

General Curriculum Report #223

UNIVERSITY OF IDAHO - REGISTRAR'S OFFICE

December 06, 2002

TO: MEMBERS OF THE UNIVERSITY OF IDAHO FACULTY

The items listed below, approved by the University Curriculum Committee, will be considered to have the necessary faculty approvals unless a petition requesting further consideration of specific items is signed by five faculty members and submitted to the chair of the Faculty Council within 14 calendar days after the date of circulation. If no petition is received within 14 days, the entire report will be submitted to the president for approval and transmittal to the regents, if regents action is required. If a petition is received, the items in the report for which further consideration is requested will be referred to the Faculty Council and the remainder of the report will move forward. On items referred to it, the council may: (1) affirm the action and report it to a meeting of the university faculty, (2) amend the action and report it to a meeting of the university faculty, or (3) rescind the action. *Note:* If a petition concerns courses or curricula in the College of L & S or in the College of Agriculture, and is signed by five faculty members of the respective college, those items will be returned to the college concerned for further consideration.

AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY

1. Add the following courses [**Effective:** Fall 2003]

- **AgEc 301** Agricultural Economics I (3 cr) (AgEc 394, 453 and 493) Microeconomic principles applied to agricultural production and the management of agribusiness firms with an introduction to spreadsheet based statistical, mathematical and optimization techniques for analyzing and solving real world management problems. Prereq: Econ 202, Math 143, and Stat 251. (Fall Only)
- **AgEc 302** Agricultural Economics II (3 cr) (AgEc 394, 453 and 493) Microeconomic principles applied to agricultural markets and consumer demand, with an introduction to spreadsheet based statistical and forecasting tools for analyzing associated real world pricing and consumer demand concerns facing managers of agribusiness firms. Prereq: Econ 202, Math 143, and Stat 251. (Spring Only)
- **AgEc 330** Agricultural Cooperatives (1 cr) Introduction to the historical basis for the formation and existence of agricultural cooperatives, the principles and policies under which they operate, and an examination of the current environment facing agricultural cooperatives. Prereq: Jr. standing. (Spring Only)
- **AgEc 335** Conflict Management (1 cr) Collaborative processes and facilitation techniques designed to bring community and natural resource decision makers together for focused problem solving. Five week course. Three hours of lec per week. (Spring Only)
- **AgEc 410** Experiencing the Idaho Public Policy Making Process (1 cr) Assessment of policy topics currently facing the agricultural industry. Students will travel to Boise while the legislature is in session to become familiar with the policy making process and to discuss current policy issues with industry and legislative officials. Three, three hour evening classes. Prereq: AgEc 356 or perm. Graded P/F. (Spring Only)
- **AgEc 411** The World of International Agribusiness (1 cr) Draws on the experience and wisdom of practitioners of international businesses engaged in various fields of agriculture. Examination of current trade practices and issues. Prereq: Jr standing. (Fall only, Alt/odd yrs)
- **AgEc 413** Management of Human Resources in Agribusiness Firms (1 cr) Processes involved in the management of the human resources of organizations and the study of the personal attributes and behaviors associated with successful managers. Five week course. Three hours of lec per week. Prereq: Jr standing. (Fall Only)
- **AgEc 414** Financial Analysis of Agricultural Firms (1 cr) Applying cost analysis and financial statement analysis to the management of an agricultural business. Examination of cost and accrual based income statement for tax and management decisions. Five week course. Three hours of lec per week. Prereq: Acct 201 , AgEc 278 or perm. (Fall Only)
- **AgEc 415** Entrepreneurial Skills in Agribusiness Management (1 cr) An examination of fundamental entrepreneurial responsibilities of managers in agricultural and natural resource based firms. Identification and development of business goals, tactical and strategic plans, environmental assessment, and decision-making. Five week course. Three hours of lec per week. Prereq: AgEc 278 or perm. (Fall Only)
- **AgEc 416** Agricultural and Natural Resource Project Evaluation (1 cr) Application of benefit-cost analysis to natural resource and agricultural investments. The ability to use spreadsheets is essential for students enrolling. Five week course. Three hours of lec per week. Prereq: Math 143, AgEc 278 or perm. (Spring Only)
- **AgEc 417** Risk Management in Agriculture (1 cr) Identification of risks facing agricultural based firms. Assessment of risk management tools and strategies (e.g. agriculture insurance programs and enterprise diversification)

as applied to decision making. Five week course. Three hours of lec per week. Prereq: AgEc 278, AgEc 301 or AgEc 302 or perm. (Fall Only)

- **AgEc 477 Law, Ethics, and the Environment** (3 cr) Examines the laws and related ethical questions pertaining to agricultural and natural resource issues. Prereq: Blaw 265 or Jr standing.
- **AgEc 478** Advanced Agribusiness Management (3 cr) The capstone class for Agribusiness and Agricultural Economic students. Economics and agribusiness theory is put into practice through decision cases and agribusiness simulation games. Team building, written, and oral presentation skills are stressed. Prereq: AgEc 301, AgEc 302, Acct 201, Acct 202, Sr standing or perm. (Spring Only)

2. Drop the following Courses [**Effective:** Summer 2003]

- **AgEc 332** Economics of Agricultural Development (3 cr) **Recommended substitution:** Econ 447
- **AgEc 391** Agribusiness Management (3 cr) **Recommended substitution:** AgEc 478 or a 3 credit hour selection of AgEc 412, 413, 414, 415, 416, or 417.
- **AgEc 394** Analytical Techniques in Agribusiness and Economics (3 cr) **Equivalent Course:** AgEc 301 or AgEc 302
- **AgEc 453** Agricultural Price Analysis (3 cr). **Equivalent course:** AgEc 302
- **AgEc ID467** Economics of Rural Community Development (3 cr) **Recommended substitution:** AgEc 451
- **AgEc 493** Agricultural Production Economics (3 cr) **Equivalent Course:** AgEc 301

3. Change the prerequisites of the following courses [**Effective:** Summer 2003]

- **AgEc 451** Land and Natural Resource Economics (3 cr). Prereq: [AgEc 301 or Econ 352 or perm.](#)
- **AgEc 481** Agricultural Markets in a Global Economy (3 cr). Prereq: [AgEc 301 or Econ 352 or perm.](#)
- **AgEc 489** Understanding and Using Futures and Options Markets (2 cr). Prereq: Math ~~460-143~~ or higher and Econ 201, or perm.

4. Change the curricular requirements of the following minors [**Effective:** Summer 2003]

AGRIBUSINESS MINOR

~~AgEc 101 Agricultural Economics and Agribusiness (3 cr)~~

AgEc 278 Principles of Farm and Ranch Management (4 cr)

AgEc 289 Agricultural Markets and Prices (3 cr)

~~AgEc 356 Agricultural and Rural Policy (3 cr)~~

~~AgEc 394 Analytical Techniques in Agribusiness and Economics or AgEc 453 Ag Price Analysis or AgEc 481 Ag Markets in a Global Economy (3 cr)~~

~~Two~~ One of the following courses (~~6-3~~ cr):

~~AgEc 356 Agricultural Programs and Policies~~

~~AgEc 361 Farm and Natural Resource Appraisal~~

~~AgEc 391 Agribusiness Management~~

~~AgEc 301 Agricultural Economics I (3 cr)~~

~~AgEc 302 Agricultural Economics II (3 cr)~~

~~Six credits of upper division Agricultural Economics electives (6 cr)~~

NATURAL RESOURCE ECONOMICS AND COMMUNITY DEVELOPMENT MINOR

AgEc 101 Agricultural Economics and Agribusiness (3 cr)

AgEc 278 Principles of Farm and Ranch Management (4 cr)

AgEc 356 Agricultural Programs and Policies (3 cr)

~~AgEc 361 Farm and Natural Resource Appraisal (3 cr)~~

~~AgEc 383 Economics for Natural Resource Managers (3 cr)~~

~~AgEc 451 Land and Natural Resource Economics (3 cr)~~

~~AgEc 451 Land and Natural Resource Econ or 467 Econ of Rural Community Dev (3 cr)~~

~~Two of the following courses (6 cr):~~

~~AgEc 332 Economics of Agricultural Development~~

~~AgEc 361 Farm and Natural Resource Appraisal~~

~~AgEc 383 Economics for Natural Resource Managers~~

5. Change the curricular requirements of B.S.AG.ECON. [**Effective:** Summer 2003]

CORE COURSES FOR B.S.AG.ECON.

AgEc 101 ~~Agricultural Economics and Agribusiness~~ The Business of Agriculture (3 cr)

AgEc 278 Principles of Farm and ~~Ranch~~ Agribusiness Management (4 cr)
~~AgEc 289 Agricultural Markets and Prices (3 cr)~~
~~AgEc 301 Agricultural Economics I (3 cr)~~
~~AgEc 302 Agricultural Economics II (3 cr)~~
AgEc 356 Agricultural Programs and Policies (3 cr)
~~Biol 100 Intro to Biology or Biol 201 Intro to Life Sciences~~ Biol 111 Evolution and Diversity of Life or Biol 112 Biological Principles and Mechanisms or MMBB 250 General Microbiology (4-5 cr)
Chem 101 Introduction to Chemistry I or Chem 111 Principles of Chemistry I (4 cr)
Comm 101 Fundamentals of Public Speaking (2 cr)
~~CS 112 Introduction to Problem Solving and Programming or ASM 240 Computer Applications in Biological Systems (3 cr)~~
Econ 201, 202 Principles of Economics (6 cr)
~~Econ 352 Intermediate Microeconomic Analysis (3 cr)~~
Engl 317 Technical Writing (agribusiness majors may substitute Engl 313) (3 cr)
Math 143 Pre-calculus Algebra and Analytic Geometry (3 cr)
Stat 251 Principles of Statistics (3 cr)
Acct 201 Introduction to Financial Accounting (3 cr)
Acct 202 Introduction to Managerial Accounting (3 cr)
Humanities and social sciences (at least 6 cr of each) (14 cr)

AGRICULTURAL ECONOMICS (B.S.Ag.Econ.)

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

~~Acct 201 Introduction to Financial Accounting (3 cr)~~
~~Acct 202 Introduction to Managerial Accounting (3 cr)~~
~~AgEc 289 Agricultural Markets and Prices (3 cr)~~
~~AgEc 453 Agricultural Price Analysis (3 cr)~~
AgEc 451 Land and Natural Resource Economics (3 cr)
AgEc 478 Advanced Agribusiness Management (3 cr)
AgEc 481 Agricultural Markets in a Global Economy (3 cr)
~~AgEc 493 Agricultural Production Economics (3 cr)~~
Econ 351 Intermediate Macroeconomic Analysis (3 cr)
Econ 352 Intermediate Microeconomic Analysis (3 cr)
Math 170 Analytic Geometry and Calculus I (4 cr)
~~Math, stat, or CS electives above the specific requirements (3-4 cr)~~
Agricultural economics electives (3 cr)
Economics electives (6 cr)
Technical agriculture electives (12 cr)
Electives to total 128 cr for the degree

AGRIBUSINESS (B.S.Ag.Econ.)

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

~~Acct 201 Introduction to Financial Accounting (3 cr)~~
~~Acct 202 Introduction to Managerial Accounting (3 cr)~~
Acct 381 Accounting for Managers and Investors (3 cr)
~~AgEc 289 Agricultural Markets and Prices (3 cr)~~
~~AgEc 391 Agribusiness Management (3 cr)~~
~~AgEc 394 Analytical Techniques in Agribusiness and Economics (3 cr)~~
AgEc 478 Advanced Agribusiness Management (3 cr)
Two of the following courses (6 cr):
~~AgEc 453 Agricultural Price Analysis~~
~~AgEc 467 Economics of Rural Community Development~~
~~AgEc 481 Agricultural Markets in a Global Economy~~
~~AgEc 493 Agricultural Production Economics~~
Select from the following (3 cr)
AgEc 451 Land and Natural Resource Economics (3 cr)
AgEc 481 Agricultural Markets in a Global Economy (3 cr)
Acct 381 Accounting for Managers and Investors (3 cr)
Select two of the following (6 cr)

BLaw 265 Legal Environment of Business (3 cr)
[Bus 321 Marketing \(3 cr\)](#)
Bus 413 Organizational Behavior (3 cr)
[Math 160 Survey of Calculus or Math 170 Analytic Geom and Calc I \(4 cr\)](#)
[Agricultural economics electives \(3 cr\)](#)
Ag economics, economics, [or business, or accounting](#) electives ([3-12](#) cr)
Technical agriculture electives (12 cr)
Electives to total 128 cr for the degree

AGRICULTURAL SCIENCE AND TECHNOLOGY

1. Add the following course [**Effective:** Fall 2003]
Ag **ID416 Sustainable Small Acreage Farming and Ranching** (3 cr) Overview of small acreage production systems, evaluation of goals and resources, land evaluation, marketing options, and accessing community resources. Three field trips.
2. Add the following course [**Effective:** Spring 2004]
Ag **ID417 NxLevel's Agricultural Entrepreneurship – Tilling the Soil of Opportunity** (3 cr) Assessing potential of small farm enterprises; marketing strategies, finances, feasibility, legal issues, resource evaluation and writing a business plan. One three hour class per wk.

ART

1. Change the title and credits of the following course [**Effective:** Summer 2003]
Art **314 ~~Textile Design II~~ [Intermediate/Advanced Textile Design](#)** (3 cr, max-[69](#)).
2. Change the title, credits and number of the following courses [**Effective:** Summer 2003]
 - Art **3410 ~~Intermediate/Advanced Sculpture II~~** (3 cr, max-[69](#)). ([Art 341 and 342](#))
 - Art **3510 ~~Intermediate/Advanced Printmaking II~~** (3 cr, max-[69](#)). ([Art 351 and 352](#))
 - Art **3610 ~~Intermediate/Advanced Ceramics II~~** (3 cr, max-[69](#)). ([Art 361 and 362](#))
3. Change the title, credits, number and description of the following courses [**Effective:** Summer 2003]
 - Art **3310 ~~Intermediate/Advanced Painting II~~** (3 cr, max-[69](#)). ([Art 331 and 332](#)) Intermediate painting in oil or acrylic; emphasis on color assignments and aesthetic problems. [Advanced students emphasize individual conceptual approaches](#). Two 3-hr studios a wk and assigned work. Prereq: art core and Art 231 or perm.
 - Art **3710 ~~Advanced Interface Design III~~** (3 cr, max [69](#)). ([Art 371 and 372](#)) Intermediate; multi-media and interface design for computer applications with emphasis on individual development and exploration of contemporary technical and aesthetic design issues. [Advanced: multi-media and interface design for computer applications with emphasis on team design projects, Web site development and management, and development for stand alone delivery](#). Six hrs of lab a wk and assigned work. Prereq: art core and Art 271-272 or perm.
4. Change the number and credits of the following course [**Effective:** Summer 2003]
Art **3920 ~~Mixed Media~~** (3 cr, max [69](#)). ([Art 391 and 392](#)) Understanding synthesis of different media in context to a work of art by using two or more techniques; tutorial-based studio, production to occur outside of class. Outside lec and special events may be assigned. Prereq: art core, 9 cr of 200-level art studios, and 6 cr of 300-level art studios or perm.
5. Drop the following courses [**Effective:** Summer 2003]
 - Art **281 Watercolor I** (3 cr). **Equivalent Course:** Art 231
 - Art **311 Drawing IV** (3 cr, max 6). **Equivalent Course:** Art 390
 - Art **312 Drawing V** (3 cr, max 6). **Equivalent Course:** Art 390
 - Art **315 Textile Design III** (3 cr, max 6). **Equivalent Course:** Art 314
 - Art **332 Painting III** (3 cr, max 6). **Equivalent Course:** Art 330
 - Art **342 Sculpture III** (3 cr, max 6). **Equivalent Course:** Art 340
 - Art **352 Printmaking III** (3 cr, max 6). **Equivalent Course:** Art 350
 - Art **362 Ceramics III** (3 cr, max 6). **Equivalent Course:** Art 360

- Art **372 Interface Design IV** (3 cr, max 6). **Equivalent Course:** Art 370
- Art **391 Collage** (3 cr, max 6). **Equivalent Course:** Art 390

6. Change the curricular requirements of **Art (B.A.) [Effective: Summer 2003]**

Required course work includes the university requirements (see regulation J-3), the general L&S requirements for the B.A. degree, the art core, and a studio emphasis (all the 200-level and 300-level courses in a specific studio area) in one of the following areas: drawing, graphic design, interface design, painting, textile design, sculpture, printmaking, or ceramics, and:....

~~Art 281 Watercolor I~~

300-level studio courses selected from the following (at least 6 cr must be taken in one ~~sequential~~ studio area, i.e., Art ~~311-312~~**330**) (12**5** cr)

~~Art 311-312 Drawing IV-V~~

Art 314 ~~315 Textile Design II-III~~ **Intermediate/Advanced Textile Design**

Art 321-322 Graphic Design III-IV

Art ~~331-332 Painting II-III~~ **330 Intermediate/Advanced Painting**

Art ~~341-342 Sculpture II-III~~ **340 Intermediate/Advanced Sculpture**

Art ~~351-352 Printmaking II-III~~ **350 Intermediate/Advanced Printmaking**

Art ~~361-362 Ceramics II-III~~ **360 Intermediate/Advanced Ceramics**

Art ~~371-372 Interface Design III-IV~~ **370 Advanced Interface Design**

~~Art 391 Collage~~

Art ~~392~~**0** Mixed Media

Electives to total 128 cr for the degree

7. Change the curricular requirements of **Studio Art (B.F.A.) [Effective: Summer 2003]**

Required course work includes the university requirements (see regulation J-3), the art core, and a studio emphasis (all the 200-level and 300-level courses in a specific studio area) in one of the following areas: drawing, graphic design, interface design, painting, textile design, sculpture, printmaking, or ceramics, and:....

~~Art 281 Watercolor I~~

300-level studio courses selected from the following (at least 6 cr must be taken in one ~~sequential~~ studio area, i.e., Art ~~311-312~~**330**) (15 cr):

~~Art 311-312 Drawing IV-V~~

Art 314 ~~315 Textile Design II-III~~ **Intermediate/Advanced Textile Design**

Art 321-322 Graphic Design III-IV

Art ~~331-332 Painting II-III~~ **330 Intermediate/Advanced Painting**

Art ~~341-342 Sculpture II-III~~ **340 Intermediate/Advanced Sculpture**

Art ~~351-352 Printmaking II-III~~ **350 Intermediate/Advanced Printmaking**

Art ~~361-362 Ceramics II-III~~ **360 Intermediate/Advanced Ceramics**

Art ~~371-372 Interface Design III-IV~~ **370 Advanced Interface Design**

~~Art 391 Collage~~

Art ~~392~~**0** Mixed Media

Electives to total 128 cr for the degree

No more than a combined total of 9 credits of the following courses may be applied toward a B.F.A. degree: Art 404, 488, 497, 498, and 499.

8. Change the curricular requirements of **Art Education (B.S.Art.Ed.) [Effective: Summer 2003]**

Required course work includes the university requirements (see regulation J-3), the art core, a studio emphasis (all the 200-level and 300-level courses in a specific studio area) in one of the following areas: drawing, graphic design, interface design, painting, textile design, sculpture, printmaking, or ceramics, and the courses listed below.

200-level studio courses selected from the following (students pursuing a studio emphasis in graphic design must include Art 222; and interface design majors must include Art 272) (18 cr):

Art 211 Drawing III

Art 214 Textile Design I

Art 221-222 Graphic Design I-II

Art 231 Painting I

Art 241 Sculpture I

Art 251 Printmaking I

Art 261 Ceramics I

Art 271-272 Interface Design I-II

~~Art 281 Watercolor I~~

300-level studio courses selected from the following (at least 6 cr must be taken in one ~~sequential~~ studio area, i.e., Art ~~311 312 330~~) (12-15 cr):

~~Art 311 312 Drawing IV V~~

Art 314-315 ~~Textile Design II III~~ Intermediate/Advanced Textile Design

Art 321-322 Graphic Design III-IV

Art ~~331 332 Painting II III~~ 330 Intermediate/Advanced Painting

Art ~~341 342 Sculpture II III~~ 340 Intermediate/Advanced Sculpture

Art ~~351 352 Printmaking II III~~ 350 Intermediate/Advanced Printmaking

Art ~~361 362 Ceramics II III~~ 360 Intermediate/Advanced Ceramics

Art ~~371 372 Interface Design III IV~~ 370 Advanced Interface Design

~~Art 391 Collage~~

Art 392 0 Mixed Media

ED 201 Diverse Learners in Schools and Social/Cultural Contexts (3 cr)....

9. Add the following courses [**Effective:** Fall 2003]

- **Art 205 Visual Culture** (3 cr) An introduction to the interdisciplinary approaches in art history, visual studies, film and media studies, sociology, and the general field of cultural studies that constitute the field of visual culture. Visual Culture addresses the societal, cultural, economic, aesthetic, and political dimensions and provocations of images and the visual in our contemporary world. This course offers a broad introduction to the most important critical and theoretical methods for the analysis, critique, and evaluation of visual culture. (Fall only)
- **Art 209 Northern Renaissance Art and Culture** (3 cr) A study of the art and culture of northern Europe from c. 1350-1600. Major artistic achievements of the period, artistic theories, and their cultural and historical components are studied alongside the philosophical, religious, scientific, political, and economic developments that informed artistic production in Germany, France, England, and the Netherlands. Artists to be examined include Jan van Eyck, Rogier van der Weyden, Hugo van der Goes, Hieronimus Bosch, Albrecht Dürer, Hans Holbein, and Peter Breugel. (Alt/yrs)
- **Art 210 European Art and Culture 1600-1750** (3 cr) A survey of European Baroque and early Eighteenth-Century art, architecture, and culture. Principal periods and styles considered include Italian Baroque, Spanish Baroque, Dutch Baroque, and art and architecture in France and Britain. The art and architecture of the Age of Louis XIV along with Rococo is also examined. Artists and architects to be studied include Caravaggio, Bernini, Borromini, Velasquez, Rembrandt, Vermeer, Poussin, and Watteau, among others. (Alt/yrs)
- **Art 213 History and Theory of Modern Design** (3 cr) A broad introduction to the historical and theoretical components of design from the Industrial Revolution to the present day. Graphic design, product design, industrial design, packaging and advertising are studied in terms of their historical development and their translation and application within contemporary concepts of design in various professional fields. (Spring Only)
- **Art 303 Contemporary Art and Theory** (3 cr) A survey of the principal artists, movements, theories, and artistic strategies since World War II in Europe and America. Important movements examined include the New York School, Neo-dada, Post-Painterly Abstraction, British and American Pop, Minimalism, Conceptual art, Earthworks and Environments, Performance Art, Neoexpressionism, and the various approaches within contemporary art.

10. Change the title and description of the following courses [**Effective:** Summer 2003]

- **Art 207 ~~Survey of Western Art: Ancient to Medieval Art and Culture~~** (3 cr). ~~Introduction to the arts and architecture of Mesopotamia, Egypt, the Aegean, Greece, Rome, and Medieval Europe to the year 1400; periods evaluated according to comparative stylistics, with additional emphasis on causality of change and innovation; emphasis on architecture, sculpture, and forms of painting. May have evening exams. Survey of art and civilization from the Prehistoric era to Medieval Europe. The study and evaluation of the principal artistic and architectural monuments includes examination of the art and architecture of Ancient Egypt, the Ancient near East, the Aegean civilizations, the art and culture of Greece and Rome, the Early Christian and Byzantine periods, and Carolingian, Romanesque, and Gothic art and architecture.~~
- **Art 208 ~~Survey of Western Art: Renaissance to Modern~~ Italian Renaissance Art and Culture** (3 cr). ~~Introduction to the arts of the Italian Renaissance, the Renaissance in the North, the Baroque Period, Neo-Classicism and Romanticism, 19th century experiments, and modern to contemporary periods; primary emphasis on two-dimensional arts, with some focus on architecture and sculpture; periods evaluated according to comparative stylistics, with additional emphasis on causality of change and innovation. May have evening exams. A study of painting, sculpture, architecture, and art theory in Italy from c. 1350-1600. The art of Giotto, Duccio, Brunelleschi, Ghiberti, Alberti, Donatello, Fra Angelico, Fra Filippo Lippi, Andrea Mantegna, Botticelli, Leonardo da Vinci, Raphael, Michelangelo, Bramante, Palladio, Giorgione and Titian, among others, is examined along with the broader components of Italian Renaissance culture.~~

11. Change the title, description and class meeting information of the following courses [**Effective:** Summer 2003]

- Art 301 **History of Art: 19th Century- Early Modern Art and Aesthetics** (3 cr). A survey of the major artistic movements and theoretical developments in European art and aesthetics from c. 1750-1880. The close study of the principal artists of the period will include the examination of concomitant historical, philosophical, political, and cultural developments that informed the theoretical and artistic advancements in 18th century and 19th Century art. Special consideration is given to the philosophical, theoretical, and political groundings of European Neoclassicism, Romanticism, Realism, and Impressionism. (Fall only)
- Art 302 **History of Art: 20th Century- Modern Art and Theory** (3 cr). A study of the principal artistic movements and theories in modern art from c. 1880 to World War II. Beginning with late-nineteenth-century modernism, the course closely examines the historical, societal, cultural, philosophical, and theoretical frameworks from which modern art and theory emerged. Modernist movements to be considered include, Neoimpressionism, Symbolism, Fauvism, German Expressionism, Futurism, Cubism, Dada, and Surrealism, among others. (Fall only)
- Art 508 (s) Readings in Art: **Critical Theory and Continental Aesthetics** (3 cr, max 6). Readings in specific subject or topic areas: art theory, art history; art criticism, and other art subject areas. One hr a wk conference/discussion/seminar and assigned work. Introduction and examination of principal texts on art and aesthetics from the major figures in Critical Theory and Continental philosophy. Students will be encouraged to address the possible relevancy and application of the various theoretical frameworks within the purview of their own aesthetic and critical disciplines. Open to all graduate students, and to undergraduates with instructor's approval. (Spring only)

BIOLOGICAL SCIENCES

1. Add the following courses [**Effective:** Fall 2003]

- Biol **J448/J548 Plant-Animal Interactions** (3 cr) Principles of interactions between plants and animals; interactions and diversification, coevolution; pollination, fruit and seed dispersal, herbivory, ant-plant and ant-plant-fungal interactions, importance of interactions in conservation biology. Addl projects/assignments required for grad cr. One field trip. Biol 314 recommended. Prereq: Biol 111. (Fall only, Alt/yrs)
- Biol **508 Topics in Neuroscience** (1 cr) Seminars and discussion of current topics in neuroscience. Prereq: Grad standing.
- Biol **510 Science Teaching Workshop** (1 cr) Exploration of higher education science teaching, learning theories, learning styles, teaching methods and strategies, classroom ethics, web-based instruction, and lecture and lab design. Course will be offered the Thursday and Friday before the beginning of Fall semester. (Fall only)
- Biol **551 Seminar on Reproductive Biology** (1 cr) Current topics in reproductive biology. Prereq: Grad standing.
- Biol **558 Reproductive Biology of Fishes** (2 cr) A graduate level course covering all aspects of the reproductive biology of fishes. The class will meet once per week for 2 hours; the first hour will be used for a formal lecture, the second hour will be used for informal student presentations/discussion of current literature topics or assigned readings in the field. Prereq: Grad standing. (Spring only, Alt/yrs)

CHEMISTRY

Change the credits of the following courses [**Effective:** Summer 2003]

- Chem **J435/J535 Principles of Chemical Instrumentation** (~~4~~2 cr).
- Chem **J453/J553 Separation Theory and Chromatography** (~~3~~2 cr).
- Chem **J467/J567 Inorganic Spectroscopy** (~~3~~2 cr).
- Chem **J468/ID-J568 Organometallic Chemistry** (~~3~~2 cr). WSU Chem 504.
- Chem **513 Nuclear Chemistry** (~~3~~2 cr).
- Chem **550 Radioanalytical Chemistry** (~~3~~2 cr).
- Chem **551 Electronic Spectrometry** (~~3~~2 cr).
- Chem **552 Analytical Vibrational Spectrometry** (~~3~~2 cr).
- Chem **558 Electrochemistry** (~~3~~2 cr).
- Chem **569 Fluorine Chemistry** (~~3~~2 cr).

ECONOMICS

1. Change the curricular requirements of **Economics (B.A.)** [Effective: Summer 2003]
 Required course work includes the university requirements (see regulation J-3), the general College of L&S requirements for the B.A. degree, and:
~~Acct 201 Introduction to Financial Accounting (3 cr)~~
 Econ 201, 202 Principles of Economics; or Econ 272 Foundations of Economics and either Econ 201 or Econ 202 or two more credits of an upper-division economics course* (6-7 cr)....
 Econ 490 Economic Theory and Policy (3 cr)
~~Math 130 Finite Mathematics (3 cr)~~ or Math 143 Pre-calculus Algebra and Analytic Geom ~~and Phil 202 Intro to Symbolic Logic (3-6 cr)~~ or higher
~~Math 160 Survey of Calculus, Math 170 Analytic Geometry and Calculus I or Math 175 Analytic Geometry and Calculus II (3-4 cr)~~
 Stat 251 Principles of Statistics (3 cr) and Stat 262 Decision Analysis (1 cr); or Stat 271 Statistical Inference and Decision Analysis (4 cr); or higher.
 Additional upper-division credits in economics (12-14 cr)
 Upper-division credits in ~~a combination of anthro, geog, hist, political sc, psych, or soc (at least 9 credits in one social se)~~ related fields, selected with approval of economics faculty. (15 cr)

* A total of six credits in this area is required. Students who have completed Econ 272 with a final grade of B or better may either complete at least two additional upper-division credits in economics or take Econ 201 or Econ 202 for two credits. Students who have completed Econ 272 with a final grade lower than B must take either Econ 201 or Econ 202 for two credits.

2. Change the curricular requirements of **Economics (B.S.)** [Effective: Summer 2003]
 Required course work includes the university requirements (see regulation J-3), the general College of L&S requirements for the B.S. degree, and:
~~Acct 201 Introduction to Financial Accounting (3 cr)~~
 Econ 201, 202 Principles of Economics; or Econ 272 Foundations of Economics and either Econ 201 or Econ 202 or two more credits of an upper-division economics course* (6-7 cr)....
 Econ 490 Economic Theory and Policy (3 cr)
~~Math 130 Finite Mathematics (3 cr)~~ Math 143 Pre-calculus Algebra and Analytic Geometry (3 cr) or higher
~~Math 160 Survey of Calculus, or~~ Math 170 Analytic Geometry and Calculus I or Math 175 Analytic Geometry and Calculus II (4 cr)
 Stat 251 Principles of Statistics (3 cr) and Stat 262 Decision Analysis (1 cr); or Stat 271 Statistical Inference and Decision Analysis (4 cr); or higher.
 Additional upper-division credits in economics (12-14 cr)
 Upper-division ~~social science credits (credits earned in math beyond the stated requirement will be accepted)~~ courses in related fields, selected with approval of economics faculty (15 cr)

* A total of six credits in this area is required. Students who have completed Econ 272 with a final grade of B or better may either complete at least two additional upper-division credits in economics or take Econ 201 or Econ 202 for two credits. Students who have completed Econ 272 with a final grade lower than B must take either Econ 201 or Econ 202 for two credits.

ENGLISH

1. Add the following course [Effective: Summer 2003]
 Engl **440 (s) Reading, Writing, and Rhetoric** (3 cr) Selected Topics in rhetoric related to literary practices. Prereq: Engl 102. (Spring only)

ENVIRONMENTAL SCIENCE

1. Add the following courses [Effective: Spring 2004]
 - EnvS **225 International Environmental Issues Seminar** (3 cr) Designed for individuals who have an interest in understanding environmental issues from a global perspective. The course focuses on various social and physical

issues related to the environment and natural resources using human population dynamics as a backdrop. EnvS 101 recommended. (Spring only)

- EnvS **J446/J546 Drinking Water and Human Health** (3 cr) Understand the characterization, testing, and treatment of chemical, microbial and hazardous compounds and their impact on human health. Be familiar with drinking water standards, regulatory aspects and protection of municipal, community, and private well systems. (Spring only, Alt/yrs)
2. Change the number of the following courses [**Effective:** Summer 2003]
EnvS **R428 Pollution Prevention** (3 cr). ([EnvS R428](#))
EnvS **R429 Environmental Audit** (3 cr). ([EnvS R429](#))

FISH AND WILDLIFE RESOURCES

1. Change the credits and description of the following course [**Effective:** Summer 2003]
Fish 430 Riparian Ecology and Management (~~2~~3cr). Same as Rnge 430. Structure, function, and management of riparian ecosystems; interrelationships of terrestrial and aquatic components of riparian areas. [3 field trips. Special fee required.](#) Prereq: For/Rnge 221 or Biol 314. (Fall only)
2. Add the following course [**Effective:** Spring 2004]
Wlf 552 Ecological Modeling (3 cr) Linear and nonlinear dynamical models of biological systems; computer-intensive introduction to concepts of stability, attractors, bifurcations, chaos; model identification, estimation, and evaluation; applications in aquatic and terrestrial ecological communities. Prereq: Math 175 and For/Rnge 221 or perm. (Spring only, Alt/yrs)
3. Change the curricular requirements of **Fishery Resources (B.S.Fish.Res.) and Wildlife Resources (B.S.Wildl.Res.)** [**Effective:** Summer 2003]
Students pursuing a B.S. degree in fishery resources (management or aquaculture emphasis) must have received a grade of C or better in each of the following four indicator courses to register for fish- and wildlife-prefixed upper-division courses and to graduate with a B.S.Fish.Res.: Biol 112 and 213, Stat 251, and For/Rnge 221.
First and Second Years....
Math 160 Survey of Calculus (4 cr)
[NR 101 Exploring Natural Resources \(1 cr\)](#)
Phys 100 Fundamentals of Physics (4 cr)
Stat 251 Principles of Statistics (3 cr)....

Students pursuing a B.S. in wildlife resources must have received a grade of C or better in each of the following four indicator courses to register in fish- and wildlife-prefixed upper-division courses and to graduate with a B.S. in wildlife resources: Biol 112 and 213, Stat 251, and For/Rnge 221.

First and Second Years....

Math 160 Survey of Calculus or Math 170 Analytic Geometry and Calculus I (4 cr)
[NR 101 Exploring Natural Resources \(1 cr\)](#)
Stat 251 Principles of Statistics (3 cr)
WLF 102 The Wildlife Profession (1 cr)
WLF/For/Rnge 221 Natural Resources Ecology (3 cr)....

FOOD SCIENCE AND TOXICOLOGY

1. Add the following course [**Effective:** Fall 2003]
FST 588 Food Science Teaching Practicum (1-3 cr) Supervised teaching in a university setting. Graded P/F. Prereq: grad standing in M.S. Food Science program and perm.

FOREIGN LANGUAGES AND LITERATURES

Add the following course [**Effective:** Fall 2003]
Span **301 Advanced Grammar** (3 cr) Recommended for prospective teachers of Spanish.

FOREST PRODUCTS

1. Change the number and description of the following course [**Effective:** Summer 2003]
ForP ~~J436~~/~~J536~~ **Wood Composites** (3 cr). Raw material, processes, properties, and markets for a number of wood composites made of particles and fibers. Additional projects and assignments reqd for grad cr. One full-day field trip.
Prereq: ForP 277. (Alt/yrs)

2. Change the curricular requirements of **Forest Products (B.S.For.Prod.)**
Required course work includes the university requirements (see regulation J-3) and one of the following options.

A. WOOD CONSTRUCTION AND DESIGN OPTION....

Math 160 Survey of Calculus (4 cr)

NR 101 Exploring Natural Resources (1 cr)

Phys 111 General Physics I (4 cr)

Stat 251 Principles of Statistics (3 cr)

And one of the following emphasis areas:

Architecture Technology Emphasis:

~~Arch 453-454 Architectural Design II (6 cr)~~

Arch 353-354 Architectural Design I (5 cr)

Electives chosen from the following (9 cr):....

B. TIMBER HARVESTING OPTION....

ForP/For/RRT/Rnge/WLF/Fish 470 Interdisciplinary Natural Resource Planning (3 cr)

NR 101 Exploring Natural Resources (1 cr)

Soil 205 The Soil Ecosystem (3 cr)....

C. FOREST PRODUCTS BUSINESS MANAGEMENT OPTION....

Math 160 Survey of Calculus (4 cr)

NR 101 Exploring Natural Resources (1 cr)

Phys 111 General Physics I (3 cr)

Stat 251 Principles of Statistics (3 cr)....

D. PULP AND PAPER TECHNOLOGY OPTION....

Math 310 Ordinary Differential Equations (3 cr)

NR 101 Exploring Natural Resources (1 cr)

Phys 211, 212 Engineering Physics I, II (6 cr)....

FOREST RESOURCES

1. Change the description and prerequisites of the following course [**Effective:** Summer 2003]
For **ID510 Fundamentals of Research** (3 cr). WSU BSysE 510. Same as CS 507. The research process, the graduate program, and the graduate research project; objectives, techniques, and challenges; science and the scientific method; ~~and the design process; use of the research~~ literature; ethics; creativity; writing and speaking about research; preparation of a ~~research~~ proposal for the graduate research project. Students should be in very early stages of planning their research.
Prereq: perm.
2. Change the title, credits, description, prerequisites and meeting information of the following course [**Effective:** Summer 2003]
For ~~274 Forest Measurement Techniques and inventory~~(~~4-3~~cr). ~~Practical techniques in measuring forest land and in measuring and inventorying forest resources.~~ Practical techniques for the design and execution of the measurement and inventory of forest resources ~~Two hrs of lec and one 3 hr lab a wk for 5 wks~~ Spring, one three hour lab and three one-hour lectures. Prereq: ~~course in trigonometry and college algebra~~ Stat 251.
3. Change the title, credits, number, description, prerequisites and class meeting information of the following course [**Effective:** Summer 2003]
For ~~J462~~/~~J562~~ **Watershed Science and Management** (~~2-3~~cr). Influence of land management practices on ~~streamflow~~ hydrologic processes, water quality, and riparian habitat w/emphasis on wildland watersheds. Additional

~~projects/assignments reqd for grad cr.~~ Two days of field trips. Prereq: ~~For Range/WLF 221~~ Math 143 or 160, high school physics or Phys 100 or 111, or perm. (Fall only)

4. Drop the following course [**Effective:** Summer 2004]
For **394 Quantitative Resource Analysis** (3 cr). **Equivalent Course:** For 474
5. Add the following course [**Effective:** Summer 2003]
For **594 Analysis of Correlated Data** (3 cr) Same as Stat 594. Theory and application of statistical tools to data of intricate correlation structures, such as are commonly found in natural resources. Coverage will include mixed-effects linear models and either nonlinear models or geostatistical techniques, depending on student interests. Use of R and Splus for data analysis. Prereq: Stat 401. (Spring only)

GEOLOGICAL SCIENCES

1. Add the following courses [**Effective:** Summer 2003]
 - Geol **290 Field Geology I** (3 cr) Introduction to field mapping and field techniques; interpretation of sedimentary sequences; introduction to tectonic structures; preparation of reports based on field observations and interpretations. Accident and health insurance required. Three week, off-campus field course. Prereq: Geol 101 or 111, and 102. (Summer only)
 - Geol **490 Field Geology II** (3 cr) Advanced field problems and methods; interpretation of field data, preparation of reports based on field observations and interpretations. Accident and health insurance required. Three week, off-campus. Prereq: Geol 290 and 345. (Summer only)
2. Drop the following dormant courses [**Effective:** Summer 2003]
 - Geol **ID&WS103 The Solar System** (3 cr).
Equivalent Course: Core 201
 - Geol **J419/J519 A World History of Mining, Metals, and Materials** (3 cr).
 - Geol **430 Topics in Geomorphology/Geologic Hazards** (3 cr).
 - Geol **ID524 Hydrostratigraphy** (3 cr).
 - Geol **525 Stratigraphic Paleobotany** (3 cr).
 - Geol **WS563 Igneous Petrogenesis** (3 cr).
 - Geol **WS584 Stable Isotope Geochemistry** (3 cr).
 - Geop **J420/J520 Exploration Geophysics** (3 cr).
 - Geop **J423/J523 Seismic Stratigraphy** (3 cr).
 - Geop **521 Mining Geophysics** (3 cr).
3. Change the number and description of the following course [**Effective:** Summer 2003]
Geol ~~301~~ **201 Computer Geology** (2 cr). (Geol 301) Computer applications in geology One lec and one 2-hr lab a wk. Prereq: perm.
4. Change the title, number, description and prerequisites of the following course [**Effective:** Summer 2003]
~~Geop-Geol 422 Principles of General Geophysics~~ (3 cr). ~~Same as Geol and Min 422.~~ Outline of geophysical methods used to investigate earth's interior for geological investigations. One 1-day field trip. ~~Prereq: perm.~~
5. Change the number, description and prerequisites of the following course [**Effective:** Summer 2003]
Hydr ~~J409/J509 Quantitative Hydrogeology~~ (3 cr). ~~Same as GeoE 409.~~ A rigorous introduction to the description of flow in porous media; the basic equations of potential flow theory as they relate to groundwater problems, with application to common engineering problems encountered by hydrogeologists and engineers; dimensional analysis, properties assignment, and heterogeneous systems. For graduate credit additional reading, presentations, and/or written reports of assigned literature required. Prereq: Math 275, Stat 251 or 301, ~~or perm.~~
6. Change the subject, title and description of the following course [**Effective:** Summer 2003]
~~Geop-Geol 421 Engineering-Environmental Geophysics~~ (3 cr). ~~See Min 421 and GeoE 421.~~ Introduction to surface and borehole geophysics with emphasis on environmental problems. One day field trip.
7. Change the curricular requirements of Earth Science Teaching Major and Composite Teaching Major [**Effective:** Summer 2003]

~~A. 62-CREDIT EARTH SCIENCE TEACHING MAJOR~~

~~Special methods sequence:~~

- ~~EDTE 433– Secondary Science Methods I (2 cr)~~
- ~~EDTE 443– Secondary Science Methods II (2 cr)~~
- ~~Biol 111– Evolution and Diversity of Life (4 cr)~~
- ~~Biol 112– Biological Principles and Mechanisms or Biol 203– General Botany (4 cr)~~
- ~~Chem 111– Principles of Chemistry I (4 cr)~~
- ~~Geog 100– Physical Geography (4 cr)~~
- ~~Geog 401– Climatology (3 cr)~~
- ~~Geol 101– Physical Geol or Geol 111 Physical Geol for Sc Majors (4 cr)~~
- ~~Geol 102– Historical Geology (4 cr)~~
- ~~Geol 212– Principles of Paleontology (4 cr)~~
- ~~Geol 306– Nature of Earth Materials (3 cr)~~
- ~~Geol 324– Principles of Stratigraphy and Sedimentation (4 cr)~~
- ~~Geol 335– Geomorphology (3 cr)~~
- ~~Geol 405– Earth Sciences (3 cr)~~
- ~~Geol 408– Field Methods in the Earth Sciences (3 cr)~~
- ~~Math 143– Pre-calculus Algebra and Analytic Geometry (3 cr)~~
- ~~Phys 103, 104– General Astronomy and Lab (4 cr)~~
- ~~Phys 111–112– General Physics I–II (8 cr)~~

~~B. 45-CREDIT COMPOSITE TEACHING MAJOR~~

~~Special methods sequence:~~

- ~~EDTE 433– Secondary Science Methods I (2 cr)~~
- ~~EDTE 443– Secondary Science Methods II (2 cr)~~
- ~~Geog 100– Physical Geography (4 cr)~~
- ~~Geog 401– Climatology (3 cr)~~
- ~~Geol 101– Physical Geol or Geol 111 Physical Geol for Sc Majors (4 cr)~~
- ~~Geol 102– Historical Geology (4 cr)~~
- ~~Geol 212– Principles of Paleontology (4 cr)~~
- ~~Geol 306– Nature of Earth Materials (3 cr)~~
- ~~Geol 335– Geomorphology (3 cr)~~
- ~~Geol 405– Earth Sciences (3 cr)~~
- ~~Geol 408– Field Methods in the Earth Sciences (3 cr)~~
- ~~Phys 103, 104– General Astronomy and Lab (4 cr)~~
- ~~Courses selected from the following (6 cr):~~
 - ~~Geog 180– Spatial Graphics~~
 - ~~Geog 380– Cartography and Graphic Communication~~
 - ~~Geol 360– Geologic Hazards~~
 - ~~Geol 361– Geology and the Environment~~

~~Approved upper division earth science electives to total 45 credits in the teaching major.~~

EARTH SCIENCE TEACHING MAJOR

Note: Completion of the Earth Science Teaching Major involves completion of the 33 credits of Required courses as well as 12 credits of Electives:

Required (39 credits)

PHYS 103	General Astronomy	3
PHYS 104	General Astronomy Lab	1
MATH 143	Pre-Calculus Algebra & /Analytic Geometry	3
CHEM 111	Principles of Chemistry I	4
PHYS 111	General Physics I	3
PHYS 111L	General Physics I Lab	1

Subtotal: 15

One of the following:

GEOL 101	Physical Geology	3
GEOL 101L	Physical Geology Lab	1

or

GEOL 111	Physical Geology for Science Majors	3
GEOL 111L	Physical Geology for Science Majors	1
<i>or</i>		
<i>GEOG 100</i>	<i>Physical Geography</i>	<i>3</i>
GEOG 100L	Physical Geography Lab	1
		Subtotal: 4
GEOL 102	Historical Geology	3
GEOL 102L	Historical Geology Lab	1
GEOL 324	Principles of Stratigraphy & Sedimentation	4
GEOL 335	Geomorphology	3
GEOG 301	Meteorology	3
		Subtotal: 14
Advisor Approved Science Electives		12
		Subtotal: 12
Total Credits		45

HISTORY

- Add the following course [**Effective:** Summer 2003]
Hist **350 European Cultural History, 1600–1800** (3 cr) History of thought, material culture, and “mentalities” in early modern Europe, including the Scientific Revolution and Enlightenment.
- Change the title and description of the following courses [**Effective:** Summer 2003]
Hist **J451/J551 ~~Age of the French Revolution and Napoleonic Era~~** (3 cr). ~~Nature of the Old Regime; relationship between the Enlightenment and the French Revolution; aims, progress, and consequences of the revolution itself; Europe, 1650–1815.~~ Conditions in pre-revolutionary and revolutionary France; the Napoleonic state and impact of French changes upon Europe.

Hist **J469/J569 ~~Modern France, 1815-present~~** (3 cr). ~~French nation from 1815 through the De Gaulle era. Cultural, social, and economic transformations in French society from 1815 to the present. Impact of industrialization, revolution, and war upon people’s lives.~~

MATHEMATICS

- Change the number of the following course [**Effective:** Summer 2003]
Math ~~286~~386 Theory of Numbers (3 cr).
- Change the prerequisites of the following course [**Effective:** Summer 2003]
Math **160 Survey of Calculus** (4 cr) (C). Prereq: One yr of high school geometry and one of the following: (1) 1-1/2 yrs high school algebra and sufficiently high score on SAT, ACT, or COMPASS Math Test, or (2) Math 137, or (3) Math 143, ~~or (4) a grade of A or B in Math 108.~~

MILITARY SCIENCE

Change the title and credits of the following course [**Effective:** Summer 2003]
MS **289 ~~Basic Encampment~~ Leadership Training Course** (~~6-cr~~ arr. max 6).

NATURAL RESOURCES

- Change the title, description and class meeting information of the following course [**Effective:** Summer 2003]

NR 101 ~~Forestry Orientation~~ Exploring Natural Resources (1 cr). ~~Intro to forestry and related wildland management professions.~~ Introduction to the interdisciplinary fields and professions in natural resources. (Fall only)

2. Add the following course [**Effective:** Fall 2003]
NR 506 **Advanced GIS Applications in Fire Ecology and Management** (1 cr) Advanced applications of GIS and Remote Sensing to fire ecology and management, including fire regimes, fire effects and fire behavior. Includes independent study project; accelerated. GIS experience required. Prereq: GIS experience and perm. (Fall only)
3. Change the curricular requirements of **Natural Resources Ecology and Conservation Biology (B.S.Nat.Res.Ecol.-Cons.Biol.)** and **Natural Resources Minor** [**Effective:** Summer 2003]

Biol 111 Evolution and Diversity of Life (4 cr)
Biol 112 Biological Principles and Mechanisms (4 cr)
Biol 213 Principles of Biological Structure and Function (4 cr)
Biol 341 Systematic Botany or For 320 Dendrology ~~or Rnge 353 Rangeland Plant Identification and Ecology (3 cr)~~
Chem 101 Introduction to Chemistry I or 111 Principles of Chemistry I (4 cr)....
For 383 Economics for Natural Resource Managers or RRT 383 Amenity Resource Economics for Environmental Policymaking or AgEc 451 Land and Natural Resource Economics or Econ 385 Environmental Economics (3 cr)
For 470 Interdisciplinary Natural Resource Planning (3 cr) For 480 Senior Project Planning (1 cr)
For 481 Senior Project Presentation (1 cr)
Math 160 Survey of Calculus or 170 Analytic Geometry and Calculus I (4 cr)
Phil 103 Ethics (3 cr)
Phys 100 Fundamentals of Physics (~~4 cr~~) or Phys 111 General Physics I (4 cr)
Stat 251 Principles of Statistics (3 cr)

And one of the following options:

A. NATURAL RESOURCES ECOLOGY OPTION

The natural resources ecology option combines ecological theory, field experience, and quantitative tools to gain an interdisciplinary understanding of the structure and function of ecosystems. This field covers ecological topics from local, regional, and landscape scales while integrating the social and biophysical worlds.

To graduate in this option, students must achieve a “C” or better in the following seven core courses: Fish/For/Rnge/RRT/WLF 200, For 330, ~~For 394~~, For 429, Rnge 459, Soil 205/206, and WLF 316 or Fish 316.

Fish/For/Rnge/RRT/WLF 200 Seminar (1 cr)
For 330 Forest Ecosystem Processes (3 cr)
~~For 394 Quantitative Resource Analysis (3 cr)~~
For 429 Landscape Ecology of Forests and Rangelands (2 cr)
For 474 Forest Inventory (3 cr)
Rnge 459 Rangeland Ecology (3 cr)
Soil 205/206 The Soil Ecosystem and Lab (4 cr)
Wlf 316 Wildlife Ecology II (4 cr) or Fish 316 Principles of Population Dynamics (2 cr)
Quantitative Resource Analysis Restricted Electives (two courses from the following) (~~5-6 cr~~):
For 375 Airphoto Interpretation and Mapping (3 cr)
For 472 Remote Sensing of Environment (3 cr)
~~For 476 Forestry Project Evaluation (3 cr)~~
~~For 477 Integrated Forest Management Models (3 cr)~~
Geog 385 GIS Primer (3 cr)
Math 437 Mathematical Biology (3 cr)
Rnge 357 Rangeland and Riparian Habitat Assessment (3 cr)
RRT 310 Leisure Services Research and Evaluation (4 cr)
Stat 401 Statistical Analysis (3 cr)
Stat 422 Sample Survey Methods (2 cr)
Stat/GeoE 428 Geostatistics (3 cr)
Wlf 448 Fish & Wildlife Population Ecology (4 cr.)
Resource Management Restricted Electives (two courses from the following) (~~4-8 cr~~):....
RRT 385 Resource Recreation and Tourism Management (3 cr)

~~RRT 484 Management of Recreation Sites and Leisure Settings (2 cr)~~

RRT 490 Wilderness Management (3 cr)

RRT 496 Monitoring Human Impacts in Wilderness (3 cr)

WLF 445 Nongame Management (2 cr)

WLF 492 Wildlife Management (4 cr)

Ecology restricted electives (four courses from the following) ~~(9-13 cr):....~~

Social/political restricted electives (two courses from the following) ~~(5-6 cr):~~

AgEc 356 Agricultural and Rural Policy (3 cr)

Comm 331 Conflict Management (3 cr)

~~Econ 385 Environmental Economics (3 cr)~~

For 484 Forest Policy and Administration (2 cr)

Geog 420 Land, Resources, and Environment (3 cr)

Geog 444 Environmental Assessment (3 cr)

Hist 424 American Environmental History (3 cr)

Phil 452 Environmental Philosophy (3 cr)

PolS 464 Politics of the Environment (3 cr)

RRT 481 Conservation Leadership (3 cr)

RRT 486 Public Involvement in Natural Resource Management (3 cr)

RRT 489 Personalities and Philosophies in Conservation (2 cr)

RRT 493 International Land Preservation and Conservation Systems (3 cr)

Electives to total 128 credits for the degree

B. CONSERVATION BIOLOGY OPTION

The conservation biology option is centered around a multidisciplinary curriculum that provides students with ~~the~~ training to work in jobs aimed at conserving the earth's biodiversity. This option provides a broad-based education that covers ~~all levels of the~~ biological diversity hierarchy ranging from the genetic level to the landscape level, and provides additional training in social sciences and management. In the words of Hunter (1996), "Conservation biology is cross-disciplinary, reaching far beyond biology into subjects such as philosophy, economics, and sociology; disciplines that are concerned with the social environment in which we practice conservation--as well as into subjects such as law and education that determine the ways we implement conservation."....

Quantitative Resource Analysis Restricted Electives (one course from the following) ~~(3-4 cr):~~

For 375 Airphoto Interpretation and Mapping (3 cr)

For 394 Quantitative Resource Analysis (3 cr.)

For 472 Remote Sensing of Environment (3 cr)

For 474 Forest Inventory (3 cr)

~~For 476 Forestry Project Evaluation (3 cr)~~

~~For 477 Integrated Forest Management Models (3 cr)~~

Geog 385 GIS Primer (3 cr)

Math 437 Mathematical Biology (3 cr)

Rnge 357 Rangeland and Riparian Habitat Assessment (3 cr)

Stat 401 Statistical Analysis (3 cr)

Stat 422 Sample Survey Methods (2 cr)

Stat/GeoE 428 Geostatistics (3 cr)

Resource Management Restricted Electives (two courses from the following) ~~(4-8 cr):....~~

Rnge 456 Integrated Rangeland Management (3 cr)

RRT 310 Leisure Services Research and Evaluation (4 cr)

RRT 385 Resource Recreation and Tourism Management (3 cr)

~~RRT 484 Management of Recreation Sites and Leisure Settings (2 cr)~~

RRT 490 Wilderness Management (3 cr)

Ecology restricted electives (two courses)

Biol 478 Animal Behavior (3 cr)

Ent 472 Aquatic Entomology (3 cr)

Fish 314 Fish Ecology (3 cr)

Fish 415 Limnology (4 cr)

Fish/Rnge 430 Riparian Ecology and Management ~~(2-3 cr)~~

Organismal biology elective (one course from the following) ~~(3-4 cr):~~

Biol/Ent 211 Insect Biology (4 cr)

Biol 481/Fish 411 Ichthyology (4 cr)
Biol 483 Mammalogy (3 cr)
[Rnge 353 Rangeland Plant Identification and Ecology \(3 cr\)](#)
Wlf 482 Ornithology (3 cr)
Social/political restricted electives (two courses from the following) ~~(4-6 cr):~~
AgEc 356 Agricultural and Rural Policy (3 cr)
Comm 331 Conflict Management (3 cr)
~~Econ 385 Environmental Economics (3 cr)....~~

NATURAL RESOURCES MINOR

Note: Not open to students pursuing a major in the College of Natural Resources.

For 235 Society and Natural Resources (3 cr)

For/Rnge/~~WLF~~ 221 Natural Resources Ecology (3 cr)

Courses chosen from at least three of the following subjects, including at least 3 credits at the 300 level or above (12 cr):

Fishery Resources (Fish)
Forest Products (ForP)
Forest Resources (For)
Range Resources (Rnge)
Resource Recreation and Tourism (RRT)
Wildlife Resources (WLF)

RANGELAND ECOLOGY AND MANAGEMENT

Change the curricular requirements of **Rangeland Ecology and Management (B.S.Rangeland Ecol.-Mgt.)** [Effective: Summer 2003]

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

Third and Fourth Years

Biol 341 Systematic Botany (3 cr)
Engl 317 Technical Writing or Engl 313 Business Writing (3 cr)
For/Rnge/WLF/Fish/RRT/ForP 470 Interdisciplinary Natural Resource Planning (3 cr)
Geog 385 GIS Primer (3 cr)
[Rnge 352 Natural History of Rangelands \(3 cr\).](#)
Rnge 353 Rangeland Plant Identification and Ecology (3 cr)
Rnge 354 Wildland Vegetation Management and Restoration (3 cr)
Rnge 357 Rangeland and Riparian Habitat Assessment (3 cr)
[Rnge 430 Riparian Ecology and Management \(23 cr\).](#)
Rnge 456 Integrated Rangeland Management (3 cr)
Rnge 459 Rangeland Ecology (3 cr)
Soil 454 Soil Development and Classification (3 cr)

And one of the following options:

A. RANGELAND ECOLOGY OPTION

First and Second Years

Math 160 Survey of Calculus or Math 170 Analytical Geometry and Calculus I (4 cr)

Two of the following courses (4-6 cr):

Fish/WLF 290 Fish and Wildlife Ecology, Mgt, and Conservation (3 cr)
For 270 Prin of Forest Ecosystem Management or ForP 250 Prin of Forest Products (2 cr)
RRT 287 Professional Foundations of Resource Recreation and Tourism (3 cr)

Third and Fourth Years

~~[Rnge 352 Natural History of Rangelands \(3 cr\)](#)~~

~~[Rnge 430 Riparian Ecology and Management \(2 cr\)](#)~~

Restricted electives selected from the following or discuss substitutions with advisor -(20 cr):

Biol 210 Genetics (4 cr) or Gene 314 General Genetics (3 cr)
Biol 421 Advanced Evolution/Population Dynamics (3 cr)
Biol 431 Landscape and Community Ecology (3 cr)
Biol 415, 436 Plant Environmental Biophysics and Lab (3 cr)
~~[Ent 447 Fundamentals of Biological Control \(2 cr\)](#)~~
~~[Ent 451 Applied Biological Control: Weeds \(1 cr\)](#)~~

~~Ent 491 Principles of Insect Pest Management (3 cr)~~

EnvS 528 Pollution Prevention (3 cr)....

WLF 314 Wildlife Ecology I (3 cr)

~~WLF 316 Wildlife Ecology II (4 cr).~~

WLF 440 Conservation Biology (3 cr)

~~WLF 443 Multi-Species Interactions (3 cr).~~

WLF 445 Nongame Management (2 cr)

WLF 448 Fish and Wildlife Population Ecology (4 cr)

Electives to total 128 credits for the degree

B. ENVIRONMENTAL ASSESSMENT OPTION

First and Second Years

Math 160 Survey of Calculus or Math 170 Analytical Geometry and Calculus I (4 cr)

Two of the following courses (4-6 cr):

Fish/WLF 290 Fish and Wildlife Ecology, Mgt, and Conservation (3 cr)

For 270 Prin of Forest Ecosystem Management or ForP 250 Prin of Forest Products (2 cr)

RRT 287 Professional Foundations of Resource Recreation and Tourism (3 cr)

Third and Fourth Years

Restricted electives selected from the following or discuss substitutions with advisor (22 cr):....

For 394 Quantitative Resource Analysis (3 cr)

~~For 474 Forest Inventory (3 cr)~~

ForP 230, 231, and 232 Forest Land Measurements I, II, and III (3 cr total)

Geog 370 Spatial Analysis (3 cr)

Geog 380 Cartography and Graphic Communication (3 cr)

Phil 452 Environmental Philosophy (3 cr)

PISc 409 Scientific Photography and Data Presentation (1 cr)

~~Rnge 352 Natural History of Rangelands (3 cr)~~

~~Rnge 430 Riparian Ecology and Management (2 cr)~~

Rnge 497 Senior Research and Thesis (3 cr)

RRT 494 Natural Resource Communication (3 cr)

Stat 401 Statistical Analysis (3 cr)

Stat 422 Sample Survey Methods (2 cr)

WLF 440 Conservation Biology (3 cr)

Electives to total 128 credits for the degree

C. RANGELAND MANAGEMENT OPTION

First and Second Years

~~AVS 205 Introduction to Animal Nutrition (3 cr)~~

Math 143 Pre-calculus Algebra and Analytical Geometry or Math 160 Survey of Calculus or Math 170 Analytical Geometry and Calculus I (4 cr)

Two of the following courses (4-6 cr):

Fish/WLF 290 Fish and Wildlife Ecology, Mgt, and Conservation (3 cr)

For 270 Prin of Forest Ecosystem Management or ForP 250 Prin of Forest Products (2 cr)

RRT 287 Professional Foundations of Resource Recreation and Tourism (3 cr)

Third and Fourth Years

Restricted electives selected from the following or discuss substitutions with advisor (22 cr):

For 383 Econ for Natural Resource Mgrs or BAE 451 Land and Natural Resource Econ (3 cr)

~~Rnge 352 Natural History of Rangelands (3 cr)~~

~~Rnge 430 Riparian Ecology and Management (2 cr)~~

One of the following (2-4 cr):

For 375 Airphoto Interpretation and Mapping (3 cr)

For 462 Watershed Management (2 cr)

ForP 230, 231, 232 Forest Land Measurements I-III and For 274 Forest Measurement Techniques (4 cr)

PISc 338 Weed Control (3 cr)

PISc 410 Biology of Weeds (3 cr)

RRT 494 Natural Resources Communications or RRT 387 Environmental and Cultural Interpretation (3 cr)

One of the following (3-4 cr):

AVS ID&WS205 Introduction to Animal Nutrition (3 cr)

AVS 222 Animal Reproduction and Breeding (4 cr)
AVS 305 Animal Nutrition (4 cr)
AVS 306 Feeds and Ration Formulation (4 cr)
AVS 371 Anatomy and Physiology (4 cr)
AVS 466 Horse Production (3 cr)
AVS 474 Beef Cattle Science (3 cr)
AVS 476 Sheep Science (3 cr)
[Comm 331 Conflict Management \(3 cr\)](#)
[Comm 444 Communication and Public Opinion \(3 cr\)](#)
[Ent ID-J447/ID-J547 Fundamentals of Biological Control \(2 cr\)](#)
[Ent J451/ID&WS-J551 Applied Biological Control: Weeds \(1 cr\)](#)
[Fish ID&WS418 Fisheries Management \(4 cr\)](#)
[For 361 Farm and Natural Resource Appraisal \(3 cr\)](#)
[For 426 Wildland Fire Management and Ecology \(3 cr\)](#)
[Rnge 454 Rangeland Weed Management \(3 cr\)](#)
[RRT ID486 Public Involvement in Natural Resource Management \(3 cr\)](#)
[WLF 314 Wildlife Ecology I \(3 cr\)](#)
[WLF 316 Wildlife Ecology II \(4 cr\)](#)
[WLF ID445 Nongame Management \(2 cr\)](#)
Electives to total 128 credits for the degree

STATISTICS

Add the following course [**Effective:** Summer 2003]
Stat **594 Analysis of Correlated Data** (3 cr) See For 594.

THEATRE ARTS

1. Add the following courses [**Effective:** Fall 2003]
TheA **441 Foundations of Screenwriting** (3 cr) Introduction to the fundamental elements of screenwriting; techniques of developing story lines and advancing a narrative in a visual way using the industry standard of a tightly structured long-form feature film. Prereq: perm.
2. Add the following course [**Effective:** Spring 2004]
TheA **220 History of World Cinema** (3 cr) A comprehensive survey of the major film movements; introduction to film history and techniques. (Spring only)

FOR THE FACULTY'S INFORMATION

Correction to General Curriculum Report 222:

Changes to Cooperative Courses Approved Since Last General Curriculum Report:

(ID = taught only at UI; WS = taught only at WSU, LC = taught only at LCSC; ID&WS = can be taught at both UI & WSU; ID&LC = can be taught at both UI & LCSC)

1. Add the following cooperative courses
 - Ag **WS150 Science, Society and Sustainable Food Systems** (3 cr) WSU Soils 150.
 - Chin **WS105 Elementary Conversation I** (1 cr, max 2) WSU Chin 105. Graded P/F.
 - Chin **WS111 Asian Film** (3 cr) WSU Chin 111.

- Chin **WS121 Modern Chinese Culture** (3 cr) WSU Chin 121.
 - Chin **WS131 Masterpieces of Asian Literature in Translation** (3 cr) WSU Chin 131.
 - Chin **WS205 Intermediate Conversation** (1 cr, max 2) WSU Chin 205. Graded P/F. Prereq: Chin 102 or equiv.
 - Chin **WS305 Intermediate Conversation II** (1 cr, max 2) WSU Chin 305. Graded P/F. Prereq: Chin 202.
 - Chin **WS307 Intermediate Chinese** (3 cr) WSU Chin 307. Prereq: Chin 202.
 - FLEN **WS220 Global Theory/Regional Reality** (3 cr) WSU ForL 220.
 - Russ **WS105 Elementary Conversation I** (1 cr, max 2) WSU Rus 105. Graded P/F.
 - Russ **WS120 Russian Culture** (3 cr) WSU Rus 120. Taught in English.
 - Russ **WS205 Intermediate Conversation I** (1 cr, max 2) WSU Rus 205. Graded P/F. Prereq: Russ 102.
 - Russ **WS306 Intermediate Reading & Translation** (3 cr) WSU Rus 306. Prereq: Russ 207.
 - Russ **WS308 Intermediate Grammar & Writing** (3 cr) WSU Rus 308. Prereq: Russ 207.
 - Russ **WS361 Russian for the Professions** (3 cr) WSU Rus 361.
 - Russ **WS450 Seminar in Russian Studies-Themes** (3 cr) WSU Rus 450. Prereq: Russ 306.
2. Change the number and title of the following courses
- Chin **WS~~304~~202 Chinese Intermediate-Fourth Semester** (4 cr). WSU Chin ~~304~~204.
 - Russ **WS~~304~~207 Intermediate Russian-Fourth Semester** (4 cr). WSU Rus ~~304~~204. Prereq: Russ 203.
 - Russ **WS~~317~~121 Contemporary Russian Culture and Society** (3 cr). WSU Rus ~~317~~121. Taught in English.
3. Change the number of the following courses
- Russ **WS~~323~~131 Masterpieces of Russian Literature in Translation** (3 cr). WSU Rus ~~323~~131.
 - Russ **WS~~360~~410 Russian Film** (3 cr). WSU Rus ~~360~~410.
4. Change the title, credits, prerequisites and grading of the following course
- Russ **WS305 ~~Russian-Intermediate~~ Conversation II** (1 cr, ~~max 2~~). WSU Rus 305. ~~Graded P/F. Prereq: Russ 207.~~
5. Change the title and prerequisite of the following course
- Russ **WS307 ~~Intermediate Speaking Proficiency and Listening~~** (3 cr). WSU Rus 307. ~~Prereq: Russ 207.~~
6. Drop the following dormant courses
- FST **WS302 Meat and Poultry Products** (3 cr) WSU FSHN 302
 - FST **WS508 Philosophy of Pharmacology and Toxicology** (1 cr) WSU P/T 501
 - FST **WS525 Instrumental Methods in Pharmacology/Toxicology** (3 cr) WSU P/T 525
 - FST **WS566 Molecular Mech/Target Organ Toxicity** (2 cr) WSU P/T 566
 - FST **WS567 Risk Assessment Methodologies** (1-2 cr) WSU P/T 567