3 cr):
AgEc 411  The World of International Agribusiness (1 cr)
AgEc 413  Management of Human Resources in Agribusiness Firms (1 cr)
AgEc 415  Entrepreneurial Skills in Agribusiness Management (1 cr)
AgEc 418  Developing Negotiation Skills in Agribusiness (1 cr)
AgEc 419  Development and Analysis of Enterprise Budgets (1 cr)

One of the following (3 cr):
Engl 313  Business Writing (3 cr)
Engl 317  Technical Writing (3 cr)

Courses to total 128 credits for this degree

Distance education: Less than 50% of the curricular requirements can be completed via distance
Geographical Area Availability: Moscow
Assessment: Improved writing skills in advanced ASM courses will be expected
Rationale: The ASM program requires both Comm 101 AND one class either Engl 313 or Engl 317 while the other programs in the AgLS degree only requires one class in Comm or one of the advanced English classes. This change was submitted in 2013 but somehow was not included in the catalog.

FAMILY AND CONSUMER SCIENCES

1. Add the following courses

FCS 425 Collections Management (1 cr)
Introduction to managing a historic collection of garments including accession and deaccession policies and procedures, conservation and storage practices, disaster management, and research for and mounting of exhibitions. Junior or Senior Standing.
Prereq: FCS Major, Junior or Senior Standing

Available via distance: No
Geographical Area Availability: Moscow
Rationale: The Leila Old Historic Costume Collection houses 10,000 objects related to dress and appearance. Students often express an interest in museum collections, but we haven’t had a curator to supervise this learning. Now we do. In the course, Apparel, Textile, and Design majors apply knowledge gained from other ATD courses including textiles, apparel production, design, history of fashion, and dress and culture. Assessment of the course will include assignments and a student portfolio. Grading rubrics are based on standard museum collection practice.

FCS 484 Vegetarian Food and Nutrition (3 cr)
Vegetarian food and nutrition principles with their application to health benefits and life cycles stages. (offered online)
Prereq: FCS 205

Available via distance: Yes, exclusively.
Geographical Area Availability: Online
Rationale: Due to high demand from students, we would like to define this special topics course as a permanent course. It will continue to be offered during the summer as an online elective option for both Food and Nutrition students as well as non-majors. Assessment of the course includes assignments, case studies, discussions, quizzes and a final presentation and paper.

2. Change the following courses

<table>
<thead>
<tr>
<th>FCS 324 Patternmaking (34 cr)</th>
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<tr>
<td>Methods and principles of flat pattern and draping design; use of pattern making skills and advanced construction skills in apparel product development; developing specifications for apparel production. Two 3-hour studios a week and assigned work. Students must complete this course with a grade of 'C' or higher as a prerequisite to future Apparel, Textiles and Design courses.</td>
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<tr>
<td>Prereq: FCS 224 with a grade of 'C' or better and Apparel, Textiles, and Design major; or Permission</td>
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</tbody>
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| Available via distance: No |
| Geographical Area Availability: Moscow |
| Rationale: In order to prepare students for the FCS 424 Apparel Product Line Development capstone course, we are adding 3 hours of open studio/week. As such, increasing the credit load from 3 to 4 credits is a more accurate indicator of student work load and course expectations. |

| FCS 424 Apparel Product Line Development (34 cr) |
| Gen Ed: Senior Experience |
| Advanced patternmaking, draping, and construction skills, combined with aesthetic principles of design, prepare students to create apparel lines. A senior capstone to design and product development studies. Two 3-hour studios a week and assigned work. |
| Prereq: FCS 119, FCS 319, FCS 323, FCS 324, or Permission |

| Available via distance: No |
| Geographical Area Availability: Moscow |
| Rationale: In order to prepare students for the apparel industry, we are adding 3 hours of open studio work to this FCS 424 Apparel Product Line Development capstone course. As such, increasing the credit load from 3 to 4 credits is a more accurate indicator of student work load and course expectations. |

3. Make the following curricular changes to the Apparel, Textiles, and Design Major (B.S.F.C.S.)

This major considers apparel, textiles and design as basic human needs, consumer products, historical and cultural artifacts, and communication tools. Students who wish to graduate in Apparel, Textiles and Design (ATD) must earn a grade of "C" or higher in all required ATD 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:

Art 100   World Art and Culture (3 cr)
Bus 321  Marketing (3 cr)
Comm 101  Fundamentals of Public Speaking (2 cr)
FCS 105  Individual and Family Development (3 cr)
FCS 119  Introduction to Fashion and the Apparel Industry (3 cr)
FCS 123  Textiles (3 cr)
FCS 224  Apparel Construction and Assembly Processes (3 cr)
FCS 319  Digital Illustration for the Apparel Industry (3 cr)
FCS 323  Apparel Product Development (3 cr)
FCS 324  Patternmaking (3 cr)
FCS 329  History of Western Dress (3 cr)
FCS 395  Career Development in Apparel and Textiles (1 cr)
FCS 419  Dress and Culture (3 cr)
FCS 424  Apparel Product Line Development: Senior Capstone (3 cr)
FCS 448  Consumer Economic Issues (3 cr)

One of the following (3 cr):
Psyc 101  Intro to Psychology (3 cr)
Soc 101  Intro to Sociology (3 cr)

One of the following (3-4 cr):
Econ 201  Principles of Macroeconomics (3 cr)
Econ 202  Principles of Microeconomics (3 cr)
Econ 272  Foundations of Economic Analysis (4 cr)

Anthropology elective (3 cr)

Computer applications elective (2-3 cr)

Additional FCS credits outside of the CTD curriculum (6 cr)
An area of emphasis selected with the guidance of an advisor (18 cr)

Courses to total 128 credits for this degree

Distance education: Less than 50% of the curricular requirements can be completed via distance

Geographical Area Availability: Moscow

Rationale: These additions to the Apparel, Textile, and Design curriculum fulfill ATD strategic plan goals for 2015-2016. Our strategic plan included updating course content, aligning prerequisites, and establishing minimum grades and GPA to continue in the program. One objective was to create efficiencies to permit existing faculty to offer more courses to add depth to the program. FCS319 and FCS395 have been developed and have been offered as electives. Requiring them as part of the ATD program better solidifies student preparation for industry expectations. Adding writing and social psychology requirements develops students’ professional writing skills and broadens their understanding of the human being as a member of society. Requiring these courses also eliminates the requirement for additional FCS electives. The general requirement of a computer applications elective is being replaced by FCS319 that better meets the computer skills required in the industry. While we’re increasing our specified required courses, it does not exceed the 128 credits required for the degree.

4. Make the following curricular changes to the Food and Nutrition Major (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.

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 205  Concepts in Human Nutrition (3 cr)
FCS 270  Scientific Principles of Food Preparation (3 cr)
FCS 275  Experimental Foods (2 cr)
FCS 301  Professional Skills in Dietetics I (1 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  Intro Dietetics Supervised Practice II (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 (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 154,  Introductory Microbiology and Lab (4 cr)
Biol 155

Biol 250,  General Microbiology and Lab (5 cr)
Biol 255

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)
- FCS 484 Vegetarian Food and Nutrition (3 cr)

Courses to total 128 credits for this degree

**Rationale:** The Vegetarian Food and Nutrition Course is being added as an elective option for Food and Nutrition students. The dietetics option requires students to select at least 2 credits of elective courses.

**FOOD SCIENCE**

1. Add the following courses

**FS 401 Industrial Fermentations (3 cr)**
Science and technology associated with industrial-scale food fermentations. Cooperative: open to WSU degree-seeking students.

**Prereq:** Biol 250 and Biol 300

**Available via distance:** No
**Geographical Area Availability:** Moscow

**Rationale:** New course is being added to the WSU curriculum and will be a class offered by the bi-state Food Science program in which UI students should be able to count towards a UI degree. Teaching faculty and resources have been allocated.

Course will be assessed through three separate examinations and through student’s level of class discussion and participation.

**FS 402 Ciders and Other Fermented Foods (3 cr)**
Short course: CIDERS & OTHER FERMENTED FOODS
Chemistry, microbiology, and technology associated with the production of cider, beer, and other food fermentations. Two half-day field trips required. Cooperative: open to WSU degree-seeking students.

**Prereq:** FS 304; FS 465

**Available via distance:** No
**Geographical Area Availability:** Moscow

**Rationale:** New course is being added to the WSU curriculum and will be a class offered by the bi-state Food Science program in which UI students should be able to count towards a UI degree. Teaching faculty and resources have been allocated.

Course will be assessed through two exams; two written reports; an oral presentation; and attendance and participation of students.

**FS 514 Starch Chemistry (3 cr)**
The course will provide insight into structure-function relationship of starch through case study-teaching in a student-centered classroom. Cooperative: open to WSU degree-seeking students.

**Prereq:** Chem 275 & 276 or Chem 277 & 278, Biol 380 or 300, or permission from instructor

**Available via distance:** No
**Geographical Area Availability:** Moscow
Rationale: Idaho State has abundant agricultural resources, and most of them are associated with starch chemistry. The course is designed to gain specific knowledge, enhance critical thinking and develop problem-solving skills through team learning. Students will be more competitive in agricultural industries after graduation and be able to use scientific approach to solve problems in the real world. Quizzes, clicker, exams, and writing reports will be used to assess students’ learning. A new faculty member was hired to teach this course.

2. Reactivate the following courses

FS 516 Food Laws (2 cr)
Become familiar with government statutes and regulations that contribute to a safe, nutritious, and wholesome food supply. Understand more about the law and the US legal system relevant to the regulation of the manufacture and sale of food and supplements, including jurisdictional issues, administrative law, and tort, contract, corporate, environmental, labor and criminal law issues. Senior or Graduate student standing recommended. Cooperative: open to WSU degree-seeking students.

Available via distance: No
Geographical Area Availability: Moscow
Rationale: Course is part of cooperative program and should not be dormant as it could be taught at UI in any given academic year given instructor and classroom availability.

FS 522 Sensory Evaluation of Food and Wine (3 cr)
Short course: SENSORY EVAL OF FOOD & WINE
See FS 422.

Available via distance: No
Geographical Area Availability: Moscow
Rationale: Course is part of cooperative program and should not be dormant as it could be taught at UI in any given academic year given instructor and classroom availability. It is joint-listed with 422 so that both graduates and undergraduates can take this course for degree credit.

FS 529 Dairy Products (3 cr)
See FS 429.

Available via distance: No
Geographical Area Availability: Moscow
Rationale: Course is part of cooperative program and should not be dormant as it could be taught at UI in any given academic year given instructor and classroom availability. It is joint-listed with 429 so that both graduates and undergraduates can take this course for degree credit.

3. Reactivate and change the following courses

FS 583 Advances in Cereal Science Chemistry and Technology (23 cr) dormancy
Short course: ADVANCES IN CEREAL CHEM & TECH
Chemistry and functionality of cereal grains as related to their processing and product quality. This course provides in-depth information on wheat chemistry and technology as well as chemistry and uses of other cereal grains and legumes. Emphasis will be given to composition and functionality of wheat as related to processing and product quality, along with reviews of recent advances in cereal chemistry and technology. Cooperative: open to WSU degree-seeking students.

Available via distance: No
Geographical Area Availability: Moscow
Rationale: This course is currently dormant, but will be taught next academic year if approved. It is part of the food science cooperative program. The course is being revitalized and the title change is to better represent the course content.

Assessment will be done through weekly quizzes, three exams, a term paper, and comprehensive final. Upon completion of this course students will be expected to identify and describe major structures of cereal grains as well as functional traits, processing characteristics, and end use. They will draw conclusions on processing and utilization importance; outline and discuss various milling processes and aspects of malting and brewing. Students will additionally outline and discuss the processes of cereal product production.

Several topic areas; a term paper; manuscript reviews and additional lecture time are being added to further strengthen the course and academic program. This will require the course to be changed from 2 to 3 credits to accurately represent the added load. A title change is needed to better represent the course content. The change in course credits will be absorbed into Dr. Brennan Smith’s 0.75 teaching FTE.

3. Change the following courses

FS J429/J529 Dairy Products (3 cr)
Dairy chemistry, microbiology, sanitation, product development and processing from cow to consumer. Cooperative: open to WSU degree-seeking students.
Prereq: Biol 250, Biol 300, and FS 303
Available via distance: No
Geographical Area Availability: Moscow
Rationale: Prereq for FS 429; not required for the conjoint FS 529 class. We needed to adjust the prereqs since students need the background in FS 303, Food Processing to successfully understand and pass the material in FS 429, Dairy Products, which had dairy processing as part of the content.

FS 432 Food Engineering (3 cr)
Fundamentals of food engineering for improving the efficiency of food processing operations and the quality of processed food. Principles of heat transfer, steam, air-vapor mixtures, refrigeration and fluid flow as applied to food processing and storage. Recommended preparation: Phys 111. Cooperative: open to WSU degree-seeking students.
Prereq: FS 302 and FS 303
Coreq: FS 433
Available via distance: No
Geographical Area Availability: Moscow
Rationale: Course is meant to be taken with the adjoining lab therefore it needs to be a corequisite. If students want to take the lab separately an exception should be required. Both of these courses are required for the Food Science Degree.

FS 433 Food Engineering Lab (1 cr)
To enhance the learning experience of the students taking FS 432 through laboratories, problem sessions and group discussions. Field Trip Required. Cooperative: open to WSU degree-seeking students.
Prereq or Coreq: FS 432
Available via distance: No
Geographical Area Availability: Moscow
Rationale: A required field trip is part of the lab. It used to be on the old FS description, but in error it was removed and not placed on the lab.

FS J470/J570 Advanced Food Technology (3 cr)
Physical principles of food preservation and recent advances in food technology including process control and control systems. Recommended Preparation: FS 432, and FS 460. Additional projects/assignments required for graduate credit. Cooperative: open to degree-seeking students. Prereq: FS 302 andor FS 303

Available via distance: No
Geographical Area Availability: Moscow
Rationale: Expand the description to more fully represent the course content. Change the prerequisites to "or" since 302 and 303 are currently taught at different campuses which would allow a decrease in the amount of overrides required for students to enroll in this course. Students would have either FS 302 or 303 on their UI or WSU transcript which would be sufficient to enroll in the course.