General Curriculum Report #251

UNIVERSITY OF IDAHO - REGISTRAR'S OFFICE
January 09, 2009

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 Letters Arts and Social Sciences or in the College of Agricultural and Life Sciences, and is signed by five faculty members of the respective college, those items will be returned to the college concerned for further consideration.

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Adult, Career and Technology Education

1. Add the following courses [**Effective**: Summer 2009]

AdOL 628 Program Evaluation (3 cr)
Schools, organizations, and community agencies are being increasingly held accountable for their respective programs. This course addresses how action research can be a powerful tool for empirically evaluating all aspects of a given program. Recommended Preparation: foundations and/or introduction to research.
Prereq: Enrollment to a doctoral program

PTTE 525 Emergency Management and Planning (3 cr)
A study of the basic principles in emergency management and planning in the United States. This course is not directed at any particular type of hazard, but the processes and considerations of planning for all-hazards along with the basics of generic protective actions and the planning concepts supporting effective protective action recommendations.

PTTE 526 Community Emergency Planning (3 cr)
A study of the theory and practice of community emergency planning. The Citizen Corps, Principles of Emergency Planning, and CERT programs will be studied. Cases are studied in order to assist students in understanding the management and leadership complexity associated with modern emergencies and disasters. Recommended Preparation: PTTE 525.

PTTE 533 Chemical Hazards (3 cr)
Emergency responders can encounter a wide range of chemical hazards. Topics include information on interpreting hazardous chemical labels and Material Safety Data Sheets and the relationship between those two methods of hazard communication. Acute and chronic effects of hazardous chemicals to which responders may be exposed will be discussed. Recommended Preparation: PTTE 525.

PTTE 534 Biological Hazards (3 cr)
Emergency responders can encounter a wide range of biological hazards. The objectives of this course are to understand the nature of biological hazards and how to control them. The biological hazards to be discussed are Bacteria, Viruses, Fungi/Molds, Protozoa, Prions – infectious proteins, Biological Toxins. Recommended Preparation: PTTE 525.

PTTE 535 Radiation Detection and Measurement (3 cr)
This course is designed to provide in-depth understanding of nuclear radiations with focus on detection, measurement and health physics. Students will learn how to select the proper detector given the energy and type of radiation measured; analyze the results of counting experiments to calculate errors, uncertainties, and energy spectra; and to perform radiation measurements following proper health physics procedures. In-class and laboratory experiments are included.
Prereq: Permission

2. Change the status of the following courses from Dormant to Active [**Effective**: Summer 2009]

PTTE 185 Business Computation Concepts (2 cr)
The integration of business computational concepts for solving business financial problems with the use of electronic calculators and/or computers.

PTTE 310 Production Safety (3 cr)
Students will learn and demonstrate the safe use of tools, machines, and lab equipment. Knowledge will be applied to both industrial and educational settings. This is intended to be the first course taken in PTTE for technology education and industrial technology majors.
Prereq: Stat 251, Math 143

PTTE 362 Behavior Based Safety (3 cr)
Principles of paradigm shifts required for total safety, human barriers to safety, the basic principles of behavior-based psychology and behavioral safety analysis and behavior-based interventions.

PTTE 452 Fire Emergency Planning (3 cr)

This course is intended to provide information that will enable persons just entering the profession or expanding their roles to have the ability to assess their community's fire hazards, determine community resources, and write an all-hazards plan to assign responsibility to various agencies who will respond during a fire emergency or disaster.
Prereq: Permission

PTTE 454 National Incident Management Systems (3 cr)
This course is designed to increase the participants' knowledge and understanding of the inherent flexibility of the Incident Command System to manage major or complex incidents. Utilizing lectures and small group activities, participants will acquire an in-depth knowledge of the National Incident Management System (NIMS), terminology, players, and management philosophy. Participants will also acquire the ability to organize and manage major or complex incidents. The material covered during the course includes command and general staff duties and responsibilities, unified command, major incident management and area command structures.

3. Change the title of the following course [**Effective**: Summer 2009]

AdOL 560 Career Development in Organizations ~~and Integrated Life Planning for Adults~~ (3 cr)
Builds upon the foundation of personality psychology, genetic research, and modern neuroscience in understanding the complex process of career decision-making.

4. Change the description of the following course [**Effective**: Summer 2009]

PTTE 578 International and Cross-Cultural Workforce Development (3 cr)
Examination of international workforce development efforts at the secondary and postsecondary levels with emphasis on the relationships among economic, community, and workforce development. Adult education, training, and technical education considerations are integrated.~~Socio-cultural considerations are integrated with technical skill emphases.~~

5. Change the prerequisites of the following courses [**Effective**: Summer 2009]

PTTE 310 Production Safety (3 cr)
Students will learn and demonstrate the safe use of tools, machines, and lab equipment. Knowledge will be applied to both industrial and educational settings. This is intended to be the first course taken in PTTE for technology education and industrial technology majors.
~~**Prereq:** Stat 251, Math 143~~

PTTE 462 Communication Technology (3 cr)
The first part of this course investigates the evolution of communication technology, and the problems associated with interpersonal human communication and human to machine communication. The second part of the course covers the Infinity Pre-engineering program which investigates the science and mathematics in technologies such as cell phones, music, and video. Recommended Preparation: PTTE 415.
~~**Prereq:** PTTE 111~~

6. Change the description and prerequisites of the following courses [**Effective**: Summer 2009]

PTTE 252 Green Construction Technology (3 cr)
The theory and the praxis—hands-on how to—of green building. Concepts such as structure, building loads, thermal mass, insulation and more are addressed and basic traditional building techniques will be addressed. Alternative building methods such as earth plaster, straw bale, cordwood, cob, and living roofs are examined and are experimented with. Recommended Preparation: PTTE 152 or Work Experience.
~~**Prereq:** PTTE 152 or Work Experience and Permission~~

PTTE 352 Manufacturing: Metallic Materials and Processes (3 cr)
This course introduces and reinforces knowledge in the area of manufacturing and manufacturing processes of metallic materials (ferrous and nonferrous). The materials themselves, primary processing, and the systems of secondary processing will be studied in-depth. Recommended Preparation: PTTE 152 or Work Experience.~~PTTE 267.~~
~~**Prereq:** PTTE 152 or Work Experience and Permission~~

PTTE 355 Professional-Technical Education Micro-Enterprises (3 cr)
In preparation for running a Technology Student Association (TSA) club in their school, students will explore mass production systems, marketing, and entrepreneurship and learn how to fund club related activities at the state and national level. Recommended Preparation: PTTE 152, PTTE 225 and PTTE 352; or Work Experience.
~~**Prereq:** PTTE 152, 225 and 352; or Work Experience and Permission~~

PTTE 428 Computer Integrated Systems (3 cr)
PC maintenance fundamentals, an overview of various computer operating systems, fundamental networking applications, peripherals and integration of PC technology into the home and industry. Students will have the tools they need for further study and industry certification. Enrollment per section limited to computer stations available. Recommended Preparation: PTTE 111.
~~**Prereq:** PTTE 111 or Permission~~

7. Change the co-requisites of the following course [**Effective**: Summer 2009]

PTTE 455 Professional Role Development in PTTE II (1 cr)

Concurrent with the Internship will focus on developing a reflective stance to critically examine ones teaching for improvement and enhancement by linking prior knowledge and making informed decisions about needed change and learning.
Coreq: PTTE ~~497~~484

8. Change the co-requisites and prerequisites of the following course [**Effective**: Summer 2009]

PTTE 484 (s) Internship in Professional-Technical and Technology Education Teaching (3-14 cr, max 28)
Guided observation, supervised instruction, and comprehensive team and independent teaching in school settings.
Prereq: ~~Permission of division~~ Admission to teacher education program
Coreq: ~~Integrated course work and ED 401~~PTTE 455

9. Change the curricular requirements of **Professional-Technical and Technology Education** (B.S.Ed.) [**Effective**: Summer 2009]

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B. Professional-Technical Education Option

This option is designed for those teachers in secondary trade and industrial programs who wish to teach in post-secondary professional-technical programs. Requirements include the General Professional-Technical and Technology Education Requirements and the following:

PTTE 420 Evaluation in Professional-Technical Education (3 cr)
PTTE 426 Instructional Design and Curriculum (3 cr)
PTTE 447 Diverse Populations and Individual Differences (2-3 cr)
PTTE 472 Teaching and Learning in Occupation Education (3 cr)
Approved course in computer literacy (3 cr)
Professional-technical electives approved by advisor to total 128 credits:
PTTE 200, 400 Seminar (cr arr)
PTTE 203, 403 Workshop (cr arr)
PTTE 204, 404 Special Topics (cr arr)
PTTE 299, 499 Directed Study (cr arr)
PTTE 306 Preservice for New Professional-Technical Teachers (3 cr)
PTTE 307 Inservice for New Professional-Technical Teachers (3 cr)
PTTE 418 Teaching Economics and Personal Finance (3 cr)
PTTE 470 Technical Competence (1-32 cr)

Additional requirements for PTE students seeking Idaho Secondary Teaching Certificate include the satisfactory completion of the PRAXIS II Content Area Test, and the following:

Comm 101 Fundamentals of Public Speaking or Comm 132 Oral Interpretation (2 cr)
~~ED 201 Diverse Learners in Schools and Social/Cultural Contexts (3 cr)~~
~~ED 301 Principles of Learning and Development in Education (3 cr)~~
~~ED 302 Curriculum, Instruction, and Assessment Strategies (3 cr)~~
~~ED 401 Professional Role Development (3 cr)~~
EDCI 201 Contexts of Education (2 cr)
EDCI 301 Learning, Development, and Assessment (3 cr)
EDCI 302 Teaching Culturally Diverse Learners (4 cr)
EDCI 401 Internship Seminar (1 cr)
EDCI 463 Literacy Methods for Content Learning (3 cr)
EDCI 485 Secondary Internship or PTTE 484 Internship in Professional-Technical and Technology Education Teaching (18 cr)
EDSP 300 Educating for Exceptionalities (2 cr)
Psyc 101 Intro to Psychology or Psyc 305 Developmental Psychology (3 cr)
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10. Change the curricular requirements of **Adult Basic Education/GED Instructor** (Academic Certificate) [**Effective**: Summer 2009]

AdOL 501 Seminar (3 cr)
AdOL 573 Adult Learners: Foundations and Characteristics (3 cr)
~~AdOL 574 Foundations of Adult Learning (3 cr)~~
AdOL 575 Strategies for Facilitating Adult Learning (3 cr)
AdOL 576 Communication Skills for Adults in a Diverse World (3 cr)
AdOL 528 Program Planning, Development, and Evaluation (3 cr)
Credits to total 15 for this Academic Certificate

11. Change the curricular requirements of **Emergency Planning and Management** (Academic Certificate) [**Effective**: Summer 2009]

~~PTTE 404 or 504 Special Topics: Emergency Planning and Management (3 cr)~~
~~PTTE 404 or 504 Special Topics: Community Emergency Planning (3 cr)~~
PTTE 454 National Incident Management Systems (3 cr)
PTTE 525 Emergency Management and Planning (3 cr)
PTTE 526 Community Emergency Planning (3 cr)

Two of the following (6 cr):
~~PTTE 404 or 504 Special Topics: Biological Hazards (3 cr)~~
~~PTTE 404 or 504 Special Topics: Chemical Hazards (3 cr)~~
PTTE 452 Fire Emergency Planning (3 cr)
PTTE 486 Homeland Security (3 cr)
PTTE 533 Chemical Hazards (3 cr)
PTTE 534 Biological Hazards (3 cr)
Credits to total 15 for this Academic Certificate

Agricultural and Extension Education

1. Drop the following course [**Effective**: Summer 2009]

AgEd 181 Introduction to Extension Education (1 cr)
Overview of purpose and career opportunities available in extension education profession; role of cooperative extension faculty; basic principles and practices of Cooperative Extension System including related legislation. (Fall only)

2. Change the credits, description and title of the following course [**Effective**: Summer 2009]

AgEd 180 Introduction to Agricultural and Extension Education (~~1~~ 2 cr)
Overview of the goals, mission, and purpose agricultural and extension education programs within society. Course content will include topics related to career opportunities in Agricultural and Extension Education, key issues facing agricultural education programs in high school and extension education programs at the local, state, and national levels; the importance of agricultural education to society; and the role of the agricultural educator or extension educator in schools and communities.~~Overview of purposes and career opportunities in agricultural education; role of secondary agriculture instructor in secondary school systems.~~ (Fall only)

Agricultural Economics and Rural Sociology

1. Add the following course [**Effective**: Summer 2009]

AgEc 418 Developing Negotiation Skills in Agribusiness (1 cr)
Understanding the art and science of securing agreements between two or more independent parties by managing interdependence, engaging in mutual adjustment, creating or claiming value, and managing conflict. (Spring only)
Prereq: Junior or Senior standing

AgEc 419 Development and Analysis of Enterprise Budgets (1 cr)
Examination of accounting and economic costs and their importance in enterprise cost analysis. Identification and allocation of operating and ownership costs to enterprises. Introduction to software packages used in the development of cost and return estimates. (Spring only)
Prereq: AgEc 478 or Permission

AgEc 506 Faculty Seminar Series (0 cr)
Focus on current issues impacting agriculture, natural resources, and community development though seminars introducing research occurring in the department.

AgEc 586 Regional Economic Development Theory (3 cr)
Theory course in the explanation and causes of regional economic growth and community development. Topics include land economics, transportation models, central place theory, location theory, agglomeration, economic base theory, and economic growth theory. Recommended Preparation: Introductory Microeconomics and Macroeconomics or Introduction to Bioregional Planning. (Spring only)

AgEc 587 Regional Economic Development Methods (3 cr)
Methods course in the tools of regional economics and community development. Topics include Community Economic Profiling, Input-Output Analysis, Social Accounting, General Equilibrium Analysis, Social Benefit-Cost Analysis, and Non-Market Valuation. (Fall only)
Prereq: AgEc 586 or Permission

2. Change the title of the following course [**Effective**: Summer 2009]

AgEc 447 International Development Economics ~~of Developing Countries~~ (3 cr)
See Econ 447.

3. Change the description, prerequisites and title of the following course [**Effective**: Summer 2009]

AgEc 451 ~~Land~~ Applied Environmental and Natural Resource Economics (3 cr)
Economic analysis of current issues pertaining to environmental and natural resources. Economic tools will be applied in the contexts of climate change, valuation of the environment, sustainable development, energy, water, environmental risk, etc. Specific cases used to describe economic theories and tools used by experts working in the field.~~Agricultural, forest, and mineral land use and classification; factors affecting land use; ownership, tenure, taxation, values, credit, and governmental policies.~~
Prereq: AgEc 301, AgEc 302, or Econ ~~352~~ 385; or Permission

4. Change the cooperative status of the following courses [**Effective**: Summer 2009]

AgEc ID&WS525 Master's Econometrics (3 cr) WSU EconS 525
Same as Econ 525. Sampling techniques, linear regression and analysis of variance with economic applications. (Fall only)
Prereq: 3 cr in statistics

AgEc ID&WS529 Research Methods (1 cr) WSU EconS 529
Social science Master's thesis as a research journey toward craftsmanship including elements of imagination, modeling, mindfulness, guidelines, and mentor experiences. (Spring only)
Prereq: Graduate standing and Permission

AgEc ID&WS532 Natural Resource Economics and Policy (3 cr) WSU EconS 532
Economic principles and models applied to natural resource problems, issues, and policies. (Spring only)
Prereq: Econ 352 or Permission

AgEc ID&WS533 International Trade and Policy (3 cr) WSU EconS 533
International trade theories and policies and research issues related to world trade, with emphasis on agricultural commodity markets. (Fall only)
Prereq: Econ 446, AgEc 481, or Permission

AgEc ID&WS534 Production Economics (3 cr) WSU EconS 534
Production economics theory and methods applied to problems of production response, economic optimization, technology, policy, risk and dynamics. (Spring only)
Prereq: AgEc 525

5. Change the title of the following course [**Effective**: Summer 2009]

AgEc ID&WS526 Master's Microeconomics Analysis (3 cr) WSU EconS 526
See Econ 526.

6. Change the curricular requirements of **Agricultural Economics and Agribusiness** (B.S.Ag.Econ.) [**Effective**: Summer 2009]

CORE COURSES FOR B.S.AG.ECON.

Acct 201 Introduction to Financial Accounting (3 cr)
Acct 202 Introduction to Managerial Accounting (3 cr)
~~Acct 205 Fundamentals of Accounting (4 cr)~~
AgEc 101 The Business of Agriculture (1 cr)
AgEc 278 Farm and 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 and Rural Policy (3 cr)
~~Biol 102 Biology and Society or Biol 115 Cells and the Evolution of Life or MMBB 250, 255 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)
Econ 201, 202 Principles of Economics (6 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 Statistical Methods (3 cr)
One of the following (4-5 cr):
- Biol 102 Biology and Society (4 cr)
- Biol 115 Cells and the Evolution of Life (4 cr)
- MMBB 250, 255 General Microbiology and Lab (5 cr)

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

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

AgEc 478 Advanced Agribusiness Management (3 cr)
AgEc 481 Agricultural Markets in a Global Economy (3 cr)
Econ 351 Intermediate Macroeconomic Analysis (3 cr)
Econ 352 Intermediate Microeconomic Analysis (3 cr)
Math 160 Survey of Calculus or Math 170 Analytic Geometry and Calculus I (4 cr)
Select from the following (3 cr):
- AgEc 383 Economics for Natural Resource Managers (3 cr)
- AgEc 451 Applied Environmental and Natural Resource Economics (3 cr)
- Econ 385 Environmental Economics (3 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 310 Accounting for Business Decisions I (2 cr)~~
~~Acct 311 Accounting for Business Decisions II (2 cr)~~
Acct 482 Enterprise Accounting (3 cr)
AgEc 478 Advanced Agribusiness Management (3 cr)
AgEc 481 Agricultural Markets in a Global Economy (3 cr)
Select from the following (3 cr):
- ~~AgEc 383 Economics for Natural Resource Managers (3 cr)~~
- AgEc 451 Applied Environmental and Natural Resource Economics (3 cr)
- AgEc 477 Law, Ethics, and the Environment (3 cr)
- ~~Econ 385 Environmental Economics (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)

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)

Ag economics, economics, accounting, or business electives (12 cr)
Technical agriculture electives (12 cr)
Electives to total 128 cr for the degree

7. Change the curricular requirements of **Agribusiness** (Minor) [**Effective**: Summer 2009]

AgEc 278 Farm and Ranch Management (4 cr)
AgEc 289 Agricultural Markets and Prices (3 cr)
AgEc 356 Agricultural and Rural Policy (3 cr)
One of the following courses (3 cr):
- AgEc 301 Agricultural Economics I (3 cr)
- AgEc 302 Agricultural Economics II (3 cr)

~~Six~~ Seven credits of upper division Agricultural Economics electives (~~6~~ 7 cr)

8. Change the curricular requirements of **Natural Resource Economics** (Minor) [**Effective**: Summer 2009]

~~AgEc 278 Farm and Ranch Management (4 cr)~~
~~AgEc 335 Conflict Management (1 cr)~~
AgEc 301 Agricultural Economics I or AgEc 302 Agricultural Economics II (3 cr)
AgEc 356 Agricultural and Rural Policy (3 cr)
AgEc 361 Farm and Natural Resource Appraisal (3 cr)
~~AgEc 383 Economics for Natural Resource Managers (3 cr)~~
~~AgEc 416 Agricultural and Natural Resource Project Evaluation (1 cr)~~
AgEc 410 Experiencing the Idaho Public Policy Making Process (1 cr)
AgEc 418 Developing Negotiation Skills in Agribusiness (1 cr)
AgEc 451 Applied Environmental and Natural Resource Economics (3 cr)
AgEc 477 Law, Ethics, and the Environment (3 cr)
Geog 385 GIS Primer (3 cr)

American Indian Studies

1. Add the following courses [**Effective**: Summer 2009]

AIST 411 Native American Architecture (3 cr)
See Arch 411.

AIST 420 Native American Law (3 cr)
Graded Pass/Fail.
See Law 949.

AIST 422 Plateau Indians (3 cr)
See Anth 422.

2. Change the curricular requirements of **American Indian Studies** (Minor) [**Effective**: Summer 2009]

AIST 401 Contemporary American Indian Issues (3 cr)

~~Anth 329 North American Indians or~~ Anth~~AIST~~ 422 Plateau Indians (3 cr)
~~AIST 498 Internship (2 cr)~~
Engl 484 American Indian Literature (3 cr)
Hist 431 ~~History of Indian-White Relations~~Stolen Continents, The Indian Story: Indian History to 1840 or Hist 426 Red Earth White Lies: American Indian History 1840-Present (3 cr)
Elective courses selected from the following (6 cr):
AIST 320 The Celluloid Indian: American Indians in Popular Film (3 cr)
AIST 404 Special Topics (3 cr)
~~AIST 411 Native American Architecture (3 cr)~~
~~AIST 420 Native American Law (3 cr)~~
~~AIST 495 Practicum (cr arr)~~
AIST 498 Internship (cr arr)
AIST 499 Directed Study (cr arr)
~~Anth 329 North American Indians (3 cr)~~
~~Anth 422 Plateau Indians (3 cr)~~
Anth 436 North American Prehistory (3 cr)
Anth 443 Plateau Prehistory (3 cr)
~~Hist 313 Red, White, and Black: The Peopling of Early America (3 cr)~~
~~Hist 404 ST: The Nez Perce: Then and Now (3 cr)~~
~~Hist 426 Red Earth White Lies: American Indian History 1840-Present (3 cr) (If not used above)~~
~~Hist 431 Stolen Continents, The Indian Story: Indian History to 1840 (3 cr) (If not used above)~~
NezP 101 Elementary Nez Perce I (4 cr)
NezP 102 Elementary Nez Perce II (4 cr)
Phil 381 American Indian Environmental Philosophy (3 cr)
Soc 427 or Anth 427 Racial and Ethnic Relations (3 cr)

Animal and Veterinary Science

1. Change the credits of the following courses [**Effective**: Summer 2009]

AVS J409/J509 Growth Physiology Inquisition (2 cr~~.~~ max arr)
This course will develop skills in critical review of literature in Growth Physiology. Students will study set journal articles describing original research and present their review to the study group in a team participation format. Active participation of the study group, led by the primary reviewer is an essential component of the course. Graduate students are encouraged to take the course multiple times (e.g., each semester). Student performance is evaluated using a six criterion Rubric. For undergraduate credit, students are evaluated across 2-3 achievement levels per criterion. For graduate credit, students are evaluated across 4 achievement levels per criterion as shown in the Course Outline. Recommended Preparation: AVS J451/J551.

2. Change the curricular requirements of **Animal and Veterinary Science** (B.S.A.V.S.) [**Effective**: Summer 2009]

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D. Science/Preveterinary Option

~~AVS 472 Dairy Cattle Management or AVS 474 Beef Cattle Science (3 cr)~~
Biol 116 Organisms and Environments (4 cr)
Biol 210 Genetics or Gene 314 General Genetics (3-4 cr)
Chem 112 Principles of Chemistry II (5 cr)
Chem 277, 278 Organic Chemistry I and Lab (4 cr)
MMBB 154 Introductory Microbiology (3 cr)
MMBB 155 Introductory Microbiology Laboratory (1 cr)
MMBB 300 Survey of Biochemistry (3 cr)
Phys 111 General Physics I (4 cr)
Phys 112 General Physics II (4 cr)
First Year in veterinary school (32 cr) or the following courses:
AVS 306 Feeds and Ration Formulation (4 cr)
AVS 330 Genetics of Livestock Improvement (3 cr)
AVS 450 Issues in Animal Agriculture (1 cr)
AVS 471 Animal Disease Management (3 cr)
AVS 472 Dairy Cattle Management or AVS 474 Beef Cattle Science (3 cr)
One of the following (3 cr):
~~AVS 466, 468, 472, 474 or 476 Species Production (6 cr)~~
AVS 466 Horse Science and Management (3 cr)
AVS 468 Companion Animal Biology & Management (3 cr)
AVS 472 Dairy Cattle Management (3 cr)
AVS 474 Beef Cattle Science (3 cr)
AVS 476 Sheep Science (3 cr)
Chem 372 Organic Chemistry II (3 cr)
Biol or MMBB elective, 300-level or above (3 cr)
Electives to total 132 for the degree

Architecture and Interior Design

1. Add the following courses [**Effective**: Summer 2009]

Arch 141 Design Discovery Program (1 cr)
The University of Idaho Design Discovery Summer Program is an intensive one week experience that offers prospective students a chance to experience the world of design. During the program, students gain a broad view of various design disciplines while developing graphic and design skills and building their portfolios. (Summer only)

Arch J411/J511 Native American Architecture (3 cr)
Same as AIST 411. An exploration of Native American architecture in North America, including ancient, historic, and contemporary buildings and settlements within their diverse social, cultural, and physical contexts. Additional assignments required for graduate credit. (Spring only)

2. Change the description and prerequisites of the following courses [**Effective**: Summer 2009]

Arch 453 Architectural Design V (5 cr)
Design in the urban and/or community context. Application of urban theory and appropriate responses to climatic factors to the resolution of architectural and planning problems in community or urban contexts. Collaborative and/or interdisciplinary design encouraged. Three 3-hr studios a wk and assigned work; field trips will be reqd at student expense; some class jury sessions will meet outside of scheduled hours. Field trips at student expense are required.~~Recommended Preparation: Arch 353-354.~~
Prereq: Arch 353 and Arch 354; or Permission

Arch 454 Architectural Design VI (5 cr)
Large architectural and/or urban design projects that explore and integrate urban theory and/or concepts for sustainable design, environmental control systems technology, human and cultural factors, and construction assemblies. Design in team/collaborative settings encouraged; some class presentation sessions will meet outside of scheduled hours. Field trips at student expense are required.~~ Three 3-hr studios a wk and assigned work; field trips will be reqd at student expense; some class jury sessions will meet outside of scheduled hours. Recommended Preparation: Arch 353-354.~~
Prereq: Arch 353 and Arch 354; or Permission

Art and Design

1. Change the curricular requirements of **Art Education** (B.S.Art Ed.) [**Effective**: Summer 2009]

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, interaction design, painting, sculpture, printmaking, photography/digital imaging, and the courses listed below.

Note: For registration in upper-division courses in the field of education, students must have been admitted to the teacher education program and meet the teacher education GPA requirements. For admission criteria, refer to "Admission to the Teacher Education Program" in the College of Education section of Part 4 of this catalog.

Art 410 Professional Practices (2 cr)
~~ED 201 Diverse Learners in Schools and Social/Cultural Contexts (3 cr)~~
~~ED 301 Principles of Learning and Development in Education (3 cr)~~
~~ED 302 Curriculum, Instruction, and Assessment Strategies (3 cr)~~
~~ED 401 Professional Role Development (3 cr)~~
EDCI 201 Contexts of Education (2 cr)
EDCI 301 Learning, Development, and Assessment (3 cr)
EDCI 302 Teaching Culturally Diverse Learners (4 cr)
EDCI 401 Internship Seminar (1 cr)
EDCI 436 Secondary Art Methods (3 cr)
EDCI 446 Secondary Art Practicum (1 cr)
EDCI 463 Literacy Methods for Content Learning (3 cr)
EDCI 485 Secondary Internship (1-15 cr)
EDSP 300 Educating for Exceptionalities (2 cr)
200-level studio courses selected from the following (students pursuing a studio emphasis in graphic design must include Art 222; and interaction design majors must include Art 272) (18 cr):
- Art 211 Drawing III (3 cr)
- Art 221 Introduction to Graphic Design (3 cr)
- Art 222 Introduction to Typography (3 cr)
- Art 231 Painting I (3 cr)
- Art 241 Sculpture I (3 cr)
- Art 251 Printmaking I (3 cr)
- Art 261 Ceramics I (3 cr)
- Art 271-272 Interaction Design I-II (3 cr)
- Art 280 Understanding Photography (3 cr)
- Art 282 Color Photography/Digital Imaging (3 cr)

300-level studio courses selected from the following (at least 6 cr must be taken in one studio area, i.e., Art 330, no more than 6 cr in one studio area may be counted toward this requirement) (15 cr):
- Art 321 Graphic Design Concepts (3 cr, max 6)

Art 322 Graphic Design Studio (3 cr, max 6)
Art 330 Intermediate/Advanced Painting (3 cr, max 9)
Art 340 Intermediate/Advanced Sculpture (3 cr, max 9)
Art 350 Intermediate/Advanced Printmaking (3 cr, max 9)
Art 370 Advanced Interaction Design (3 cr, max 9)
Art 380 Digital Imaging (3 cr)
Art 381 Advanced Imaging Concepts (3 cr)
Art 390 Mixed Media (3 cr, max 9)
Art 491 Information Design (3 cr, max 9)
Advisor Approved electives in art/design history/theory (12 cr)
Electives to total 128 cr for the degree

Biological and Agricultural Engineering

1. Drop the following course [**Effective**: Summer 2009]

BAE 143 Engineering Problem Solving (2 cr)
Engineering principles used to solve agricultural and biological systems problems, including computer programming; introduction to elements of design.

2. Change the curricular requirements of **Agricultural Systems Management** (B.S.A.S.M.) [**Effective**: Summer 2009]

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C. Agricultural Production Management Option

ASM 304 Agricultural Fluid Power (2 cr)
ASM 306 Agricultural Structures and Environmental Systems (3 cr)
~~ForP 230 Forest Harvesting Field Measurement (2 cr)~~
Math 143 Pre-calculus Algebra and Analytic Geometry or Math 160 Survey of Calculus (3-4 cr)
Agriculture and Technical Electives (See list in Dept. Office) (14 cr)
Life Science Electives (See list in Dept. Office) (3 cr)
Business Electives (See list in Dept. Office) (3 cr)
Upper Division (300 level or higher) AgEc or Bus elective (3 cr)
Advisor approved electives to total 128 for the degree (See list in Dept. Office)

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3. Change the curricular requirements of **Biological and Agricultural Engineering** (B.S.B.A.E.) [**Effective**: Summer 2009]

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

BAE 142 Engineering for Living Systems (2 cr)
~~BAE 143 Engineering Problem Solving or CS 112 Introduction to Problem Solving and Programming (3 cr)~~
BAE 355 Fundamentals of Hydrologic Engineering (3 cr)
BAE 441 Instrumentation and Measurements (3 cr)
BAE 462 Electric Power and Controls (3 cr)
BAE 478 Engineering Design I (2 cr)
BAE 479 Engineering Design II (2 cr)
BAE 491 Senior Seminar (1 cr)
Chem 111 Principles of Chemistry I (4 cr)
Chem 112 Principles of Chemistry II (5 cr)
CS 130 Programming with Visual Basic or CS 112 Introduction to Problem Solving and Programming (3 cr)
Engr 105 Engineering Graphics (2 cr)
Engr 210 Engineering Statics (3 cr)
Engr 240 Introduction to Electrical Circuits (3 cr)
Engr 320 Engineering Thermodynamics and Heat Transfer (3 cr)
Engr 335 Engineering Fluid Mechanics (3 cr)
Engr 350 Engineering Mechanics of Material (3 cr)
Engr 360 Engineering Economy (3 cr)
Math 170 Analytic Geometry and Calculus I (4 cr)
Math 175 Analytic Geometry and Calculus II (4 cr)
Math 275 Analytic Geometry and Calculus III (3 cr)
Math 310 Ordinary Differential Equations (3 cr)
Phys 211 Engineering Physics I (4 cr)
Phys 212 Engineering Physics II (~~4~~ 3 cr)
Soil 205 The Soil Ecosystem (3 cr)
Stat 301 Probability and Statistics (3 cr)

And one of the following options:
…

4. Change the curricular requirements of **Agricultural Systems Management** (Minor) [**Effective**: Summer 2009]

ASM 202 Agricultural Shop Practices (2 cr)
At least four credits from the following skill courses (4 cr):
ASM 107 Beginning Welding (2 cr)
ASM 112 Introduction to Agricultural Systems Management (3 cr)
PTTE 267 Computer Aided Drafting/Design (3 cr)
ASM 210 Small Engines (2 cr)
At least twelve credits from the following application courses (12 cr):
ASM 304 Agricultural Fluid Power Systems (2 cr)
ASM 305 GPS and Precision Agriculture (3 cr)
ASM 315 Irrigation Systems and Water Management (3 cr)
ASM 409 Agricultural Tractors, Power Units and Machinery Management (3 cr)
ASM 412 Agricultural Safety and Health (2 cr)
ASM 430 Water and Wastewater Management (3 cr)

The minimum number of credits in agricultural systems management courses for the minor is ~~19~~20.

Biological Sciences

1. Drop the following course [**Effective**: Summer 2009]

Biol 341 Systematic Botany (3 cr)
Classification and identification of flowering plants; local flora. Two 1-hr lec and two 2-hr labs a wk; four 1-day field trips. (Spring only)
Prereq: Biol 115 and 116.
Recommended Equivalency: REM 341

2. Change the title of the following course [**Effective**: Summer 2009]

Biol 563 Mathematical ~~Methods for Population~~ Genetics ~~and Evolution~~ (3 cr)
See Math 563.

3. Change the description of the following course [**Effective**: Summer 2009]

Biol 481 Ichthyology (4 cr)
Anatomy, taxonomy, physiology, genetics, and zoogeography of fishes. Three lec and one 3-hr lab a wk~~; one half-day field trip~~. (Spring only)
Prereq: Biol 115 and 116

4. Change the credits of the following course [**Effective**: Summer 2009]

Biol 407 Practicum in Biology Laboratory Teaching (42-6 cr, max 12)
Organization, preparation, and teaching of lab experiments or demonstrations under faculty supervision.
Prereq: Any four of the following courses: Biol 115, 116, 210, 212, 213, or 314; and Permission

5. Change the prerequisites of the following course [**Effective**: Summer 2009]

Biol ID558 Reproductive Biology of Fishes (2 cr) WSU Biol 511
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. (Spring only, Alt/yrs)
~~**Prereq:** Graduate standing~~

6. Change the curricular requirements of **Biological Sciences** (B.S. or B.A.) [**Effective**: Summer 2009]

To graduate in this program, students must earn a minimum grade of C in Biol 115 and 116 and must have a minimum gpa of 2.40 in Biol 115, 116, 210, 212, and 213.

Required course work includes the university requirements (see regulation J-3), and the following major requirements (electives to be chosen in consultation with the departmental advisor).

Biol 101 Perspectives in Biology (1 cr)
Biol 115 Cells and the Evolution of Life (4 cr)
Biol 116 Organisms & Environments (4 cr)
Biol 210 Genetics (4 cr)
Biol 212 Molecular and Cellular Biology (4 cr)
Biol 213 Principles of Biological Structure and Function (4 cr)
Biol 314 Ecology and Population Biology (4 cr)
Biol 411 Senior Capstone (2 cr)

Biol 421 Advanced Evolutionary Biology (3 cr)

Chem 111 Principles of Chemistry I (4 cr)
Chem 112 Principles of Chemistry II (5 cr)
Chem 275, 276 Carbon Compounds and Lab or Chem 277, 278 Organic Chemistry and Lab (4 cr)
Math 160 Survey of Calculus or Math 170 Analytic Geometry and Calculus I (4 cr)
MMBB 380 Introductory Biochemistry or MMBB 300 Survey of Biochemistry (3-4 cr)
Phys 111 General Physics I (4 cr)
Phys 112 General Physics II (4 cr)
Stat 251 Statistical Methods (3 cr)

NOTE: Students considering graduate school in biology are strongly encouraged to take Math 170, Chem 277/278, and MMBB 380.

9 credits of approved electives from the following list are required (categories are intended only as a guide for student and advisor use). Additional classes can be substituted with prior approval of adviser and chairperson.

Natural History

Biol 341 Systematic Botany (3 cr)
Biol 478 Animal Behavior (3 cr)
Biol 481 Ichthyology (4 cr)
Biol 483 Mammalogy (3 cr)
Biol 489 Herpetology (4 cr)
Ent 440 Insect Identification (4 cr)
WLF 482 Ornithology (4 cr)

Anatomy/Physiology

…

7. Change the curricular requirements of **45-Credit Biological Sciences Composite Teaching Major** (B.S.Ed.) [**Effective**: Summer 2009]

A. 45-CREDIT COMPOSITE TEACHING MAJOR

Biol 115 Cells and the Evolution of Life (4 cr)
Biol 116 Organisms & Environments (4 cr)
Biol 210 Genetics (4 cr)
Biol 212 Molecular and Cellular Biology (4 cr)
Biol 213 Principles of Biological Structure and Function (4 cr)
Biol 314 Ecology and Population Biology (4 cr)
Biol 421 Advanced Evolutionary Biology (3 cr)
Chem 111 Principles of Chemistry or Chem 101 Introduction to Chemistry (4 cr)
Chem 275 Carbon Compounds or Chem 277 Organic Chemistry I (3 cr)
Phys 111 General Physics I (4 cr)
Phys 112 General Physics II (4 cr)
Electives (see list of electives for Biology major in Part 5) (3-4 cr)

Business

1. Change the title of the following course [**Effective**: Summer 2009]

Econ ID&WS526 Master Microeconomics Analysis (3 cr) WSU EconS 526
Same as AgEc 526. Master-level, calculus-based producer and consumer theory with selected managerial economics topics. (Fall only)
Prereq or **Coreq:** AgEc 427 or Econ 427 or Permission

Chemistry

1. Add the following courses [**Effective**: Summer 2009]

Chem J414/J514 Applications of Nanomaterials in Biomolecular Engineering (3 cr)
Interdisciplinary approach to the fundamental chemistry, physics, biology and engineering of matter and processes at the crossroads of microscopic and molecular scales; integration of the language and tools of multiple disciplines toward technological applications of nanomaterials in the life sciences and medicine. Additional projects/assignments required for graduate credit. (Spring only)
Prereq: Senior or Graduate standing in the Colleges of Science or Engineering

Chem 514 Applications of Nanomaterials in Biomolecular Engineering (3 cr)
See Chem J414/J514.

2. Change the title of the following courses [**Effective**: Summer 2009]

Chem J472/J572 ~~Rational Design of Pharmaceuticals~~Medicinal Chemistry (3 cr)
Synthetic chemistry necessary for design and preparation of medicinal agents, and mechanistic chemistry germane to action of pharmaceuticals. Graduate students are required to write an original research proposal on a topic related to drug discovery. (Alt/yrs)
Prereq or **Coreq:** Chem 473 or Chem 476; or Permission

Computer Science

1. Add the following course [**Effective**: Summer 2009]

CS 573 Stochastic Optimization for Industrial and Laboratory Applications (3 cr)
The course examines industrial and research applications of stochastic optimization techniques. It explores the difficulties of these optimizations through a series of case studies.
Prereq: CS 472 or CS 572; or Permission

Conservation Social Sciences

1. Drop the following course [**Effective**: Summer 2009]

CSS 470 Interdisciplinary Natural Resource Planning (3 cr)
Same as ForP/For/REM 470. Examines how ecological and social sciences are interrelated and how they influence natural resource decisions; students learn how to work effectively in teams to make sound management decisions and communicate those decisions to a variety of constituents. Three hrs of lec and three hrs of recitation a wk; one 2-day field trip.
Prereq: Senior standing, CSS 235 or For 235, and For 221 or REM 221; or Permission
Recommended Substitution: None

2. Change the prerequisites of the following courses [**Effective**: Summer 2009]

CSS 385 Conservation Management and Planning I (3 cr)
Intro to theory, processes, and techniques for the management and planning of conservation systems including conservation organizations, natural areas, and their uses; focuses on resource and user management programs and techniques such as programming, budgeting, financing, contracting, and personnel management processes as well as conservation planning processes including operational, strategic, and long-range planning for natural sites and larger landscapes. Field trips may be required. (Fall only)
Prereq: Junior or Senior standing ~~CSS 287 or Permission~~

CSS 386 Conservation Management and Planning II (3 cr)
Advanced theory, processes, and techniques for the management and planning of conservation systems including conservation organizations, natural areas, and their uses; focuses on resource and user management programs and techniques such as programming, budgeting, financing, contracting, and personnel management processes, as well as conservation planning processes including operational, strategic, and long-range planning for natural sites and larger landscapes. Field trips required. (Spring only)
Prereq: ~~CSS 310,~~ CSS 385 and Junior or Senior standing~~,~~ ; or Permission

3. Change the curricular requirements of **Resource Recreation and Tourism** (B.S.Res.Rc.) [**Effective**: Summer 2009]

Students must select any academic minor (including those in the Department of Conservation Social Sciences) and attend one, two-week long field studies course during summer session. Special fees are required for this and a few other courses. To graduate a student must earn an average GPA of 2.30 or higher in all CSS courses.

Required Course work includes the university requirements (see regulation j-3) and:

Biol 102 Biology and Society or Biol 115 Cells and the Evolution of Life (4 cr)
~~Chem 101 Introduction to Chem I or Chem 111 Principles of Chem I or Geol 101 Physical Geology (4 cr)~~
Comm 101 Fundamentals of Public Speaking or one semester of a foreign language (2-4 cr)
Econ 202 or 201 Principles of Economics (3 cr)
For 221 Ecology or REM 221 Ecology (3 cr)
For 375 Introduction to Spatial Analysis for Natural Resource Management or LArc 395 GIS in Land Planning or Geog 385 GIS Primer (3 cr)
Math 143 Pre-calculus Algebra and Analytic Geometry or 160 Survey of Calculus or 170 Survey of Calculus II (3-4 cr)
NR 101 Exploring Natural Resources (taken simultaneously with CSS 287) (1 cr)
PolS 101 Intro to Political Science and American Government or PolS 275 American State and Local Government (3 cr)
~~PolS 462 Natural Resource Policy or PolS 364 Politics of the Environment or For 484 Forest Policy and Administration (2-3 cr)~~
CSS 235 Society and Natural Resources (3 cr)
CSS 287 Foundations of Conservation Leadership and Management (taken simultaneously with NR 101) (2 cr)
CSS 304 Conservation Social Sciences Field Studies (3 cr)
CSS 310 Social Research Methods in Conservation (4 cr)
~~CSS 383 Resource Economics for Environmental Policymaking or Econ 385 Environmental Economics (3 cr)~~
CSS 385 Conservation Management and Planning I (3 cr)
CSS 386 Conservation Management and Planning II (3 cr)
CSS 387 Environmental Communication Skills (3 cr)
~~CSS/For/REM/WLF/Fish/ForP 470 Interdisciplinary Natural Resource Planning (3 cr)~~

CSS 481 Conservation Leadership (3 cr)
CSS 489 Personalities and Philosophies in Conservation (2 cr)
Stat 251 Statistical Methods (3 cr)
One writing course, such as Engl 207, 208, 209, 313, 316, 317 (3 cr)
One of the following (4 cr):
- Chem 101 Introduction to Chem I (4 cr)
- Chem 111 Principles of Chem I (4 cr)
- Geol 101 Physical Geology (4 cr)

One of the following (2-3 cr):
- CSS 364 Politics of the Environment (3 cr)
- CSS 462 Natural Resource Policy (3 cr)
- For 484 Forest Policy and Administration (2 cr)

One of the following (3 cr):
- CSS 383 Resource Economics for Environmental Policymaking
- Econ 385 Environmental Economics (3 cr)
- Econ 447 International Development Economics (3 cr)

~~One of the following (2-4cr):~~
- ~~For 320 Dendrology (3 cr)~~
- ~~LArc 288 Plant Materials I (3 cr)~~
- ~~PlSc 205 General Botany (4 cr)~~
- ~~REM 353 Rangeland Plant Ident and Ecology (3 cr)~~
- ~~REM 452 Western Wildland Landscapes (2 cr)~~

One of the following (3 cr):
- For 426 Wildland Fire Ecology and Management (3 cr)
- For 429 Landscape Ecology (3 cr)
- REM 440 Wildland Restoration Ecology (3 cr)
- REM 459 Rangeland Ecology (2 cr) and REM 460 Rangeland Ecology Current Topics and Field Studies (1 cr)
- WLF 314 Wildlife Ecology I (3 cr)

Two of the following (6 cr):
- Anth 100 Introduction to Anthropology (3 cr)
- Psyc 101 Introduction to Psychology (3 cr)
- Soc 101 Introduction to Sociology (3 cr)

14-15 credits (if not chosen above) from the following, in at least 2 disciplines with at least 2 courses in one discipline:
- AgEc 477 Law, Ethics, and the Environment (3 cr)
- Anth 329 North American Indians (3 cr)
- Anth 410 Research Methods in Anthropology (3 cr)
- Anth 428 Social and Political Organization (3 cr)
- Anth 462 Human Issues in International Development (3 cr)
- ~~Arch 483 Urban Theory and Issues (3 cr)~~
- Comm 331 Conflict Management (3 cr)
- Comm 335 Intercultural Communication (3 cr)
- Comm 433 Organizational Comm. Theory and Research (3 cr)
- CSS 364 Politics of the Environment (3 cr)
- CSS 462 Natural Resource Policy (3 cr)
- CSS 486 Public Involvement in Natural Resource Management (3 cr)
- CSS 487 Environmental Education (3 cr)
- CSS 490 Wilderness and Protected Area Management (3 cr)
- CSS 493 International Land Preservation and Conservation Systems (3 cr)
- ~~CSS 494 Public Relations for Natural Resources Professionals (3 cr)~~
- CSS 498 Internship (3-6 cr)
- Econ 385 Environmental Economics (3 cr)
- Econ 407 Public Finance (3 cr)
- Econ 441 Labor Economics (3 cr)
- Econ 447 Economics of Developing Countries (3 cr)
- EnvS 479 Introduction to Environmental Regulations (3 cr)
- EnvS 482 Natural Resource Policy and Law (3 cr)
- For 408 Community/Urban Forestry (2 cr)
- For 484 Forest Policy and Administration (2 cr)
- Geog 330 Urban Geography (3-4 cr)
- Geog 350 Geography of Development (3-4 cr)
- Geog 360 Population Dynamics and Distribution (3-4 cr)
- Geog 420 Land, Resources, and Environment (3 cr)
- Hist 424 American Environmental History (3 cr)
- JAMM 350 Public Relations Writing and Production (3 cr)
- JAMM 444 Communication and Public Opinion (3 cr)
- JAMM 452 Public Relations Campaign Design (3 cr)
- JAMM 458 Public Relations Case Studies and Issues Mgmt (3 cr)
- Phil 452 Environmental Philosophy (3 cr)
- Phil 472 Social and Political Philosophy (3 cr)
- PolS 275 American State and Local Government (3 cr)
- PolS 333 American Political Culture (3 cr)
- ~~PolS 364 Politics of the Environment (3 cr)~~
- PolS 428 American Political Thought (3 cr)
- PolS 440 International Organizations and Law (3 cr)
- PolS 451 Public Administration (3 cr)
- PolS 454 Public Organization Theory (3 cr)

~~PolS 462 Natural Resource Policy (3 cr)~~
PolS 480 Politics of Development (3 cr)
Psyc 305 Developmental Psychology (3 cr)
Psyc 320 Introduction to Social Psychology (3 cr)
Psyc 325 Cognitive Psychology (3 cr)
Soc 313 Collective Behavior (3 cr)
Soc 340 Social Change & Globalization (3 cr)
Soc 343 Political Sociology (3 cr)
Soc 414 Development of Social Theory (3 cr)
Soc 423 Social Class & Stratification (3 cr)
Soc 424 Sociology of Gender (3 cr)
Soc 427 Racial and Ethnic Relations (3 cr)
Soc 450 Dynamics of Social Protest (3 cr)
Electives to total 128 cr for the degree

4. Change the curricular requirements of **Environmental Communication** (Minor) [**Effective**: Summer 2009]

CSS 387 Environmental Communication Skills (3 cr)
CSS 486 Public Involvement in Natural Resource Management (3 cr)
CSS 487 Environmental Education (3 cr)
~~CSS 494 Public Relations for Natural Resources Professionals (3 cr)~~
JAMM 121 Media Writing and Information Gathering (3 cr)
JAMM 252 Principles of Public Relations (3 cr)
~~At least one~~Two course~~s~~ from the following (~~3~~ 6 cr):
Art 280 Understanding Photography (3 cr)
Comm 331 Conflict Management (3 cr)
Comm 347 Persuasion (3 cr)
Comm 431 Professional Presentation Techniques (3 cr)
~~JAMM 252 Principles of Public Relations (3 cr)~~
JAMM 265 Principles of Advertising (3 cr)
JAMM 275 Introduction to Video/Television & Digital Media Production (3 cr)
JAMM 361 Advertising Creativity (3 cr)
JAMM 425 Feature Article Writing (3 cr)

5. Change the curricular requirements of **Outdoor Recreation Leadership** (Minor) [**Effective**: Summer 2009]

Rec 320 Outdoor Recreation Leadership (2 cr)
Courses selected from the following (~~12~~ 13-14 cr):
CSS 287 Foundations of Conservation Leadership and Management (taken simultaneously with NR 101) (2 cr)
CSS 387 Environmental Communication Skills (3 cr)
CSS 401 Practicum in Tutoring (1 cr)
CSS 481 Conservation Leadership (3 cr)
CSS 487 Environmental Education (3 cr)
CSS 490 Wilderness and Protected Area Management (3 cr)
~~CSS 491 Wilderness Leadership for Personal Growth (3 cr)~~
H&S 288 First Aid: Emergency Response or Rec 290 Wilderness First Responder (2-3 cr)
NR 101 Exploring Natural Resources (taken simultaneously with CSS 287) (1 cr)
Rec 125 Outdoor Leisure Pursuits (2 cr)
Rec 215 River Reading and Whitewater Safety (1 cr)
Rec 243 Recreation Activities (2 cr)
Rec 254 Camp Leadership (3 cr)
Rec 256 Camp Counseling Practicum (2-3 cr)
Rec 280 Recreation Practicum (1 cr)
Rec 321 Wilderness Medicine and Evacuation (1 cr)
Rec 420 Experiential Education (2 cr)
Rec 495 Practicum in Tutoring (1 cr)
Courses selected from the following (5 cr):
CSS 204 Special Topics (course approved by advisor)
PEB 106 Individual and Dual Sports: ~~Fly Fishing~~ Wall Climbing(1 cr)
PEB 108 Swimming: Scuba (1 cr)
Rec 106 Introductory Arboricultural Tree Climbing Techniques (1 cr)
Rec 204 Special Topics (course approved by advisor)
Rec 211 Fly Tying (1 cr)
Rec 212 Beginning Fly Fishing (1 cr)
Rec 213 Advanced Fly Fishing (2 cr)
Rec 214 Western Angling (2 cr)
Rec 217 Wild Game Calling/Viewing (1 cr)
Rec 219 Archery (1 cr)
Rec 220 Rock Climbing (1 cr)
Rec 221 Mountaineering (2 cr)
Rec 222 Cross Country Skiing (1 cr)
Rec 223 Winter Skills (2 cr)
Rec 224 Whitewater Rafting (1 cr)
Rec 225 Kayaking (1 cr)
Rec 226 Whitewater Canoeing (1 cr)

Rec 227 Mountain Biking (1 cr)
Approved t~~T~~echnical competency (contact the CSS or HPERD department~~s~~; practical exam administered by Rec and/or CSS faculty) (max 4 cr)

6. Change the curricular requirements of **Parks, Protected Areas and Wilderness Conservation** (Minor) [**Effective**: Summer 2009]

CSS 490 Wilderness and Protected .Area Management or CSS 493 International Land Preservation and Conservation Systems (3 cr)
WLF 440 Conservation Biology (3 cr)
One of the following (3-4 cr):
Biol 314 Ecology and Population Biology (4 cr)
For 221 Ecology (3 cr)
REM 221 Ecology (3 cr)
A general ecology course (3 cr)
Courses selected from the following (11~~19~~ cr~~edits~~):
AIST 401 Contemporary American Indian Issues (3 cr)
CSS 304 Conservation Social Sciences Field Studies (3 cr)
CSS 385 Conservation Management and Planning I (3 cr)
CSS 386 Conservation Management and Planning II (3 cr)
~~CSS 387 Environmental Communication Skills (3 cr)~~
CSS 489 Personalities and Philosophies in Conservation (2 cr)
CSS 490 Wilderness and Protected .Area Management (3 cr)
~~CSS 491 Wilderness Leadership for Personal Growth (3 cr)~~
CSS 493 International Land Preservation and Conservation Systems (3 cr)
CSS 496 Monitoring Impacts in Protected Areas and Wilderness (3 cr)
~~For 221 Ecology or a general ecology course or Biol 314 Ecology and Population Biology or CSS 304 Conservation Social Sciences Field Studies (2-4 cr)~~
For 429 Landscape Ecology (3 cr)
Geog 420 Land, Resources, and Environment (3 cr)
Hist 424 American Environmental History (3 cr)
Phil 452 Environmental Philosophy (3 cr)
~~WLF 440 Conservation Biology (3 cr)~~

7. Change the curricular requirements of **Sustainable Tourism and Leisure Enterprises** (Minor) [**Effective**: Summer 2009]

Note: This academic minor is offered through both the College of Natural Resources and the College of Education.

Bus 321 Marketing (3 cr)
~~CSS 181 Introduction to Hospitality Services Industries (3 cr)~~
~~CSS 381/Rec 382 Hospitality Management and Organization (3 cr)~~
CSS 385 Conservation Management and Planning I (3 cr)
~~CSS 494 Public Relations for Natural Resources Professionals (3 cr)~~
Rec 340 Leisure and Tourism Enterprises (3 cr)
~~One c~~Course selected from the following (~~3~~-11-12 cr):
Acct 201 Introduction to Financial Accounting (3 cr)
Acct 202 Introduction to Managerial Accounting (3 cr)
AgEc 477 Law, Ethics, and the Environment (3 cr)
AIST 401 Contemporary American Indian Issues (3 cr)
Bus 420 Promotional Strategy (3 cr)
~~CSS 385 Conservation Management and Planning I (3 cr)~~
CSS 181 Introduction to Hospitality Services Industries (3 cr)
CSS 236 Tourism, Society and Business (3 cr)
CSS 381 Hospitality Management and Organization (3 cr)
CSS 386 Conservation Management and Planning II (3 cr)
CSS 493 International Land Preservation and Conservation Systems (3 cr)
CSS 498 Internship (cr arr)
Geog 340 Business Location Decisions (3 cr)
Rec 204 Special Topics (cr arr)
Rec 254 Camp Leadership (3 cr)
Rec 280 Recreation Practicum (1 cr)
Rec 487 Recreation Program Planning and Marketing (1 cr)
~~Minimum of 18 cr required for the minor~~

Counseling and School Psychology, Special Education, and Educational Leadership

1. Add the following courses [**Effective**: Summer 2009]

EdAd 567 Administration of Teacher Development (3 cr)
Application of leadership skills including mentoring, cognitive coaching, crucial conversations and innovative state / local models designed to increase student achievement through the professional development of teachers. (Fall only)

EdAd 575 Superintendent as Researcher (3 cr)
An examination of applied research methods and topics associated with educational reform at the superintendent of school level. (Fall only)

EdAd 610 Issues in Educational Governance (3 cr)
An examination of current topics including ethics, federalism, internationalism and trend analysis of and projections for education reform. (Fall only)
Prereq: Enrollment to a doctoral program

EDSP 300 Educating for Exceptionalities (2 cr)
Introduction to exceptionalities and strategies for addressing individual differences to ensure student success in the classroom.

EDSP 544 Advanced Applied Behavior Analysis and Positive Behavior Support (3 cr)
Focus on advanced applications of applied behavior analysis, positive behavior support for students with significant behavioral challenges. Students map positive behavior support practices; complete comprehensive functional assessment of students with conduct disorders, mental illness, and cognitive impairment; develop comprehensive data-based behavioral supports plan; practice application of advanced behavior change techniques. (Spring only)
Prereq: EDSP 540 and a standard exceptional child certificate or equivalent

EDSP 578 Curriculum and Assessment for Students with Severe Disabilities I (3 cr)
First of 2 courses on skills in assessment, design, implementation of instructional programs; measurement, analysis, evaluation; definitions, history; person/family-centered/culturally competent planning, teaming, self-determination. Emphasis on current issues: access to general curriculum, standards-based education, alternate assessment, paraprofessionals. Application of assessment and curriculum in communication, positive behavior supports. (Fall only)
Prereq: Standard exceptional child certificate or equivalent

EDSP 579 Curriculum and Assessment for Students with Severe Disabilities II (3 cr)
Second of 2 courses on assessment, design and implementation of instructional programs; measurement and progress monitoring; applications in sensory impairments, motor, self-care skills, peer relationships, general curriculum access in reading, math, social studies, science; community referenced instruction, transition and vocational preparation, and assistive technology. (Spring only)
Prereq: Standard exceptional child certificate or equivalent

2. Re-activate the following course [**Effective**: Summer 2009]

EDSP 550 Alternative and Augmentative Communication Strategies (3 cr)
A process for decision making, models for assessment, assessment strategies, and implementation steps for designing alternative or augmentative communication system. (Spring only)
Prereq: EDSP 549 and a standard exceptional child certificate or equivalent

3. Change the prerequisites of the following course [**Effective**: Summer 2009]

EDSP 350 Language and Communication Development and Disorders (3 cr)
Overview of language, communication, and socio/emotional development and their interaction with cognitive and learning disabilities; legal and cultural issues; informal assessments and teaching strategies; models for collaboration with speech and language professionals. (Fall only)
Prereq: ED 201 or FCS 210

4. Change the curricular requirements of **Special Education** (B.S.Ed.) [**Effective**: Summer 2009]

Required course work includes the completion of the ~~Idaho Technology Performance Assessment;~~ the Praxis II in Special Education ~~(10542 and 20353,)~~ plus any Praxis test listed in the below options, and the completion of the Idaho Comprehensive Literacy Assessment; the university requirements (see regulation J-3) and:

Comm 101 Fundamentals of Public Speaking (2 cr)
~~ED 201 Diverse Learners in Schools and Social/Cultural Contexts (3 cr)~~
~~ED 301 Principles of Learning and Development in Education (3 cr)~~
~~ED 302 Curriculum, Instruction, and Assessment Strategies (3 cr)~~
~~ED 401 Professional Role Development (3 cr)~~
EDCI 201 Contexts of Education (2 cr)
EDCI 301 Learning, Development, and Assessment (3 cr)
EDCI 302 Teaching Culturally Diverse Learners (4 cr)
EDCI 401 Internship Seminar (1 cr)
EDSP 300 Educating for Exceptionalities (2 cr)
EDSP 325 Classroom Application of Learning Theories (2 cr)
EDSP 350 Languages and Communication Development and Disorders (3 cr)
EDSP 351 Family and Community Involvement (2 cr)
EDSP 390 Special Education/Field Experience (2-3 cr)
EDSP 424 Students with Behavioral and Emotional Issues (2 cr)
EDSP 425 Evaluation of Children and Youth (2 cr)
EDSP 426 Developing Instructional Programs (2 cr)
EDSP 427 Curriculum Development and Adaptation (3 cr)
EDSP 428 Issues in Secondary Special Education (2 cr)

EDSP 484 Special Education Internship II (14 cr)

Curriculum and Instruction

1. Drop the following courses [**Effective**: Summer 2009]

EDCI 512 Standards Assessment and Accountability (3 cr)
Examines the application of standards and data analysis as factors that influence school and district performance.
Recommended Equivalent: EDCI 572

EDCI 527 Instructional Theory into Practice (3 cr)
Applications of instructional theory to the areas: teaching to an objective; diagnostic and prescriptive teaching; teaching to enhance motivation; reinforcement, transfer, retention, and rate and degree of learning; enhancement of pupil self-concept; and critical decisions underlying such techniques. (Spring only)
Recommended Equivalent: EDCI 524

EDCI 553 Idaho Comprehensive Literacy Course: Language Learning and Literacy Development (1 cr)
May not receive credit for both EDCI 553 and 552. Refinement of teachers' knowledge of both the content and approaches for teaching decoding, morphology, and fluency as a part of a comprehensive, balanced reading program.
Recommended Equivalent: EDCI 552

EDCI 554 Idaho Comprehensive Literacy Course: Reading Comprehension Research and Best Practices (1 cr)
May not receive credit for both EDCI 554 and 552. Review of the research base supporting reading comprehension instruction.
Recommended Equivalent: EDCI 552

EDCI 555 Idaho Comprehensive Literacy Course: Reading Assessment Diagnosis and Remediation (1 cr)
May not receive credit for both EDCI 555 and 552. Enhancement of teachers' knowledge of reading assessment procedures and methods for remediating students' reading difficulties.
Recommended Equivalent: EDCI 552

2. Add the following courses [**Effective**: Summer 2009]

EDCI 201 Contexts of Education (2 cr)
Introduction to the philosophical, social, cultural, historical, legal and political contexts of schooling. Develops an understanding of the sources of curriculum, standards, and assessments. Explores what it means to become a successful teacher committed to student success through the development of observation and analysis skills. Requires additional 20 hours of service learning.
Recommended Equivalent: ED 201

EDCI 301 Learning, Development, and Assessment (3 cr)
Exploration of theories of learning and human development and the use of this knowledge to support student success in classroom settings. Provides a practical understanding of motivation as a classroom management tool. Develops a fundamental understanding of assessment terminology; the uses of assessment and its relationship to student success.
Recommended Equivalent: ED 301

EDCI 302 Teaching Culturally Diverse Learners (4 cr)
An examination of cultural and linguistic diversity in classrooms. Explores strategies for creating the culturally inclusive classroom that values diversity and supports student success. Examines the use of instructional planning as a tool for motivation and classroom management. Includes 45 hours of practicum in K-12 classrooms.
Prereq: EDCI 301 or FCS 234; and admission to teacher education program
Recommended Equivalent: ED 302

EDCI 401 Internship Seminar (1 cr)
A review of the professional commitments and responsibilities and the interactions and partnerships that support student learning and well-being.
Coreq: EDCI 483, EDCI 484, EDCI 485, ED 430, ED 431, PTTE 484, AgEd 460, FCS 471, or MusT 432; or Permission

EDCI 531 Mathematics Education (3 cr)
Students will examine relevant research and practical knowledge shared by the mathematics education community. Includes the examination of history, theoretical perspectives, student learning, and pedagogy. (Summer Only)

EDCI 532 Social Studies Education (3 cr)
Students will examine relevant research and practical knowledge shared by the social studies education community. Includes the examination of history, theoretical perspectives, student learning, and pedagogy. (Summer Only)

3. Change the prerequisites of the following course [**Effective**: Summer 2009]

EDCI 320 Foundations of Literacy Development (4 cr)
Research-based principles and techniques for teaching literacy; emphasis on content, methods, and materials.

Prereq: ED 201 or FCS 210

4. Change the curricular requirement of **Early Childhood Development and Education** (B.S.Erly.Chldhd.Dev.Ed.) [**Effective**: Summer 2009]

Coursework will prepare students to be recommended for Idaho Early Childhood Education/Early Childhood Special Education (ECE/ECSE) Blended Teacher Certification. Students will be certified to teach children birth through grade three.

The minimum credits required for graduation are 139, including at least 36 credits at the 300-level or above. Required course work includes the university requirements (see regulation J-3) and:

~~Art 100 World Art and Culture or MusH 101 Survey of Music (3 cr)~~
Comm 101 Fundamentals of Public Speaking (2 cr)
~~Dan 360 Children's Dance (1 cr)~~
~~ED 302 Curriculum, Instruction & Assessment Strategies (3 cr)~~
~~ED 401 Professional Role Development (2 cr)~~
EDCI 302 Teaching Culturally Diverse Learners (4 cr)
EDCI 401 Internship Seminar (1 cr)
EDSP 300 Educating for Exceptionalities (2 cr)
EDSP 325 Classroom Applications of Learning Theories (2 cr)
EDSP 350 Language, Communication Development, and Disorders (3 cr)
~~EDSP 351 Family & Community Involvement (2 cr)~~
EDSP 460 Early Childhood Assessment (3 cr)
EDSP 461 Early Childhood SPED Curriculum (3 cr)
EDSP 484 Special Education Internship II (7 cr)
EDSP 490 Infant Practicum (7-10 cr)
EDCI 320 Foundations of Literacy Development (4 cr)
EDCI 321 Literature for Children (3 cr)
EDCI 322 Integrated Language & Literacy (3 cr)
EDCI 325 Elementary Art Education (3 cr)
EDCI 327 Elementary Mathematics Education (3 cr)
EDCI 328 Elementary Social Studies Education (3 cr)
EDCI 329 Elementary Science Education (3 cr)
EDCI 408 Integrated Methods Practicum I (1 cr)
EDCI 409 Integrated Methods Practicum II (1 cr)
EDCI 483 Elementary Internship I (7 cr)
~~EDCI 484 Elementary Internship II (15 cr)~~
~~Engl 257 or 258 Literature of Western Civilization (3 cr)~~
FCS 205 Concepts in Human Nutrition (3 cr)
FCS 210 Intro to Early Childhood Educ (2 cr)
FCS 234 Infancy and Early Childhood Dev (3 cr)
FCS 235 Principles & Methods of Child Observation (3 cr)
FCS 333 Developmental Curriculum for Young Children (4 cr)
FCS 340 Parent-Child Relationships in Family & Community (3 cr)
FCS 435 Feeding Young Children in Group Settings (1 cr)
FCS 436 Theories of Child & Family Development (3 cr)
FCS 497 Practicum: Preschool (8 cr)
Math 301 Early Childhood Mathematics (4 cr)
MusT 381 Elementary School Music Methods for Nonmajors (3 cr)
PEP 350 Elementary Health & Physical Education (3 cr)
Stat 150 Introduction to Statistics or Math 143 Pre-calculus Algebra and Analytic Geometry (3 cr)
US History course (Hist) or US Government course (PolS) (3 cr)
English Literature Elective (3 cr)
~~English electives (9 cr)~~
Humanities elective (3 cr)
Natural Science electives (8 cr)
Social Science electives ~~taken from the following disciplines: Anth, Econ, Geog, Hist, PolS, Soc.~~ (9 cr)

5. Change the curricular requirements of **Elementary Education** (B.S.Ed.) [**Effective**: Summer 2009]

Required course work includes the university requirements (see regulation J-3), successful completion of Praxis II test and the Idaho Comprehensive Literacy Assessment parts 1 and 2 prior to the internship. Maintain at least a grade of C in the following course requirements:

Comm 101 Fundamentals of Public Speaking (2 cr)
EDCI 201 Contexts of Education (2 cr)
EDCI 301 Learning, Development, and Assessment (3 cr)
EDCI 302 Teaching Culturally Diverse Learners (4 cr)
EDCI 401 Internship Seminar (1 cr)
~~ED 201 Diverse Learners in Schools and Social/Cultural Contexts (3 cr)~~
~~ED 301 Principles of Learning and Development in Education (3 cr)~~
~~ED 302 Curriculum, Instruction, and Assessment Strategies (3 cr)~~
EDCI 320 Foundations of Literacy Development (4 cr)
EDSP 300 Educating for Exceptionalities (2 cr)

Hist 101 or Hist 102 History of Western Civilization (3 cr)
Hist 111 or Hist 112 Intro to U.S. History (3 cr)
Math 143 Pre-calculus Algebra and Analytic Geometry (3 cr)
Math 235 Mathematics for Elementary Teachers I (3 cr)
Math 236 Mathematics for Elementary Teachers II (3 cr)
MusT 381 Elementary School Music Methods for Nonmajors (3 cr)
Psyc 305 Developmental Psychology (3 cr)
Advanced composition elective (3 cr)
Engl 207 Persuasive Writing (3 cr)
Engl 208 Personal and Exploratory Writing (3 cr)
Engl 209 Inquiry-Based Writing (3 cr)
Engl 291 Creative Writing: Poetry (3 cr)
Engl 292 Creative Writing: Fiction (3 cr)
Engl 309 Advanced Prose Writing (3 cr)
Engl 313 Business Writing (3 cr)
Engl 317 Technical Writing (3 cr)
Engl 401 Writing Workshop for Teachers (3 cr)
Earth science elective (4 cr):
Geog 100 Physical Geography (4 cr)
Geol 101 Physical Geology (4 cr)
Physical science elective (4 cr):
Chem 101 Introduction to Chemistry I (4 cr)
Chem 111 Principles of Chemistry I (4 cr)
Chem 112 Principles of Chemistry II (5 cr)
Phys 103 General Astronomy and Phys 104 Astronomy Lab (4 cr)
Phys 111 General Physics I (4 cr)
Life science elective (4 cr):
Biol 102 Biology and Society (4 cr)
Biol 115 Cells and the Evolution of Life (4 cr)
English elective in composition or literature (excluding Engl 101 and 102) (3 cr)
Literature elective (3 cr)
Social science electives other than psychology (6 cr)

Elementary Education Major Requirements

Mathematics/Science/Social Studies/Physical Education Block:
EDCI 327 Elementary Mathematics Education (3 cr)
EDCI 328 Elementary Social Studies Education (3 cr)
EDCI 329 Elementary Science Education (3 cr)
EDCI 408 Integrated Methods Practicum I (1 cr)
PEP 350 Elementary Physical and Health Education (3 cr)

Literacy/Arts Education Block:
EDCI 321 Literature for Children (3 cr)
EDCI 322 Integrated Language and Literacy (3 cr)
EDCI 325 Elementary Art Education (3 cr)
EDCI 409 Integrated Methods Practicum II (1 cr)
Dan 360 Children's Dance (1 cr)
TheF 411 Theatre Methods (1 cr)

Internship Year:
First Semester:
EDCI 466 Literacy Assessment and Intervention (3 cr)
EDCI 483 Elementary Internship I (7 cr)

Second Semeter:
~~ED 401 Professional Role Development (3 cr)~~
EDCI 484 Elementary Internship II (15 cr)

It is highly recommended that elementary students who are planning to teach grades 6, 7, and 8 select an area of concentration that meets state endorsement standards for secondary education. Students should consult with their advisor for details.

6. Change the curricular requirements of **Secondary Education** (B.S.Ed.) [**Effective**: Summer 2009]

Required course work includes the university requirements (see regulation J-3); successful completion of Praxis II test(s) in the student's content area; one 45-credit teaching major or one 30-credit teaching major and one 20-credit teaching minor (see "Teaching Majors and Minors" below); and maintain at least a grade of C in the following course requirements:

Comm 101 Fundamentals of Public Speaking (2 cr)
~~ED 201 Diverse Learners in Schools and Social/Cultural Contexts (3 cr)~~
~~ED 301 Principles of Learning and Development in Education(3 cr)~~
~~ED 302 Curriculum, Instruction, and Assessment Strategies (3 cr)~~
~~ED 401 Professional Role Development (3 cr)~~
EDCI 201 Contexts of Education (2 cr)
EDCI 301 Learning, Development, and Assessment (3 cr)

EDCI 302 Teaching Culturally Diverse Learners (4 cr)
EDCI 401 Internship Seminar (1 cr)
EDCI 463 Literacy Methods for Content Learning (3 cr)
EDCI 485 Secondary Internship (15 cr)
EDSP 300 Educating for Exceptionalities (2 cr)
Psyc 101 Intro to Psychology or Psyc 305 Developmental Psychology (3 cr)
Advanced composition course (Engl 207, Engl 208, Engl 209, Engl 291, Engl 292, Engl 309, Engl 313, Engl 317 or Engl 401) (3 cr)
Mathematics elective (math or statistics UI core course) (3 cr)
Special methods sequence (EDCI 437/EDCI 447, EDCI 431/ EDCI 441, EDCI 432/ EDCI 442, EDCI 433/ EDCI 443, EDCI 434/ EDCI 454, or EDCI 436/ EDCI 446) (4 cr)

7. Change the curricular requirements of **22-Credit French Teaching Minor** (B.S.Ed.) [**Effective**: Summer 2009]

Fren 101-102 Elementary French I-II (8 cr)
Fren 201-202 Intermediate French I-II (8 cr)
Approved upper-div French electives (either Fren 301 or 302 is reqd; lab-based and lit in translation courses are not acceptable) (6 cr)

In addition to the above teaching requirements, the following special methods course is also required:
EDCI 437 Secondary Foreign Language Methods (3 cr)

Note: A minor in French of less than 22 credits is not acceptable.

8. Change the curricular requirements of **22-Credit German Teaching Minor** (B.S.Ed.) [**Effective**: Summer 2009]

Germ 101-102 Elementary German (8 cr)
Germ 201-202 Intermediate German (8 cr)
Approved upper-div German electives (either Germ 301 or 302 is reqd; lab-based and lit in translation courses are not acceptable) (6 cr)

In addition to the above teaching requirements, the following special methods course is also required:
EDCI 437 Secondary Foreign Language Methods (3 cr)

Note: A minor in German of less than 22 credits is not acceptable.

9. Change the curricular requirements of **23-Credit Latin Teaching Minor** (B.S.Ed.) [**Effective**: Summer 2009]

Latn 101-102 Elementary Latin I-II (or equivalent) (8 cr)
FLEN 243 English Word Origins (2 cr)
FLEN 364 Literature of Rome or 442 Civilization of Ancient Rome (3 cr)
Latin at the 300 and/or 400 level (10 cr)

In addition to the above teaching requirements, the following special methods course is also required:
EDCI 437 Secondary Foreign Language Methods (3 cr)

Note: A minor in Latin of less than 20 credits is not acceptable.

10. Change the curricular requirements of **22-Credit Spanish Teaching Minor** (B.S.Ed.) [**Effective**: Summer 2009]

Span 101-102 Elementary Spanish I-II (8 cr)
Span 201-202 Intermediate Spanish I-II (8 cr)
Approved upper-div Spanish electives (either Span 301 or 302 reqd; lab-based and lit in translation courses are not acceptable) (6 cr)

In addition to the above teaching requirements, the following special methods course is also required:
EDCI 437 Secondary Foreign Language Methods (3 cr)

Note: A minor in Spanish of less than 22 credits is not acceptable.

11. Change the curricular requirements of **24-Credit History Teaching Minor** (B.S.Ed.) [**Effective**: Summer 2009]

~~History courses chosen from the following (9 cr):~~
~~Hist 101-102 History of Civilization (6 cr)~~
~~Hist 111-112 Introduction to U.S. History (6 cr)~~
~~Hist 180 Introduction to East Asian History (3 cr)~~
Hist 101 and Hist 102 History of Civilization (6 cr)
Hist 111 and Hist 112 Introduction to U.S. History (6 cr)
PolS 101 Introduction to Political Science and American Government or PolS 275 American State and Local Government (3 cr)
~~American government (3 cr)~~
Upper-division history courses, including at least (9 cr):
3 cr in U.S., Latin American, or African history~~, and at least~~
3 cr in Ancient, European or Asian history~~ (12 cr)~~

12. Change the curricular requirements of **45-Credit Social Science Composite Teaching Major** (B.S.Ed.) [**Effective**: Summer 2009]

The basic objective of this teaching major is to provide the undergraduate student with the preparation that leads to teaching social studies in the public schools. To obtain a social studies endorsement in the state of Idaho, a student must pass the Praxis II exam in both social studies content knowledge and in one of the other areas listed below where they have a minimum of 20 credits of coursework. This will result in a student being endorsed to teach in any of the subject areas included in the composite major.

Note: This does not mean that the student will be "Highly Qualified", for social studies under the provisions of the No Child Left Behind Act. For students to become "highly qualified", they must also pass the Praxis II exam in each subject area. A student with a social studies major does not have to earn 20 credits in each subject to take the Praxis in that area.

Note: Due to extensive course overlap, social science majors may NOT select history as a teaching second major or as a minor.

History (~~15~~ 18 cr):
- Hist 101 History of Civilization (3 cr)
- Hist 102 History of Civilization (3 cr)
- Hist 111 Introduction to U.S. History (3 cr)
- Hist 112 Introduction to U.S. History (3 cr)
- Modern U.S. or European history ~~(1 course minimum)~~(6 cr)

Economics (6 cr):
- Econ 201 Principles of Economics (3 cr)
- Econ 202 Principles of Economics (3 cr)

Geography – Choose two of the following (6 cr):
- Geog 165 Human Geography (3 cr)
- Geog 200 World Regional Geography (3 cr)
- Geog 330 Urban Geography (3-4 cr)
- Geog 360 Population Dynamics and Distribution (3-4 cr)
- Geog 365 Political Geography (3 cr)

Political Science (6 cr):
- PolS 101 Introduction to Political Science and American Government (3 cr)
- PolS 275 American State and Local Government ~~or PolS 381 Western European Politics~~ (3 cr)

Sociology/Psychology~~Anthropology –~~ ~~choose one of the following:~~ (6 cr):
- Soc 101 Introduction to Sociology (3 cr)~~and any other sociology course (excluding courses on social welfare and services) (6 cr)~~
  ~~OR~~
- ~~Anth 100 Introduction to Anthropology and any other anthropology course (6 cr)~~
- Psyc 101 Introduction to Psychology or Psyc 305 Developmental Psychology (3 cr)

Electives. ~~Two additional courses taken from any two of the areas listed above (excluding history) (6 cr)~~Additional course from any area listed above excluding history (3 cr)

In addition to the above teaching major requirements, the following special methods sequence is also required:
- EDCI 432 Secondary Social Science Methods (3 cr)
- EDCI 442 Secondary Social Science Methods Practicum (1 cr)

13. Change the curricular requirements of **20-Credit Sociology/Anthropology Teaching Minor** (B.S.Ed.) [**Effective**: Summer 2009]

~~Anth 100 Introduction to Anthropology (3 cr)~~
~~Anth 220 Peoples of the World or Anth 329 North American Indians (3 cr)~~
Soc 101 Introduction to Sociology (3 cr)
Soc 230 Social Problems (3 cr)
Approved electives in ~~anthropology and~~ sociology (~~8~~ 14 cr)

Education

1. Drop the following courses [**Effective**: Fall 2009]

ED 201 Diverse Learners in Schools and Social/Cultural Contexts (3 cr)
Introduction to an inquiry-based model to examine student learning and diversity in relation to the purposes and functions of schools in society; focus on K-12 exposure to diverse learners in a variety of contexts. Thirty hours of field experience required.
Prereq: Permission of the College of Education (see College of Education section, part 4)
Recommended Equivalent: EDCI 201

ED 301 Principles of Learning and Development in Education (3 cr)
Theoretical and practical applications of the process of human growth, development, and learning within diverse educational communities. Two lec and 2 hrs of lab a wk.
Prereq: ED 201 or Permission
Recommended Equivalent: EDCI 301

ED 302 Curriculum, Instruction, and Assessment Strategies (3 cr)
Examination of the curriculum development process, knowledge of instructional planning and models of teaching, and an understanding of a wide array of formal, informal, and authentic assessment strategies within and across teaching disciplines; classroom management, exceptionality, philosophical foundations, technology, multi-cultural issues, and instructional inquiry examined within each of these processes.
Prereq: ED 301 or Permission

Recommended Equivalent: EDCI 302

ED 401 Professional Role Development (1-3 cr, max 3)
Preservice teachers will examine and evaluate the application of foundational knowledge of teaching, learning, and evaluation; school structures and professional roles; family and community resources and concerns; funding processes; legal and legislative issues; and professional development.
Prereq: ED 302 and program recommendation
Coreq: Enrollment in full-year internship

2. Add the following courses [**Effective**: Summer 2009]

ED 595 Survey Design for Social Science Research (3 cr)
This course focuses on the design and development of the survey instrument. Topics include how to word questions, validation, development of appropriate scales, traditional and alternative modes of survey administration; impacts of non-response; the effect of question structure, wording and context of instrument items; and post-survey follow-up and data processing. Recommended Preparation: Foundations of research course at graduate level.

ED 611 Doctoral Seminar I (1 cr)
This seminar is intended to help facilitate a community among doctoral students and build an understanding of the processes and strategies necessary for success in the doctoral program. (Fall only)
Prereq: Enrollment to a doctoral program

ED 612 Doctoral Seminar II (1 cr)
The seminar is intended for those doctoral students who have completed all or most of their course work. The seminar will focus on preparation for the preliminary examination and advancement to candidacy. Preparation of the dissertation proposal will also be covered. (Spring only)
Prereq: Enrollment to a doctoral program

ED 613 Doctoral Seminar III (1 cr)
The seminar is intended to support candidates who have had a successful defense of the dissertation proposal. The seminar will focus on the advancement of the dissertation, completion and continuation of the research project, defense of the dissertation, and ultimately publication of the study. Students will read , critique, and respond to other candidates work.
Prereq: Enrollment to a doctoral program

ED 680 Philosophical Foundations of Educational Research (3 cr)
This doctoral level course involves learners in an examination of the philosophical foundations, epistemological assumptions, and methodological frameworks of educational and social science research. Given the current acknowledgement of the importance of perspective and point of view in inquiry. readings in gender, class, and ethnic identity will be included.
Prereq: Enrollment to a doctoral program

3. Change the curricular requirements of **Teacher Education Admission Requirements** [**Effective**: Summer 2009]

Admission to Teacher Education Programs. ~~Upon completion of the first semester of the sophomore year and a minimum of 26 credits, all~~ All students who plan to enter teacher education programs must make application for admission to the program. Criteria for admission to teacher education programs include: 1) ~~completion of 100 hours of experience working~~20 hours of service learning with children and/or youth ~~(form available from advisor)~~; 2) cumulative grade point average of 2.75 or better; 3) have completed, with a minimum of a C in the following courses: Engl 102, University of Idaho Core Mathematics Course, Comm 101, and EDCI 201 (or FCS 210 for Early Childhood Education); ~~and~~ 4) signature of authorized advisor, and (5) completion of background check.

Electrical and Computer Engineering

1. Change the curricular requirements of **Computer Engineering** (B.S.Comp.E.) [**Effective**: Summer 2009]

…
The minimum number of credits for the degree is 128, not counting Engl 101, Math 143, and other courses that might be required to remove deficiencies.

Students majoring in computer engineering must earn a grade of C or better in each of the following courses for graduation, and before registration is permitted in upper-division engineering courses: ECE 210, ECE 212, ECE 240, ECE 241, Math 170, Math 175, Math 310, Phys 211, and Phys 212. Students majoring in computer engineering must earn a grade of B or better in CS 120, CS 121, CS 150, and a C or better in Math 176 for graduation and before registration is permitted in 200-level CS courses. Students majoring in computer engineering must earn a grade of C or better in CS 210, CS 240, CS 270, and Math 170, Math 175, Math 176 for graduation and before registration is permitted in upper-division CS courses.

Any student majoring in computer engineering ~~may~~ who accumulates ~~no more than~~ a total of five (5) letter grades ~~14 credits~~ of D's and F's in mathematics, science, or engineering courses that are used to satisfy graduation requirements~~. Included in this number are multiple repeats of a single course or single repeats in multiple courses and courses transferred from other institutions.~~will be required to undergo special advising as per the Department of Electrical and Computer Engineering's By-Laws (available in the ECE office).

2. Change the curricular requirements of **Electrical Engineering** (B.S.E.E.) [**Effective**: Summer 2009]

…
The minimum number of credits for the degree is128, not counting Engl 101, Math 143, and other courses that might be required to remove deficiencies.

Students majoring in electrical engineering must earn a grade of P in ECE 292 and a grade of C or better in each of the following courses before registration is permitted in upper-division electrical and computer engineering courses: Chem 111, CS 112 or CS 120, ECE 210, ECE 211, ECE 212, ECE 213, ECE 240 and ECE 241; Engr 210, and Engr 220; Math 170, Math 175, Math 275, and Math 310; and Phys 211, Phys 212. Students majoring in electrical engineering or computer engineering must meet the college requirements for admission to classes (see "Admission to Classes" under College of Engineering, part four).

Any student majoring in electrical engineering ~~may~~ who accumulate ~~no more than~~ a total of five (5) letter grades ~~14 credits~~ of D's and F's in mathematics, science, or engineering courses that are used to satisfy graduation requirements~~.~~ will be required to undergo special advising as per the Department of Electrical and Computer Engineering's By-Laws (available in the ECE office). ~~Included in this number are multiple repeats of a single course or single repeats in multiple courses and courses transferred from other institutions.~~

Within the constraints on choice of technical electives noted above, students may choose sets of electives to develop proficiencies in certain areas of emphasis. Three such areas are currently available, one in communications, one in integrated circuit design, and one in power. The course requirements for each of these areas are described below.

The **Communications** emphasis prepares students for a variety of careers in the communications industry. Students should take a total of 18 credits from the following: (a) core courses: 9 credits from ECE 410, ECE 430, ECE 450, and (b) technical electives: 9 credits from ECE 413, ECE 432, ECE 445, ECE 452, ECE 455.

The **Integrated Circuit Design** emphasis prepares students for careers in the field of integrated circuit design. It includes courses in analog and digital integrated circuit at both the system and transistor level. Students should take a total of 18 credits from the following: (a) core courses: 13 credits from ECE 410, ECE 411, ECE 415, ECE 445, ECE 460 and (b) technical electives: 3 credits from ECE 412, ECE 413, ECE 416, ECE 417, ECE 440, ECE 452, ECE 470, ECE 476.

The **Power** emphasis prepares students for a variety of careers with electric utilities, consulting firms, and with manufacturing and design firms. Students should take a total of 18 credits from the following: (a) 12 credits: ECE 420, ECE 423, ECE 427 and ECE 450, and (b) 3 core credits from: ECE 410, ECE 430, ECE 440, and (c) 3 additional credits of technical electives.

English

1. Change the credits of the following course [**Effective**: Summer 2009]

Engl 521 MA-TESL Comprehensive Exam (1 cr, max 2)
Registration for this course admits the student to weekly review sessions in preparation for the MA-TESL comprehensive exam and culminates with the two-part exam (linguistics and language pedagogy) given late in the semester. Graded P (pass)/F (fail). Recommended preparation: Engl 507, Engl 510, Engl 513, Engl 517, and Engl 518.

Fish and Wildlife Resources

1. Drop the following courses [**Effective**: Summer 2009]

Fish 470 Interdisciplinary Natural Resource Planning (3 cr)
See CSS 470.
Recommended Substitution: None

WLF 470 Interdisciplinary Natural Resource Planning (3 cr)
See CSS 470.
Recommended Substitution: None

2. Change the cooperative status and description of the following course [**Effective**: Summer 2009]

WLF ID544 Large Mammal Ecology (3 cr) WSU NATRS 544
Readings and discussion on large mammal management and ecology. ~~One 3-hr lec a wk;~~ Requires two days of field trips. (Spring, Alt/yrs)
Prereq: WLF 492 or Permission

WLF ID545 Wildlife Habitat Ecology (2-3 cr) WSU NATRS 542
Reading and discussion on habitat concepts, analyses, and applications. ~~synecological relationships of wildlife habitats. Two days of field trips.~~Students enrolled in the 3rd credit will complete additional readings and quatitative problem sets. ~~(Spring, Alt/yrs)~~
Prereq: WLF 492 or Permission, animal and plant ecology

3. Change the curricular requirements of **Fishery Resources** (B.S.Fish.Res.) [**Effective**: Summer 2009]

…
Third and Fourth Years
AVS 271 Anatomy and Physiology or Biol 423 Comparative Vertebrate Physiology (4 cr)
Biol 481 Ichthyology (4 cr)
~~CSS/For/ForP/REM 470 Interdisciplinary Natural Resource Planning (3 cr)~~
Engl 313 Business Writing or Engl 317 Technical Writing (3 cr)
Fish 314 Fish Ecology (3 cr)
Fish 315 Fish Ecology Lab (1 cr)
Fish 316 Principles of Population Dynamics (2 cr)
Fish 415 Limnology (4 cr)
Fish 418 Fisheries Management (4 cr)
Fish 422 Concepts in Aquaculture (3 cr) or Fish 424 Fish Health Management (4 cr)
Fish 495 Seminar (1 cr)
Gene 314 General Genetics or Biol 210 Genetics (3-4 cr)
MMBB 250, 255 General Microbiology and Lab (5 cr)
WLF 448 Fish and Wildlife Population Ecology (4 cr)
Approved work experience in major field required
Electives to total 128 credits for the degree

4. Change the curricular requirements of **Wildlife Resources** (B.S.Wildl.Res.) [**Effective**: Summer 2009]

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 116 and 213, Stat 251, and For 221.

To graduate, a student must receive a grade of C or better in each fish- and wildlife-prefixed upper-division course listed in the requirements for the B.S. in wildlife resources.

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

First and Second Years
Biol 115 Cells and the Evolution of Life (4 cr)
Biol 116 Organisms & Environments (4 cr)
Biol 213 Principles of Biological Structure and Function (4 cr)
Chem 101 Introduction to Chemistry I (4 cr)
Chem 275 Carbon Compounds or Chem 277 Organic Chemistry I (3 cr)
Comm 101 Fundamentals of Public Speaking (2 cr)
Econ 202 Principles of Economics (3 cr)
For 221 Ecology or REM 221 Ecology (3 cr)
For 235 or CSS 235 Society and Natural Resources (3 cr)
Geol 101 Physical Geol or Soil 205, 206 The Soil Ecosystem and Lab (4 cr)
Math 160 Survey of Calculus or Math 170 Analytic Geometry and Calculus I (4 cr)
NR 101 Exploring Natural Resources (1 cr)
Stat 251 Statistical Methods (3 cr)
WLF 102 The Fish and Wildlife Professions (1 cr)
One of the following (3 cr):
~~Biol 341 Systematic Botany (3 cr)~~
For 320 Dendrology (3 cr)
REM 341 Systematic Botany (3 cr)
REM 353 Rangeland Plant Identification and Ecology (3 cr)

Third and Fourth Years
AVS 271 Anatomy and Physiology (4 cr)
Gene 314 General Genetics or Biol 210 Genetics (3-4 cr)
Phys 100 Fundamentals of Physics or Phys 111 General Physics I (4 cr)
WLF 314, 315 Wildlife Ecology I and Lab (4 cr)
WLF 316 Wildlife Ecology II (4 cr)
WLF 440 Conservation Biology (3 cr)
WLF 448 Fish and Wildlife Population Ecology (4 cr)
~~WLF/For 470 Interdisciplinary Natural Resource Planning (3 cr)~~
WLF 492 Wildlife Management (4 cr)
WLF 495 Wildlife Seminar (1 cr)
One of the following (3 cr):
Comm 431 Professional Presentation Techniques (3 cr)
Engl 208 Personal and Exploratory Writing (3 cr)
Engl 317 Technical Writing (3 cr)
One of the following (3 cr):
AgEc 477 Law, Ethics, and the Environment (3 cr)
Econ 385 Environmental Economics (3 cr)
For 383 Economics for Natural Resource Managers
Restricted electives, choose two courses from the following (must receive a grade of C or better):
Biol 481 Ichthyology (4 cr)
Biol 483 Mammalogy (3 cr)
WLF 482 Ornithology (4 cr)

Approved work experience in major field required
Electives to total 128 credits for the degree

5. Change the curricular requirements of **Aquaculture** (Minor) [**Effective**: Summer 2009]

Biol 481 Ichthyology (4 cr)
Fish 422 Concepts in Aquaculture (3 cr)
Fish 424 Fish Health Management (4 cr)
MMBB 250 General Microbiology (3 cr).
MMBB 255 General Microbiology Lab (2 cr).
Courses selected from the following (~~12~~ 10 cr):
AgEc 278 Farm and Agribusiness Management (4 cr)
Fish 398 Renewable Natural Resources Internship (cr arr)
Fish 469 Aquaculture Systems Design (2 cr)
ASM 107 Beginning Welding (2 cr)
AVS 305 Animal Nutrition (4 cr)
Bus 321 Marketing (3 cr)
Ent 472 Aquatic Entomology (3 cr)
ForP 495 Biomaterial Product and Process Development (2 cr)

Food Science

1. Add the following courses [**Effective**: Summer 2009]

FS ID&WS423 Sensory Evaluation of Food and Wine Laboratory (1 cr) WSU FS 423
This course will provide a practical application of FS422, including the theory, principles and applications of sensory evaluation techniques for the evaluation of appearance, aroma, flavor and texture of foods and wine

FS ID&WS430 Dairy Products Lab (1 cr)
Students gain hands-on skills formulating, processing, evaluating and analyzing dairy products. Communication and critical thinking skills are also developed in this laboratory course.

FS IDWS433 Food Engineering Lab (1 cr) WSU FS 433
To enhance the learning experience of the students taking FS 432 through laboratories, problem sessions and group discussions.

FS ID&WS516 Food Laws (1 cr) WSU 516
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.

FS ID&WS519 Carbohydrate Chemistry: Starch & Hydrocolloids (3 cr) WSU FS 519
This course will provide insight into structure-function relationships of polysaccharides within food systems as a function of their respective molecular structures and physical characteristics.

2. Change the cooperative status, co-requisite, description and prerequisite of the following course [**Effective**: Summer 2009]

FS ID&WS432 Food Engineering (3 cr) WSU FS 432
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. ~~(Spring only)~~
~~Coreq~~**Prereq:** FS 303

Forest Products

1. Drop the following course [**Effective**: Summer 2009]

ForP 470 Interdisciplinary Natural Resource Planning (3 cr)
See CSS 470.
Recommended Substitution: None

2. Change the curricular requirements of **Forest Products** (B.S.For.Prod.) [**Effective**: Summer 2009]

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

No more than 25 percent of the course work used for the forest products degree may be taken in business courses (excluding Econ 201 and 202). Of the 128 credits required, at most 32 credits taken in business courses may be counted toward the degree.

A. Wood Construction and Design Option

This option is designed for students interested in residential and light commercial construction or design management positions that emphasize effective use of wood as a structural material. Students may focus in one of two emphasis areas. In the architectural technology emphasis area, the student will develop design skills in addition to a background in business and wood technology for positions in non-licensed design, specification writing, design-build construction, and architectural and construction liaison. Students selecting the wood construction business emphasis area will be prepared for careers that include both supervisory and managerial positions in residential and light commercial building and building materials, sales and marketing of wood products, estimating, banking, insurance, and government agencies that deal with housing. The wood construction and design option can also provide an educational foundation for those wishing to become entrepreneurs in the area of wood construction.

Acct 202 Introduction to Managerial Accounting (3 cr)
Arch 154 Introduction to Architectural Graphics (2 cr)
~~Arch 253 Architectural Design I (3 cr)~~
~~Arch 254 Architectural Design II (3 cr)~~
Arch 266 Materials and Methods (3 cr)
Arch 353 Architectural Design III and Arch 354 Architectural Design IV; or Acct 381 Accounting for Managers and Investors and Bus 311 Introduction to Management (6-10 cr)
Arch 366 Building Technology I (3 cr)
Arch 463 Environmental Control Systems (4 cr)
Arch 464 Environmental Control Systems (4 cr)
Arch 575 Professional Practice (3 cr)
BLaw 265 Legal Environmental of Business (3 cr)
Comm 101 Fundamentals of Public Speaking (2 cr)
Econ 202 Principles of Economics (3 cr)
Engl 313 Business Writing or Engl 317 Technical Writing (3 cr)
For 235 Society and Natural Resources (3 cr)
ForP 100 Forest Products Issues and Technology (2 cr)
ForP 277 Wood Anatomy and Identification (3 cr)
ForP 337 Physical and Mechanical Properties of Wood (3 cr)
ForP 365 Wood Building Technology (3 cr)
ForP 436 Wood Composites (3 cr)
ForP 444 Primary Wood Products Manufacturing
ForP 450 Wood Deterioration and Preservation (2 cr)
ForP 491 Biomaterial Product and Process Development Lab (2 cr)
ForP 495 Product and Process Development and Commercialization (3 cr)
LArc 383 Architectural Site Design (3 cr)
Math 160 Survey of Calculus (4 cr)
NR 101 Exploring Natural Resources (1 cr)
Phys 111 General Physics I (4 cr)
Stat 251 Statistical Methods (3 cr)
VTD 344 Computer-Aided Design (2 cr)
Electives to total 128 credits for the degree

B. Forest Operations Option

This option prepares students to work as managers and planners who are responsible for forest operations that achieve sustainable management objectives in forest products companies, forest engineering consulting firms, and government agencies. The program provides background in development and design of efficient harvesting operation plans and timber sales, protection of environmental values from forest operations, supervision of logging crews, design and layout of forest roads, wood procurement, and implementations of forest health restoration projects. Specific career areas include forest operations forester, woodland manager, wood appraisal and procurement, harvesting planning and administration, timberland manager, and forest engineer. Other positions can be found in the areas of equipment development and marketing and as technical representatives for equipment companies or as independent logging contractors. Beyond the courses required in the basic sciences and forest operations, students may choose course work that will also emphasize natural resource management or technology and engineering.

Biol 115 Cells and the Evolution of Life (4 cr)
Chem 101 Introduction to Chemistry I (4 cr)
Comm 101 Fundamentals of Public Speaking (2 cr)
~~CSS/ForP/For/REM 470 Interdisciplinary Natural Resource Planning (3 cr)~~
Econ 202 Principles of Economics (3 cr)
Engl 102 College Writing and Rhetoric (3 cr)
Engl 313 Business Writing or Engl 317 Technical Writing (3 cr)
For 221 Ecology or REM 221 Ecology (3 cr)
For 235 or CSS 235 Society and Natural Resources (3 cr)
For 274 Forest Measurement and Inventory (3 cr)
For 320 Dendrology (3 cr)
For 375 Introduction to Spatial Analysis for Natural Resource Management (3 cr)
For 383 Economics for Natural Resource Managers (3 cr)
For 474 Forest Inventory (3 cr)
ForP 100 Forest Products Issues and Technology (2 cr)
ForP 230 Field Measurements for Forest Operations (2 cr)
ForP 277 Wood Structure and Identification (3 cr)

ForP 430 Forest Engineering and Harvesting (3 cr)
ForP 431 Forest Operations and Investment Analysis or Bus 362 Real Property Appraisal (3 cr)
ForP 432 Designing Forest Access (3 cr)
ForP 434 Forest Tractor and Cable Systems (4 cr)
ForP 444 Primary Wood Products Manufacturing (3 cr)
NR 101 Exploring Natural Resources (1 cr)
Soil 205 The Soil Ecosystem (3 cr)
Soil 206 The Soil Ecosystem Lab (1 cr)
Stat 251 Statistical Methods (3 cr)
And one of the following emphasis areas:

Technical Emphasis
BAE 351 Hydrology (3 cr)
Engr 210 Engineering Statics (3 cr)
Engr 220 Engineering Dynamics (3 cr)
Engr 335 Engineering Fluid Mechanics (3 cr)
Engr 350 Engineering Mechanics of Materials (3 cr)
Math 170 Analytic Geometry and Calculus I (4 cr)
Math 175 Analytic Geometry and Calculus II (4 cr)
Math 275 Analytic Geometry and Calculus III (3 cr)
Math 310 Ordinary Differential Equations (3 cr)
Phys 211 Engineering Physics I (4 cr)

Resource Emphasis
Biol 116 Organisms and Environments or PlSc 205 General Botany (4 cr)
For 330 Forest Ecosystem Processes (2 cr)
For 424 Forest Dynamics and Management (2 cr)
For 462 Watershed Science and Management (3 cr)
For 484 Forest Policy and Administration (2 cr)
Math 160 Survey of Calculus or Math 170 Analytic Geometry and Calculus I (4 cr)
Phys 111 General Physics I or Phys 211 Engineering Physics I (4 cr)
One of the following (2-3 cr):
For 426 Wildland Fire Ecology and Management (3 cr)
For 468 Forest and Plant Pathology (2 cr)
For 469 Introduction to Forest Insects (2 cr)

Electives to total 128 cr for the degree

C. Forest Products Business Management Option

This program is designed for students who plan careers in the staff or line management of firms in the forest products industry. Graduates are prepared for positions in production management, marketing and distribution of wood products, and in the technical service and support areas of the forest products industry. Students focus on the production, distribution, and marketing of wood products from a combined technical and managerial perspective. The degree also provides a foundation for pursuing a graduate degree in business, for example, the M.B.A. or M.S.

~~Acct 201 Introduction to Financial Accounting and Acct 202 Introduction to Managerial Accounting, or Acct 205 Fundamentals of Accounting (4-6 cr)~~
Acct 201 Introduction to Financial Accounting (3 cr)
Acct 202 Introduction to Managerial Accounting (3 cr)
Biol 102 Biology and Society (4 cr)
BLaw 265 Legal Environment of Business (3 cr)
Bus 301 Financial Management (3 cr)
…

Forest Resources

1. Drop the following course [**Effective**: Summer 2009]

For 470 Interdisciplinary Natural Resource Planning (3 cr)
See CSS 470.
Recommended Substitution: None

2. Add the following courses [**Effective**: Summer 2009]

For 325 Numerical Analysis for Fire Managers (4 cr)
The assembly, summarizing and display of fire management data, including fuels inventories, fire occurrence, behavior, and weather, as well as environmental and other effects of fire. Students will learn to formulate testable hypotheses from data, develop predictive equations and correlations, create probability-weighted decision matrices, and draw supportable conclusions from analyses. Intensive off-campus short course with pre-work and homework. Course is only open to students enrolled in the US Technical Fire Management program. (Fall only)
Prereq: 1 year of high school math and a minimum 5 years of experience in natural resource management

For 475 Financial Aspects of Fire Management (3 cr)
Application of microeconomics to fire management, including price theory, budgeting and theory of the firm. Elements of financial analysis applied to fire management problems, including compounding, discounting, and time preference for money. Decision theory, optimization techniques and statistical analysis applied to various financial problems in fire management. Intensive off-campus short course with pre-work and homework. Course is only open to students enrolled in the US Technical Fire Management program. (Winter Intersession only)
Prereq: For 325

For 482 Technical Fire Management (3 cr)
Identification, quantitative analysis of alternative solutions, and recommendation to address a wildland fire management problem based upon synthesis of science and application of concepts and processes learned in previous courses. Writing and oral defense of thesis-quality paper before a review panel. Intensive off-campus short course with prework and homework. Course is only open to students enrolled in the US Technical Fire Management program. (Spring only)
Prereq: For 488

For 486 Fuels, Fuels Management and Fire Science (3 cr)
Basic principles and process fire spread as it is currently modeled and relationship of fire characteristics to fuel bed particles and other fuel bed characteristics. Analysis and forecasting of fuel type and amount from accretion, decay, and management activities. Structure and operation of the principal fire behavior models used in the US and implications for collection, analysis and application of fuels and weather data in fire behavior prediction and fire danger rating. Intensive off-campus short course with pre-work and homework. Course is only open to students enrolled in the US Technical Fire Management program. (Winter Intersession only)
Prereq: For 475

For 487 Fire Effects and Landscape Ecology (3 cr)
Temporal and spatial distribution and extent of fire effects in landscapes throughout the US. Consequences of fire for ecosystem components, various remedial strategies to ameliorate these effects, and implications for restoration ecology. Intensive off-campus short course with pre-work and homework. Course is only open to students enrolled in the US Technical Fire Management program. (Spring only)
Prereq: For 486

For 488 Fire and Land Management (3 cr)
Principles of Geographic Information Systems and application to fire management planning. Use of the rational planning process for analyzing and comparing alternative system configurations on the basis of least cost plus loss; allowable resource loss; and social, legal and environmental constraints as these relate to specific land management directives. Intensive off-campus short course with pre-work and homework. Course is only open to students enrolled in the US Technical Fire Management program. (Spring only)
Prereq: For 487

3. Change co-requisites and prerequisites the following course [**Effective**: Summer 2009]

For 451 Fuels Inventory and Management (3 cr)
Tools, quantitative analysis, and approaches for inventory and management of fuels for wildland fires over large, diverse areas in forests, woodlands, shrubland, and grasslands. Critically review and synthesize relevant scientific literature. Field trips.
Prereq: For 375, ~~For 450,~~ REM 244 and For 274 or REM 357
Coreq: For 450

4. Change the curricular requirements of **Fire Ecology and Management** (B.S.Fire.Ecol.Mgmt.) [**Effective**: Summer 2009]

Students pursuing a B.S. degree in fire ecology and management must receive a grade of C or better in the following indicator courses to register for upper-division courses in Forest Resources and Rangeland Ecology and Management and to graduate with a B.S.Fire.Ecol.Mgmt.: Math 143, Stat 251, For 274 and ,For 221 or REM 221. Students must also have a minimum cumulative grade-point average of 2.00 in Forest Resource and Rangeland Ecology and Management courses to qualify for the B.S. degree in Fire Ecology and Management.

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

Chem 101 Introduction to Chemistry I or Chem 111 Principles of Chemistry I (4 cr)
~~CSS 470 Interdisciplinary Natural Resource Planning (3 cr)~~
Econ 202 Principles of Economics (3 cr)
Engl 313 Business Writing or Engl 317 Technical Writing (3 cr)
For 221 Ecology or REM 221 Ecology (3 cr)
For 235 Society and Natural Resources (3 cr)
For 274 Forest Measurement and Inventory or REM 357 Rangeland and Riparian Habitat Assessment (3 cr)
For 330 Forest Ecosystem Processes (2 cr)
For 375 Introduction to Spatial Analysis for Natural Resource Management (3 cr)
For 383 Economics for Natural Resource Managers (3 cr)
For 484 Forest Policy and Administration (2 cr)
Math 143 Pre-calculus Algebra and Analytic Geometry or Math 160 Survey of Calculus (3-4 cr)
NR 101 Exploring Natural Resources (1 cr)
Phys 111 General Physics I (4 cr)
REM 459 Rangeland Ecology (2 cr)
Soil 205 The Soil Ecosystem (3 cr)
Soil 206 The Soil Ecosystem Lab (1 cr)

Stat 251 Statistical Methods (3 cr)
One of the following courses (2-3 cr):
Comm 331 Conflict Management (3 cr)
Comm 332 Communication and the Small Group (3 cr)
CSS 287 Foundations of Conservation Leadership and Management (2 cr)
CSS 387 Environmental Communication Skills (3 cr)
CSS 486 Public Involvement in Natural Resource Management (3 cr)
~~CSS 494 Public Relations for Natural Resources Professionals (3 cr)~~
One of the following courses (3 cr):
Biol 341 Systematic Botany (3 cr)
For 320 Dendrology (3 cr)
REM 353 Rangeland Plant Identification and Ecology (3 cr)
Two of the following courses (8 cr):
Biol 115 Cells and the Evolution of Life (4 cr)
Biol 116 Organisms and Environments (4 cr)
Biol 213 Principles of Biological Structure and Function (4 cr)
PlSc 205 General Botany (4 cr)
Fire Core (14 cr):
For 426 Wildland Fire Ecology and Management (3 cr)
For 427 Prescribed Burning Lab (3 cr)
For 450 Combustion, Fire Behavior and Fuels (3 cr)
For 451 Fuels Inventory and Management (3 cr)
REM 244 Wildland Fire Management (2 cr)
~~REM 459 Rangeland Ecology (2 cr)~~
Ecology (6 cr):
Biol 311 Plant Physiology (4 cr)
For 429 or REM 429 Landscape Ecology (3 cr)
For 469 Introduction to Forest Insects (2 cr)
Geog 450 or REM 450 Global Environmental Change (3 cr)
REM 440 Wildland Restoration Ecology (3 cr)
WLF 314 Wildlife Ecology I (3 cr)
WLF 440 Conservation Biology (3 cr)
Applied Tools and Technology (4 cr):
For 435 Remote Sensing of Active Fire and Post-fire Effects (3 cr)
For 472 or REM 472 Remote Sensing of the Environment (3-4 cr)
Geog 301 Meteorology (3 cr)
Geog 385 GIS Primer (3 cr)
Geog 401 Climatology (3 cr)
~~NR 402 GIS Applications in Natural Resources (1 cr)~~
REM 402 Applied Spatial Analysis in Natural Resources (2 cr)
REM 407 GIS Applications in Fire Ecology and Management (1 cr)
Natural Resources Management, Planning and Policy (6 cr):
CSS 490 Wilderness and Protected Area Management (3 cr)
For 324 Forest Regeneration (2 cr)
For 424 Forest Dynamics and Management (2 cr)
For 462 Watershed Science and Management (3 cr)
ForP 430 Forest Engineering and Harvesting
REM 456 Integrated Rangeland Management (3 cr)
~~WLF 445 Nongame Management (2 cr)~~
~~WLF 492 Wildlife Management (4 cr)~~
Electives to total 128 credits for the degree.

5. Change the curricular requirements of **Forest Resources** (B.S.For.Res.) [**Effective**: Summer 2009]

Students pursuing a B.S. degree in forest resources must receive a grade of C or better in the following indicator courses to register for upper-division courses in forest resources and to graduate with a B.S.For.Res.: Math 143, Stat 251, For 221, and For 274. Students must also have a minimum cumulative grade-point average of 2.00 in forest resource (For) courses to qualify for the B.S. degree in forest resources.

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

Biol 115 Cells and the Evolution of Life (4 cr)
Biol 116 Organisms and Environments or PlSc 205 General Botany (4 cr)
Chem 101 Introduction to Chem I or Chem 111 Principles of Chem I (4 cr)
~~CSS/ForP/For/REM 470 Interdisciplinary Natural Resource Planning (3 cr)~~
Econ 202 Principles of Economics (3 cr)
Engl 317 Technical Writing or Engl 313 Business Writing (3 cr)
For 102 Introduction to Forest Management (1 cr)
…

6. Change the curricular requirements of **Fire Ecology and Management** (Minor) [**Effective**: Summer 2009]

Fire Core (8 cr):
For 426 Wildland Fire Ecology and Management (3 cr)
~~For 434 Assessing Fire Effects and Burn Severity (2 cr)~~

~~For 530 Fire Regime Condition Class (1 cr)~~
REM 244 Wildland Fire Management (2 cr)

One of the following (3 cr):

For 427 Prescribed Burning Laboratory (3 cr)
For 450 Combustion, Fire Behavior and Fuels (3 cr)
For 451 Fuels Inventory and Management (3 cr)

Ecology (2-3 cr):
For 330 Forest Ecosystem Processes (2 cr)
~~For/~~REM 429 Landscape Ecology (3 cr)
REM 440 Wildland Restoration Ecology (3 cr)
REM 459 Rangeland Ecology (2 cr)
REM 460 Rangeland Ecology Current Topics and Field Studies (1 cr)
WLF 314 Wildlife Ecology I (3 cr)

Applied Tools and Technology (3 cr):
For 375 Introduction to Spatial Analysis for Natural Resource Management (3 cr)
For 435 Remote Sensing of Active Fire and Post-fire Effects (3 cr)
Geog 301 Meteorology (3 cr)
Geog 385 GIS Primer (3 cr)
Geog 401 Climatology (3 cr)
Geog 475 Advanced GIS (3 cr)
~~NR 402 GIS Applications in Natural Resources (1 cr)~~
REM 402 Applied Spatial Analysis in Natural Resources (2 cr)

REM 407 GIS Applications in Fire Ecology and Management (1 cr)

Management, Planning, & Policy (6 cr):
CSS 490 Wilderness and Protected Area Management (3 cr)
For 324 Forest Regeneration (2 cr)
For 424 Forest Dynamics and Management (2 cr)
For 462 Watershed Science and Management (3 cr)
For 484 Forest Policy and Administration (2 cr)
ForP 430 Forest Engineering and Harvesting (3 cr)
REM 456 Integrated Rangeland Management (3 cr)
~~WLF 492 Wildlife Management (4 cr)~~

To complete this minor, students must complete a minimum of ~~18~~ 20 credits from the list above, with at least 12 credits in courses numbered 400 or above.

7. Change the curricular requirements of **Fire Ecology, Management and Technology** (Academic Certificate) [**Effective**: Summer 2009]

~~Note: This version of the Fire Ecology, Management and Technology Academic Certificate is intended for Graduate Students. 9 of the required 15 credits must be in courses numbered 500 or higher. A grade of 'B' or higher is required in all coursework for this academic certificate.~~

~~Fire Ecology Elective (3 cr):~~
~~For 426 Wildland Fire Ecology and Management (3 cr)~~
~~For 434 Assessing Fire Effects and Burn Severity (2 cr)~~
~~For 526 Fire Ecology (3 cr)~~
~~For 530 Fire Regime Condition Class (1 cr)~~
~~Ecology (3 cr):~~
~~For 527 Landscape Ecology of Forests and Rangelands (2-3 cr)~~
~~For 572 Spatial and Biophysical Modeling (3 cr)~~
~~REM 459 Rangeland Ecology (2 cr)~~
~~Fuels and Fuels Management (2 cr):~~
~~For 427 Prescribed Burning Lab (3 cr)~~
~~For 433 Science-Based Fuels Management Planning (2 cr)~~
~~For 451 Fuels Inventory and Management (3 cr)~~
~~For 452 Quantification of Wildland Fire and Fuels Analysis (1 cr)~~
~~For 453 Fuels Analysis Techniques (1 cr)~~
~~Applied Tools and Technology (3 cr):~~
~~NR 402 GIS Applications in Natural Resources (1 cr)~~
~~For 435 Remote Sensing of Active Fire and Post-fire Effects (3 cr)~~
~~Geog 475 Geographic Information Systems (3 cr)~~
~~For 472 Remote Sensing of the Environment (3-4 cr)~~
~~Geog 401 Climatology (3 cr)~~
~~REM 551 Rangeland Vegetation Ecology (3 cr)~~
~~Management, Planning and Policy (6 cr):~~
~~CSS 490 Wilderness and Protected Area Management (3 cr)~~
~~For 462 Watershed Science and Management (3 cr)~~
~~ForP 430 Forest Engineering and Harvesting (3 cr)~~
~~WLF 485 Ecology and Conservation Biology Senior Project (1-3 cr, max 3)~~
~~WLF 492 Wildlife Management (4 cr)~~
~~WLF 545 Wildlife Habitat Ecology (2-3 cr)~~
~~Credits to total 15 for this Academic Certificate~~

Note: ~~This version of the Fire Ecology, Management and Technology Academic Certificate is intended for Undergraduate Students. 9 of the required 15 credits must be in courses numbered 400 or higher.~~ A grade of 'B' or higher is required in all coursework for this academic certificate.

Fire Ecology ~~Elective~~ Course Group (3 cr):
- For 426 Wildland Fire Ecology and Management (3 cr)
- ~~For 434 Assessing Fire Effects and Burn Severity (2 cr)~~
- For 487 Fire Effects and Landscape Ecology (3 cr)
- For 526 Fire Ecology (3 cr)
- ~~For 530 Fire Regime Condition Class (1 cr)~~
- Equivalent Coursework

Ecology Course Group (~~2~~-3 cr):
- For 330 Forest Ecosystem Processes (2 cr)
- For 429 Landscape Ecology (3 cr)
- REM 440 Wildland Restoration Ecology (3 cr)
- REM 459 Rangeland Ecology (2 cr)
- REM 460 Rangeland Ecology Current Topics and Field Studies (1 cr)
- Equivalent Coursework

Fuels and Fuels Management Course Group (~~2~~ 3 cr):
- For 427 Prescribed Burning Lab (3 cr)
- For 433 Science-Based Fuels Management Planning (2 cr)
- For 450 Combustion, Fire Behavior and Fuels (3 cr)
- For 451 Fuels Inventory and Management (3 cr)
- ~~For 452 Quantification of Wildland Fire and Fuels Analysis (1 cr)~~
- For 453 Fuels Analysis Techniques (1 cr)
- For 486 Fuels, Fuels Management and Fire Science (3 cr)
- Equivalent Coursework

Applied Tools and ~~Technology~~ Analysis Course Group (3 cr):
- ~~Geog 385 GIS Primer (3 cr)~~
- ~~Geog 475 Geographic Information Systems (3 cr)~~
- ~~Geog 301 Meteorology (3 cr)~~
- ~~Geog 401 Climatology (3 cr)~~
- For 375 Introduction to Spatial Analysis for Natural Resource Management (3 cr)
- For 435 Remote Sensing of Active Fire and Post-fire Effects (3 cr)
- For 472 or REM 472 Remote Sensing of the Environment (3-4 cr)
- For 475 Financial Aspects of Fire Management (3 cr)
- For 570 Advanced Remote Sensing Measurement Methods (3 cr)
- For 572 Spatial and Biophysical Modeling (3 cr)
- Geog 475 Advanced GIS (3 cr)
- ~~NR 402 GIS Applications in Natural Resources (1 cr)~~
- REM 402 Applied Spatial Analysis in Natural Resources (2 cr)
- REM 407 GIS Application in Fire Ecology and Management (1 cr)
- Equivalent Coursework

Management, Planning and Policy Course Group (2-3 cr):
- CSS 490 Wilderness and Protected Area Management (3 cr)
- ~~For 424 Forest Dynamics and Management (2 cr)~~
- For 454 Air Quality and Smoke Management (3 cr)
- For 462 Watershed Science and Management (3 cr)
- For 484 Forest Policy and Administration (2 cr)
- For 488 Fire and Land Management (3 cr)
- For 529 Forest Ecosystem Analysis (3 cr)
- ForP 430 Forest Engineering and Harvesting (3 cr)
- REM 456 Integrated Rangeland Management (3 cr)
- ~~WLF 492 Wildlife Management (4 cr)~~
- Equivalent Coursework

Credits to total 15 for this Academic Certificate

Geography

1. Add the following courses [**Effective**: Summer 2009]

Geog 346 Transportation (3 cr)
Components of urban transportation modeling approach, or the four-step model; bi-directional relationships of land use development and transportation planning; the new generation of urban transportation modeling. Analytical methods to solve transportation problems are discussed along with policy responses.

Geog 415 Scientific Data Analysis with Computer Programming (3 cr)
Manipulation, visualization, and analysis of geographic, biological, and environmental data. Analysis methods applicable in IDL, Matlab, or similar environments. Topics include: review of programming concepts relevant to scientific applications; mapping and remote sensing imagery analysis and display; uncertainty and sensitivity analysis; figure preparation.
Prereq: Math 143

Geog J435/J535 Climate change Mitigation (3 cr)
Overview of methodologies for calculating greenhouse gas (GHG) emissions at the national, state and local level. Cost/benefit analysis of emission reduction strategies. Students utilize the UI campus operations as a learning laboratory for evaluating emission reduction strategies at the local level. Idaho is used as a case study for emission reduction strategies at the state level. For graduate credit, additional literature review and evaluation of new, advanced technologies are required.

Geog 476 Advanced GIS Lab (1 cr)
Advanced GIS Lab will provide extensive experience in the use of GIS techniques and applications through problem solving. ArcGIS, ArcInfo and related analytical software will be used to solve problems involving real-world data coupled to specific problems for solution. Statistical methods (e.g., regression methods, introductory spatial interpolation and autocorrelation) will be used coupled with GIS software to analyze geographic data.

Geog 508 Rural Development (3 cr)
See Geog J409/J508.

Geog 570 Global Carbon Cycle (3 cr)
Patterns and processes of carbon cycling, an important component of global environmental change. Stocks and fluxes of carbon in the lithosphere, atmosphere, hydrosphere, and biosphere. Drivers of the global carbon cycle on time scales of minutes to millennia and spatial scales of microbes to the Earth. Human modifications and their impacts are emphasized.
Prereq: Geog 100, Geog 450, EnvS 101, or For 221; or Permission

Geog 575 Advanced GIS (3 cr)
See Geog J475/J575.

2. Change the description and joint-list status of the following course [**Effective**: Summer 2009]

Geog J409/J508 Rural Development (3 cr)
Readings and discussion seminar course on rural societies in various countries. Rural trends and development prospects. Reading and discussion of literature in rural development. Extra projects and literature required for graduate credit. ~~Students do research paper.~~ (Fall only)

3. Change the description and joint-list status of the following course [**Effective**: Summer 2009]

Geog ID-J475/J575 Advanced GIS (3 cr) WSU ES/RP 575
Spatial analysis in raster- and vector-based systems; concepts, techniques, and applications of GIS technology using microcomputer and workstation platforms. Additional projects/assignments required for graduate credit. ~~Two lec and 2 hrs of lab a wk.~~
Prereq: Geog 385 and Stat 251

4. Change the prerequisite of the following courses [**Effective**: Summer 2009]

Geog 301 Meteorology (3 cr)
Atmospheric processes that produce weather; temperature; moisture, clouds, and precipitation; synoptic-scale weather; severe storms; weather instrumentation, weather maps, and forecasting; influences of weather on humans and impacts of humans on weather. (Fall only)
Prereq: Geog 100, ~~or~~ Phys 100, Phys 111, or Phys 211; and Math 143; or Permission

Geog 479 GIS Programming (2 cr)
An introduction to the use of programming languages with standard ArcGIS concepts. An introduction to Python ArcObjects, AML, and Visual Basic.
Prereq: ~~Geog 390 and~~ Geog 475; and CS 112 or Geog 415

5. Change the credits, descriptions and prerequisite of the following course [**Effective**: Summer 2009]

Geog 310 Biogeography (2-3 cr)
Geographic distributions of plant and animal species, and causes of patterns, including climate, geology, speciation, extinction, and migration. Additional assignments and exam are required for 3 credits.
Prereq: Geog 100, EnvS 101, For 221, or REM 221

6. Change the cross-list status of the following course [**Effective**: Summer 2009]

Geog 542 Spatial Statistics (3 cr)
Same as Stat 546. The course focuses on the basic theory and methods of spatial statistics including spatial dependence assessment and modeling. The course will cover basic spatial data analysis, point pattern analysis, spatial autocorrelation methods as well as the analysis of lattice structures. Geographically weighted regression, spatial auto regression and the analysis of geographically continuous data using kriging methods will also be covered. (Alt/yrs)
Prereq: Geog 475, Math 170, Math 330, and Stat 401 or permission

7. Change the curricular requirements of **Geographical Information Systems** (Academic Certificate) [**Effective**: Summer 2009]

Geog 385 GIS Primer (3 cr)
~~Geog 390 Geographic Visualization (4 cr)~~
Geog 475 Geographic Information Systems (3 cr)
~~Geog 479 GIS Programming (2 cr)~~
Electives (~~3~~ 9 cr)
Geog 390 Geographic Visualization (4 cr)
Geog 407 Spatial Anaylsis and Modeling (2 cr)
Geog 424 or Geog 524 Hydrologic Applications of GIS and Remote Sensing (3 cr)
Geog 427 Spatial Multicriteria Analysis and Optimization (3 cr)
Geog 483 or Geog 583 Remote Sensing/GIS Integration (3 cr)
Geog 479 GIS Programming (2 cr)
Geog 507 Spatial Anaylsis and Modeling (2 cr)
~~Geog 524 Hydrologic Applications of GIS and Remote Sensing (3 cr)~~
Geog 580 GIS Seminar (3 cr)
~~Geog 583 Remote Sensing/GIS Integration (3 cr)~~
Credits to total 15 for this Academic Certificate

Geological Sciences

1. Change the title of the following course [**Effective**: Summer 2009]

Hydr J413/J513 ~~Applied Hydrogeologic Concepts~~Ground Water Resource Evaluation (3 cr)
Quantitative methods for the estimation of aquifer coefficients related to ground water resource evaluations. For grad credit, students are required to complete an additional independent research paper/project.
Prereq: Geol 309

2. Change the curricular requirements of **Geological Sciences** (B.S.) [**Effective**: Summer 2009]

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

Chem 111 Principles of Chemistry I (4 cr)
Chem 112 Principles of Chemistry II (5 cr)
Engl 317 Technical Writing (3 cr)
Geog 385 GIS Primer (3 cr)
Geol 101 or Geol 111 Physical Geology (4 cr)
Geol 102 Historical Geology (4 cr)
Geol 249 Mineralogy and Optical Mineralogy (4 cr)
Geol 290 Field Geology I (3 cr)
Geol 324 Principles of Stratigraphy and Sedimentation (4 cr)
Geol 326 Igneous and Metamorphic Petrology (4 cr)
Geol 345 Structural Geology (4 cr)
Geol 422 Principles of Geophysics (3 cr)
Geol 423 Principles of Geochemistry (3 cr)
Geol 490 Field Geology II (3 cr)
Phys 111 and Phys 112 General Physics I-II; or Phys 211 and Phys 212 Engineering Physics I-II (8 cr)

And the completion of one of the following options and electives approved by the advisor to total 128 credits for the degree.

A. General Geology Option

Geol 212 Principles of Paleontology (4 cr)
Geol 335 Geomorphology (3 cr)
Math 160 Survey of Calculus or 170 Analytic Geometry and Calculus I (4 cr)
Math 175 Analytic Geometry and Calculus II, Math 330 Linear Algebra, or Stat 251 Statistical Methods (3-4 cr)
~~Phys 111-112 General Physics I-II or Phys 211-212 Engr Physics I-II (8 cr)~~
Advisor-approved electives in geology (9 cr)

B. Hydrogeology Option

Geol 309 Ground Water Hydrology or Hydr 409 Quantitative Hydrogeology (3 cr)
Geol 410 Techniques of Ground Water Study (3 cr)
Math 170 Analytic Geometry and Calculus I (4 cr)
Math 175 Analytic Geometry and Calculus II (4 cr)
Stat 251 Statistical Methods or 301 Probability and Statistics (3 cr)
~~Phys 211-212 Engineering Physics I-II (8 cr)~~
Hydrology electives chosen from the following (6 cr):
Hydr 409 or Hydr 509 Quantitative Hydrogeology (3 cr)
Hydr 412 or Hydr 512 Environmental Hydrogeology (3 cr)
Hydr 413 or Hydr 513 Ground Water Resource Evaluation (3 cr)
Hydr 414 or Hydr 514 Ground Water-Surface Water Interaction (3 cr)
Hydr 418 or Hydr 518 Geomicrobiology (3 cr)
Hydr 464 or Hydr 564 The Geochemistry of Natural Waters (3 cr)

Hydr 468 Aquifer Test Design and Analysis (3 cr)
Hydr 496 Hydrogeology Senior Thesis (3 cr)
Hydr 576 Fundamentals of Modeling Hydrogeologic Systems (3 cr)
Hydrogeology electives chosen from the following if not used above (3 cr):
BAE 351 Hydrology or BAE 450 Environmental Hydrology (3 cr)
CE 421 Engineering Hydrology (3 cr)
ChE 470 or ChE 570 Hazardous Waste Management (3 cr)
Engr 210 Engineering Statics and Engr 335 Engr Fluid Mechanics (6 cr)
Geol 578 Advanced Geochemistry of Natural Waters (3 cr)
Hydr 409 or Hydr 509 Quantitative Hydrogeology (3 cr)
Hydr 412 or Hydr 512 Environmental Hydrogeology (3 cr)
Hydr 413 or Hydr 513 Ground Water Resource Evaluation (3 cr)
Hydr 414 or Hydr 514 Ground Water-Surface Water Interaction (3 cr)
Hydr 418 or Hydr 518 Geomicrobiology (3 cr)
Hydr 464 or Hydr 564 The Geochemistry of Natural Waters (3 cr)
Hydr 468 Aquifer Test Design and Analysis (3 cr)
Hydr 496 Hydrogeology Senior Thesis (3 cr)
Hydr 576 Fundamentals of Modeling Hydrogeologic Systems (3 cr)
Math 275 Analytic Geometry and Calculus III (3 cr)
Math 310 Ordinary Differential Equations (3 cr)
Soil 205, 206 The Soil Ecosystem and Lab (4 cr)
Soil 415 Soil and Environmental Physics (3 cr)
Stat 428 Geostatistics (3 cr)
~~Hydrogeology electives chosen from the following, including at least 6 credits in Hydr courses (18 cr):~~
~~BAE 351 Hydrology (3 cr)~~
~~CE 421 Engineering Hydrology (3 cr)~~
~~ChE 470 Hazardous Waste Management (3 cr)~~
~~Engr 210 Engineering Statics and Engr 335 Engr Fluid Mechanics (6 cr)~~
~~Geol 578 Advanced Geochemistry of Natural Waters (3 cr)~~
~~Hydr 409/509 Quantitative Hydrogeology (3 cr)~~
~~Hydr 412 Environmental Hydrogeology (3 cr)~~
~~Hydr 413 Applied Hydrogeologic Concepts (3 cr)~~
~~Hydr 414/514 Ground Water-Surface Water Interaction (3 cr)~~
~~Hydr 418/518 Geomicrobiology (3 cr)~~
~~Hydr 464/564 The Geochemistry of Natural Waters (3 cr)~~
~~Hydr 468 Aquifer Test Design and Analysis (3 cr)~~
~~Hydr 496 Hydrogeology Senior Thesis (3 cr)~~
~~Hydr 576 Fundamentals of Modeling Hydrogeologic Systems (3 cr)~~
~~Hydr 577 Computer Applications in Geohydrology (3 cr)~~
~~Math 275 Analytic Geometry and Calculus III (3 cr)~~
~~Math 310 Ordinary Differential Equations (3 cr)~~
~~Soil 205, 206 The Soil Ecosystem and Lab and Soil 415 Soil Physics (7 cr)~~
~~Stat 428 Geostatistics (3 cr)~~

C. Resource Exploration Option

Econ 272 Foundations of Economic Analysis (4 cr)
Geol 212 Principles of Paleontology (4 cr)
Geol 407 or Geol 507 Basin Analysis (3 cr)
~~Geol 448 Tectonics (3 cr)~~
~~Geol 476 Mineral & Petroleum Exploration Methods (3 cr)~~
Math 160 Survey of Calculus or Math 170 Analytic Geom and Calculus I (4 cr)
~~Math 175 Analytic Geometry and Calculus II or Math 330 Linear Algebra (3-4 cr)~~
~~Phys 111-112 General Physics I-II or Phys 211-212 Engr Physics I-II (8 cr)~~
Stat 251 Statistical Methods or Stat 301 Probability and Statistics (3 cr)
Advisor approved electives in geology (6 cr)

D. Environmental Geology Option

Geol 212 Principles of Paleontology (4 cr)
Geol 309 Ground Water Hydrology or Hydr 409 Quantitative Hydrogeology (3 cr)
Geol 335 Geomorphology (3 cr)
Geol 344 Earthquakes and Seismic Hazards or Geol 361 Geology and the Environment (3 cr)
Math 160 Survey of Calculus or Math 170 Analytic Geom and Calculus I (4 cr)
Math 175 Analytic Geometry and Calculus II, Math 330 Linear Algebra, or Stat 251 Statistical Methods (3-4 cr)
~~Phys 111-112 General Physics I-II or Phys 211-212 Engr Physics I-II (8 cr)~~
Environmental geology electives chosen from the following (9 cr):
BAE 351 Hydrology (3 cr)
BAE 433 Bioremediation (3 cr)
BAE 452 Environmental Water Quality (3 cr)
Biol 115 Cells and the Evolution of Life (4 cr)
Chem 275, 276 Carbon Compounds and Lab or Chem 277, 278 Organic Chem I and Lab (4 cr)
Chem 418 Environmental Chemistry (3 cr)
Geog 401 Climatology (3 cr)
Geol 410 Techniques of Ground Water Study (3 cr)
Geol 464 or Hydr 464 The Geochemistry of Natural Waters (3 cr)

MMBB 250, 255 General Microbiology and Lab (5 cr)
Soil 205, 206 The Soil Ecosystem and Lab (4 cr)

E. Geological Education Option

Biol 115 Cells and the Evolution of Life (4 cr)
Geog 100 Physical Geography (4 cr)
Geog 401 Climatology (3 cr)
Geol 212 Principles of Paleontology (4 cr)
Geol 335 Geomorphology (3 cr)
Math 160 Survey of Calculus or Math 170 Analytic Geom and Calculus I (4 cr)
Math 175 Analytic Geometry and Calculus II, Math 330 Linear Algebra, or Stat 251 Statistical Methods (3-4 cr)
Phys 103, 104 General Astronomy and Lab (4 cr)
~~Phys 111-112 General Physics I-II or Phys 211-212 Engr Physics I-II (8 cr)~~
PlSc 205 General Botany (4 cr)

F. Structural Geology and Tectonics Option

Geol 335 Geomorphology (3 cr)
Geol 344 Earthquakes and Seismic Hazards (3 cr)
Geol 432 Geologic Development of North America (3 cr)
Geol 448 Tectonics or Geol 459 Geodynamics (3 cr)
Geol 498 Senior Thesis (4 cr)
Math 170 Analytic Geometry and Calculus I (4 cr)
Math 175 Analytic Geometry and Calculus II or Math 330 Linear Algebra (3-4 cr)
~~Phys 111-112 General Physics I-II or Phys 211-212 Engineering Physics I-II (8 cr)~~

3. Change the curricular requirements of **Geology** (Minor) [**Effective**: Summer 2009]

Geol 101 Physical Geology or Geol 111 Physical Geology for Science Majors (4 cr)
Geol 102 Historical Geology (4 cr)
Electives in geology (~~13~~ 12 cr)

Health, Physical Education, Recreation and Dance

1. Drop the following courses [**Effective**: Summer 2009]

Rec 275 Computer Applications in Leisure Services (3 cr)
Introduction to computer software applicable to the recreation and leisure profession; software used to produce presentation graphics, desktop publishing, spreadsheets, web page creation, and print material for the leisure profession; Internet access for electronic mail, and Web searches through web search engines; intro to SPSS statistical software.
Recommended Substitution: PTTE 111

Rec 329 Leadership in Recreation (3 cr)
Intro to theories, methods, and styles of effective leadership; includes motivation, group dynamics, leadership skills, and abilities in the recreation and leisure setting. (Alt/yrs)
Recommended Equivalency: HPRD 429

2. Add the following courses [**Effective**: Summer 2009]

HPRD 580 Research: Writing and Dissemination (1 cr)
Professional writing of research not directly related to a thesis or dissertation. (Spring only)
Prereq: HPRD 570

HPRD 581 Research: Group Programming (1 cr)
Group professional service projects based on research, needs assessment and implementation strategies. (Spring only)
Prereq: Rec 575

HPRD 582 Research: Individual Programming (1 cr)
Individual professional service projects based on research, needs assessment and implementation strategies. (Spring only)
Prereq: Rec 575

PEP 699 Non-dissertation Doctoral Research (cr arr)
Research not directly related to dissertation.
Prereq: Enrollment to a doctoral program

Editor's Note: 699 is not a standard course and despite similarities to 599, this course will not be entitled to the In-Progress (IP) grade mode like 599.

3. Re-activate the following dormant course [**Effective**: Summer 2009]

PEP WS311 Strength Training (3 cr) WSU Ath T 311

4. Change the cross-list status and description of the following course [**Effective**: Summer 2009]

Dan 105 (s) Dance (1 cr, max arr)
Modern, ballet, jazz, tap, and a variety of social dance (ballroom, Latin dance, swing, country western, etc.). Two hrs per wk.~~Same as PEB 105. Modern, folk, ballet, jazz, tap, square, and social dancing. Two hrs a wk.~~ Graded Pass/Fail.

5. Change the description of the following courses [**Effective**: Summer 2009]

PEP 100 Introduction to Exercise Science & Health (1 cr)
Introduction to foundational content, subdisciplines of study in exercise science, and fields of health. Students will also gain an understanding of career opportunities within the areas of exercise science & health.~~Introduction to career opportunities within the field of sport science; topics on professional development, advising issues, and guest lectures from professionals practicing in related fields.~~ (Fall only)

PEP 412 Elementary Physical Education Methods (3 cr)
Study and application of teaching methods and teaching behavior; structuring learning outcomes through performance objectives and lesson and unit planning. Includes a 16-hr required practicum at the elementary level. Lecture-lab.
Prereq: Acceptance into pedagogy sequence
Prereq or **Coreq:** ED 302

PEP 421 Secondary Physical Education Methods (2-3 cr)
Study and application of teaching methods and teaching behavior; structuring learning outcomes through performance objectives and lesson and unit planning. Includes a 16-hr required practicum at the secondary level. Lecture-lab.
Prereq: Acceptance into pedagogy sequence
Prereq or **Coreq:** ED 302

PEP 530 Contemporary Issues in Health and Activity (3 cr)
Studies of individual and community behavior, theories, policies and current issues related to health and activity; examination of research and development of research and grant proposals.~~Studies of theories, trends, policies and issues related to Health and Activity; examination of research and development of research and grant proposals.~~ (Fall only)

6. Change the prerequisites of the following courses [**Effective**: Summer 2009]

Dan 216 (s) Techniques (cr arr)
For majors and minors. Theory and techniques in ballet, modern, jazz, and performance. Two to three hrs a wk in a basic instructional curriculum.
~~**Prereq:** Permission of division~~

Dan J321/J511 Dance Pedagogy (3 cr)
Learning styles, teaching styles, and behaviors as they affect teaching and learning in dance; science of dance training. Additional projects/assignments required for graduate credit include observation and analysis of dance teacher behavior in a minimum of two genres and two skills levels; demonstrated ability to integrate pedagogical principles in teaching a minimum of two 50-minute technique classes on the university level. (Alt/yrs)
~~**Prereq:** Permission~~

Dan 416 (s) Advanced Technique (cr arr)
For majors and minors. Advanced techniques and theory in ballet, modern, jazz, and performance. Two to three hrs a wk in preprofessional technique classes.
~~**Prereq:** Permission of division~~

H&S 490 Health Promotion (3 cr)
Examines the philosophical, ethical and theoretical foundations of the professional practice of health promotion in school, community, and work site settings, as well as in health promotion consultant activities. Emphasis will be placed on facilitating prepared units/lessons to respective target populations such as students, employees, patients, or community members. (Spring only)
Prereq: HPRD 201 or H&S 150~~ and Permission~~

PEP 300 Applied Human Anatomy and Biomechanics (2-3 cr)
This course is designed to provide the student with the anatomical and biomechanical knowledge essential to conduct a systematic qualitative analysis of human movement in clinical, educational, performance, and wellness settings. Two hrs of lec, two hrs of lab per wk.
Prereq: Biol 120~~, PEP 201~~ or Permission

PEP 380 Measurement and Evaluation (2 cr)
Construction, evaluation, and interpretation of tests used in evaluating physical and cognitive performance in physical education and sport science settings; basic statistical analysis. Accelerated class; three hrs of lec-lab a wk.
Prereq: ~~PEP 201~~HPRD 201 or Permission

PEP 418 Physiology of Exercise (3 cr)
Effects of physical activity on the circulatory, respiratory, and other systems. Two lec and one 2-hr lab a wk.
Prereq: Biol 120 and Biol 121~~;~~, ~~PEP 201~~ or Permission

7. Change the description and prerequisites of the following courses [**Effective**: Summer 2009]

Dan 410 Pre-professional Dance Theatre (2 cr, max 12)
Advanced work in choreography and performance. Two hrs of company class a wk plus additional rehearsals leading to performance. ~~Recommended Preparation: Dan 210, 325, 383.~~
Prereq: Two semesters of Dan 210; or Permission

PEP 424 Physical Education for Special Populations (2 cr)
Adapting physical education programs to meet individual needs. 2 hours of lec per week. Includes a 20 hour required practicum working with individuals with disabilities. Lecture-Lab.
Prereq: PEP 360 and acceptance into pedagogy sequence
Prereq or **Coreq:** EDCI 302

PEP 440 Physical Education Curriculum and Administration (2 cr)
Curriculum, programming, organization, and administration of school physical education and intramurals; field experience. Includes a 16 hr required practicum at the secondary level. Lecture-lab.
Prereq: Acceptance into pedagogy sequence
Prereq or **Coreq:** EDCI 302

8. Change the co-requisites and description of the following course [**Effective**: Summer 2009]

PEP 350 Elementary Health and Physical Education (3 cr)
Specific methods, research, curricula, and media in teaching elementary health and physical education. Three lecture/lab hours per week and 15 hours of practicum work in the schools and community.
Coreq: ~~Courses in the math/science/physical education block~~EDCI 327, EDCI 328, and EDCI 329

9. Change the description and title of the following course [**Effective**: Summer 2009]

PEB 108 (s) ~~Swimming~~ Water-Based Sports and Fitness Activities (1 cr, max arr)
All forms of physical activity performed in the water, including all levels of proficiency in swimming (beginning, intermediate, and advanced), diving, water fitness activities, and scuba.~~All levels of proficiency, including WSI, lifeguarding, diving, and scuba.~~ Two hrs a wk. Graded Pass/Fail.

10. Change the cross-list status, description and title of the following course [**Effective**: Summer 2009]

PEB 105 (s) ~~Dance~~ Land-Based Individual and Group Fitness Activities (1 cr, max arr)
A variety of individual and group fitness activities performed on land such as step aerobics, body toning, weight training, jogging, backpacking, yoga, pilates, cycling, etc. Two hrs per wk. Graded P/F.~~See Dan 105.~~

11. Change the curricular requirements of **Athletic Training** (B.S.P.E.) [**Effective**: Summer 2009]

The Athletic Training major has two portions to the education program, didactic and clinical. Prior to application to the clinical portion of the program, a pre-professional phase is required which includes a grade of 'C' or better in prerequisite courses (Biol 120, Biol 121, H&S 245, H&S 288 and PEP 101) and successful completion of an observation period in the athletic training room (PEP 171). See the Athletic Training Education Program Director for the specific information regarding admission into the clinical portion of the program. This information includes admission requirements, pre-professional phase course work and observation period requirements, technical standards for admission, and an application form.

Additionally, to maintain good standing in the clinical portion of the program, the student must meet specific criteria, which includes maintaining a 2.75 cumulative GPA and a grade of 'C' or better in all professional courses. See the Athletic Training Education Program Director for specific information regarding continuation in the clinical portion of the program.

Required course work includes the university requirements (see regulation J-3), the Department of HPERD core and the following course work:

Professional Courses (~~68~~ 56 cr):
- Biol 120 Human Anatomy (4 cr)
- Biol 121 Human Physiology (4 cr)
- FCS 205 Concepts in Human Nutrition (3 cr)
- FCS 305 Nutrition Related to Fitness and Sport (3 cr)
- H&S 232 Medical Terminology (2 cr)
- H&S 245 Introduction to Athletic Injuries (3 cr)
- H&S 288 First Aid: Emergency Response (2 cr)
- H&S 462 General Medicine for Physically Active Individuals (1 cr)
- H&S 463 Pharmacology for Physically Active Individuals (1 cr)
- H&S 464 Athletic Training Lower Extremity Evaluation (3 cr)
- H&S 466 Athletic Training Upper Extremity Evaluation (3 cr)

H&S 467 Athletic Training Rehabilitation (3 cr)
H&S 468 Athletic Training Modalities (3 cr)
H&S 469 Athletic Training Organization and Administration (3 cr)
H&S 470 Seminar in Athletic Training (2 cr)
~~PEB 106 Individual and Dual Sports: Step Aerobics or Aerobics/Body Toning (1 cr)~~
~~PEB 106 Individual and Dual Sports: Weight Training (1 cr)~~
PEP 101 Introduction to Athletic Training (1 cr)
PEP 300 Applied Human Anatomy and Biomechanics (3 cr)
~~PEP 305 Applied Sports Psychology (3 cr)~~
~~PEP 360 Motor Behavior (3 cr)~~
~~PEP 380 Measurement and Evaluation (2 cr)~~
PEP 418 Physiology of Exercise (3 cr)
PEP 455 Design & Analysis of Research in HPERD (3 cr)
~~PEP 475 Moral Reasoning in Sport (2 cr)~~
PEP 493 Fitness Assessment and Prescription (3 cr)
One of the following (3 cr):
Engl 207 Persuasive Writing (3 cr)
Engl 208 Personal and Exploratory Writing (3 cr)
Engl 209 Inquiry-Based Writing (3 cr)
Engl 313 Business Writing (3 cr)
Engl 317 Technical Writing (3 cr)

Clinical Experiences (10 cr):
H&S 390 Athletic Training High School Clinical Experience (1 cr)
H&S 391 Athletic Training Sports Medicine Clinical Experience (1 cr)
H&S 392 Athletic Training General Medical & Orthopedic Clinical Experience (1 cr)
PEP 171 Athletic Training Clinical Experience I – Observation (1 cr)
PEP 272 Athletic Training Clinical Experience II (1 cr)
PEP 273 Athletic Training Clinical Experience III (1 cr)
PEP 371 Athletic Training Clinical Experience IV (1 cr)
PEP 372 Athletic Training Clinical Experience V (1 cr)
PEP 471 Athletic Training Clinical Experience VI (1 cr)
PEP 472 Athletic Training Clinical Experience VII (1 cr)

Electives to total 128 cr for the degree

12. Change the curricular requirements of **Physical Education** (B.S.Ed.) [**Effective**: Summer 2009]

Required course work includes the university requirements (see regulation J-3), the Department of HPERD core, the Idaho Technology Competency Certification and the following course work:

…

General College of Education Requirements

~~ED 201 Diverse Learners in Schools and Social/Cultural Contexts (3 cr)~~
~~ED 301 Principles of Learning and Development in Education (3 cr)~~
~~ED 302 Curriculum, Instruction, and Assessment Strategies (3 cr)~~
~~ED 401 Professional Role Development (3 cr)~~
EDCI 201 Contexts of Education (2 cr)
EDCI 301 Learning, Development, and Assessment (3 cr)
EDCI 302 Teaching Culturally Diverse Learners (4 cr)
EDCI 401 Internship Seminar (1 cr)
EDCI 463 Literacy Methods for Content Learning (3 cr)
EDSP 300 Educating for Exceptionalities (2 cr)
PEP 484 Internship in Physical Education Teaching (14 cr)
Psyc 101 Intro to Psychology or Psyc 305 Developmental Psychology (3 cr)

Advanced Composition Requirement (Select one of the following) (3 cr):
Engl 207 Persuasive Writing (3 cr)
Engl 208 Personal and Exploratory Writing (3 cr)
Engl 209 Inquiry-Based Writing (3 cr)
Engl 313 Business Writing (3 cr)
Engl 317 Technical Writing (3 cr)

Note: For registration in upper-division courses in education, students must have been admitted to the teacher education program and maintain a cumulative GPA of 2.75. For admission criteria, refer to "Admission to the Teacher Education Program" in the College of Education section in Part 4.

History

1. Drop the following course [**Effective**: Summer 2009]

Hist 313 Red, White, and Black: The Peopling of Early North America (3 cr)
Survey; Native American, Euroamerican, and Afro-American heritage in North America, 1400-1790.

2. Add the following courses [**Effective**: Summer 2009]

Hist J421/J521 Pirates of the Caribbean and Beyond (3 cr)
The course will use the study of pirates and privateers to examine two main questions. Firstly, the role of pirates in the construction and collapse of empires from the Roman period to the present day and secondly, the examination of the popular representations of piracy across a similar period. Additional work required for graduate credit.

Hist J426/J526 Red Earth White Lies: American Indian History 1840-Present (3 cr)
Survey 1840 to present; dynamics and themes of Indian history with emphasis on Indian-White relations in the U.S. Additional work required for graduate credit.

3. Change the description and title of the following courses [**Effective**: Summer 2009]

Hist J431/J531 ~~History of Indian-White Relations~~Stolen Continents, The Indian Story: Indian History to 1840 (3 cr)
Survey 1400 to ~~present~~1840; dynamics and themes of Indian history with emphasis on Indian-White relations in the U.S. Additional work required for graduate credit.

International Affairs

1. Change the curricular requirements of **International Studies** (B.A.) [**Effective**: Summer 2009]

Required course work includes the university requirements (see regulation J-3), the general requirements for the B.A. degree, and:

Anth 220 Peoples of the World or JAMM 490 Global Media (3 cr)
Econ 201 and Econ 202 Principles of Economics; or Econ 272 Foundations of Economic Analysis (4-6 cr)
Geog 200 World Regional Geography (3 cr)
IS 310 Model United Nations – Fall ~~or Hist 290 The Historian's Craft~~ or PolS 235 Political Research Methods and Approaches (3 cr)
IS 495 International Studies Senior Seminar (3 cr)
PolS 237 International Politics or PolS 205 Introduction to Comparative Politics (3 cr)
Stat 150 Intro to Statistics or Stat 251 Statistical Methods (3 cr)
At least 12 cr from one of the following issue emphases: international relations, international economics and business, global resources and development (see courses below)
At least 12 cr from one of the following regional emphases: Latin America, Europe, Asia (see courses below)
Demonstrated proficiency in a modern foreign language correlating with the region of emphasis and equivalent to that gained from six semesters of university study. Exceptions include any class taught in English including: Chin 331, Chin 330, Chin 363, Russ 410, and Russ 430. (0-22 cr)

In addition, international experience in the student's region of emphasis is required for all students in this major. The experience must extend consecutively for at least 10-12 weeks, be qualified for at least 12 credits, and include an academic project or assignment and immersion in the culture of the country. All costs associated with the international experience are the responsibility of the student.

The requirement of international experience will normally be fulfilled by completing a registered credit program such as study abroad, student exchange, student teaching, or internship. In general, credits are registered on the UI campus; course work and field experience are taken abroad.

In some cases, permission may be granted to complete noncredit work experience that places the student abroad for a contracted length of time. Normally this work assignment will be completed during the degree program. In some instances, prior work experience may be accepted based on the following criteria: verification, length, nature, recentness, and relevancy of experience.

ISSUE EMPHASES IN INTERNATIONAL STUDIES
Recommended courses for completion of requirement (special topic courses may be used when approved by the director).

A. International Relations
Geog 365 Political Geography (3 cr)
Hist 430 U.S. Diplomatic History (3 cr)
Hist 458 Military History (3 cr)
IS 320 Model United Nations – Spring (2 cr)
PolS 382 Post-Communist Politics (3 cr)
PolS 438 Conduct of American Foreign Policy (3 cr)
PolS 440 International Organizations and International Law (3 cr)
PolS 449 World Politics and War (3 cr)
PolS 487 Political Violence and Revolution (3 cr)
…

2. Change the curricular requirements of **International Studies** (Minor) [**Effective**: Summer 2009]

In consultation with the school director, students electing this academic minor submit an individual study plan emphasizing (a) international relations, (b) international economics and business, or (c) global resources and development.

1. **Basic Credit Requirements.** At least 21 credits selected from the list of courses approved by the Martin School of International Affairs, consisting of the following:
   - a minimum of 6 credits chosen from Anth 220, ~~Econ 446, Econ 447,~~ Geog 200, IS 310, ~~IS 495 (Int'l Studies Senior Seminar),~~ JAMM 490, PolS 205, PolS 237

- a minimum of 6 credits from one of the following issue emphases: international relations, international economics and business, global resources and development (see courses above)
- a minimum of 6 credits from one of the following regional emphases: Latin America, Europe, Asia (see courses above)

2. **Limitations.** No course to be counted toward the minor may be taken by directed study without prior approval by the ISC.

~~3. **Language Proficiency.** Demonstrated proficiency (equivalent to that required for the B.A. degree) in a modern foreign language. Students who cannot demonstrate proficiency must complete at least four credits in a modern foreign language, but these credits do not count toward the basic 18-credit requirement.~~

Landscape Architecture

1. Change the prerequisites of the following courses [**Effective**: Summer 2009]

LArc 361 Landscape Architecture 4.1 (3 cr)
Intermediate scale land planning and design problems that emphasize sustainable development practices for the urban and rural environment with a focus on the integration of wetland ecology planning, storm water management and wildlife habitat with an emphasis on the use of indigenous plant materials for restoration and rehabilitation. Selected field trips at student expense. Recommended Preparation: LArc 288 and 289. (Spring only)
Prereq: LArc 357 and LArc 395; or Permission
Coreq: LArc 362 or Permission

LArc 362 Landscape Architecture 4.2 (3 cr)
Intermediate scale land planning and design problems that emphasize sustainable development practice with a focus on landscape restoration, the application of visual analysis using GIS and the use of indigenous plant materials for restoration and rehabilitation. Selected field trips at student expense. Recommended Preparation: LArc 288, 289. (Spring only)
Prereq: LArc 395 or Permission
Prereq or **Coreq:** LArc 361 or Permission

2. Change the curricular requirements of **Landscape Architecture** (B.L.Arch.) [**Effective**: Summer 2009]

Students are typically accepted into the landscape architecture major as freshman or as transfer students. However accreditation standards defining acceptable student/faculty ratios, and the availability of overall studio space, limit the number of students in the sophomore, junior and senior design studios. In order to meet these standards and constraints all transfer students must have a minimum GPA of 2.5 to be considered for admission to the B.L.Arch. program. All new students whether freshman or transfer will be required to submit a portfolio of creative work at the end of their first year in the program. (Students are encouraged to include work from landscape architecture courses and any art or architecture courses they may have taken.) A committee of faculty will review this portfolio along with each student's cumulative GPA to determine their eligibility to continue in the program. Portfolios are due no later than the Monday of No Examination Week. All students will be notified of their eligibility for the coming fall semester no later than three weeks after the last day of classes of spring semester.

All majors in the program must maintain at least a 2.5 cumulative GPA in landscape architecture major courses. Failure to do so will require the student to meet with their advisor and repeat the landscape architecture major courses that impact this overall GPA before advancing in the program.

On registering for a course offered by the department, the student agrees that the department may retain work completed by the student for display, instruction, and accreditation purposes.

Landscape Architecture students are required to participate in two extended field trips at their own expense, one in the spring of their third year and another in the fall of their fourth year.

Landscape Architecture students are normally required to participate in the department's Study Abroad, Service Learning program in Cremolino, Italy in order to graduate with a BLA degree. This program takes place in the first eight weeks of the fall semester of the student's senior year. This study abroad program is subject to national and international conditions that may impact the department's ability to offer the program.

Computer Equipment: beginning with Landscape Architecture I, all landscape architecture students are required to have their own computer and appropriate software for use in their studios.

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

3. Change the curricular requirements of **Landscape Architecture** (Minor) [**Effective**: Summer 2009]

~~LArc 155 Introduction to Landscape Architecture I (1 cr)~~
LArc 156 Intro to Landscape Architecture II (1 cr)
LArc 389 History of Landscape Architecture (3 cr)
LArc 480 The Emerging Landscape (3 cr)
Courses chosen from the following (~~11~~ 13 cr):
LArc 155 Introduction to Landscape Architecture I (1 cr)
~~LArc 156 Intro to Landscape Architecture II (1 cr)~~
LArc 210 Computer Applications in Landscape Architecture (2 cr)

LArc 245 Landscape Graphics I (2 cr)
LArc 246 Landscape Graphics II (2 cr)
LArc 256 Landscape Architecture 1.1 (3 cr) (with instructor's permission)
LArc 257 Landscape Architecture 1.2 (3 cr) (with instructor's permission)
LArc 268 Landscape Construction I (2 cr)
LArc 269 Landscape Construction II (2 cr)
LArc 288 Plant Materials I (3 cr)
LArc 289 Plant Materials II (4 cr)
LArc 299 (s) Directed Study (3-6 cr)
LArc 356 Landscape Architecture 3.1 (3 cr) (with instructor's permission)
LArc 357 Landscape Architecture 3.2 (3 cr) (with instructor's permission)
LArc 364 Summer Study Abroad Design Studio (6 cr) (with instructor's permission)
LArc 368 Landscape Architecture Construction III (2 cr)
LArc 369 Landscape Architecture Construction IV (2 cr)
LArc 382 Landscape, Language and Culture (2 cr) (with instructor's permission)
LArc 383 Architectural Site Design (3 cr)
LArc 390 Italian Hill Towns and Urban Centers (3 cr) (with instructor's permission)
LArc 395 GIS in Land Planning (3 cr)
LArc 456 Landscape Architecture 5.1 (3 cr) (with instructor's permission)
LArc 457 Landscape Architecture 5.2 (3 cr) (with instructor's permission)
LArc 495 Computer-Aided Regional Landscape Planning (3 cr)
LArc 499 (s) Directed Study (3-6 cr)

Law

1. Change the cross-list status the following course [**Effective**: Summer 2009]

Law 949 Indian Law (3 cr)
Same as AIST 420. Study of judicial, statutory, and administrative materials concerning the historical development of Federal Indian Policy, treaties, the trust relationship, tribal sovereignty and self-government, civil and criminal jurisdiction, rights of individual Indians, state's rights, hunting and fishing rights, and the natural resources of tribes. Law 949 is a law class and will be graded based on the norms and expectations to which law students are normally held. AIST 420 is an undergraduate course that will be assessed on a P/F basis according to the general norms and expectations for an upper division undergraduate course.

Mathematics

1. Drop the following courses [**Effective**: Summer 2009]

Math ID550 Linear Algebra (3 cr) WSU Math 554
Vector spaces, direct sums, quotient spaces, similarity, Jordan forms, inner products, eigenvalues, eigenvectors, spectral theory. (Fall, Alt/yrs)

Math ID551 Ring Theory (3 cr) WSU Math 551
Ideals, quotient rings, modules, radicals, semisimple Artinian rings, Noetherian rings. (Spring, Alt/yrs)
Recommended Equivalency: Math 557

Math ID552 Galois Theory (3 cr) WSU Math 552
Field extensions, automorphisms, normality, splitting fields, radical extensions, finite fields, separability. A knowledge of group theory is presumed. (Spring, Alt/yrs)

Math 553 Group Theory (3 cr)
Permutation groups, isomorphisms, direct products, Sylow theory, normal series, abelian groups. (Fall, Alt/yrs)

2. Add the following courses [**Effective**: Summer 2009]

Math 430 Advanced Linear Algebra (3 cr)
Vector spaces, linear transformations, characteristic polynomial, eigenvectors, Hermitian and unitary operators, inner products, quadratic forms, Jordan canonical form, applications. Recommended Preparation: Math 215.
Prereq: Math 330 or Permission

Math 555 Groups and Fields I (3 cr)
Groups, fields, polynomials, Galois theory, representation theory. (Fall, alt/yrs)
Prereq: Math 461 and Math 462; or equivalent

Math 556 Groups and Fields II (3 cr)
Groups, fields, polynomials, Galois theory, representation theory. (Spring, alt/yrs)
Prereq: Math 555 or Permission

Math 557 Ring Theory (3 cr)
Rings, ideals, modules, commutative algebra. (Fall, alt/yrs)
Prereq: Math 461 and Math 462; or equivalent

Math 558 Introduction to Algebraic Geometry (3 cr)
Affine and projective varieties, morphisms, functions on varieties, birational maps, applications. (Spring, alt/yrs)
Prereq: Math 557 or Permission

3. Change the prerequisites of the following course [**Effective**: Summer 2009]

Math 461 Abstract Algebra (3 cr)
Groups, rings, and fields. (Fall only)
Prereq: Math 215 and Math 330; or Permission~~, and at least one of the following: Math 215, 386, 390~~

4. Change the cooperative status of the following courses [**Effective**: Summer 2009]

Math ~~ID&WS~~522 Topology (3 cr) ~~WSU Math 526~~
Basic concepts of point set and algebraic topology. (Spring, Alt/yrs)

Math ~~ID~~523 Algebraic Topology (3 cr) ~~WSU Math 527~~
Basic homotopy theory, covering spaces, homology theory, and applications. (Alt/yrs)

Math ~~ID~~524 Algebraic Topology (3 cr) ~~WSU Math 528~~
Basic homotopy theory, covering spaces, homology theory, and applications. (Alt/yrs)

Math ~~WS~~554 Advanced Topics in Geometry (3 cr) ~~WSU Math 550~~
(Alt/yrs)

Math ~~ID&WS~~571 Functional Analysis (3 cr) ~~WSU Math 504~~
Linear topological spaces and linear operators. (Fall, Alt/yrs)
Prereq: Math 536

Math ~~ID&WS~~572 Functional Analysis (3 cr) ~~WSU Math 506~~
Linear topological spaces and linear operators. (Spring, Alt/yrs)
Prereq: Math 536

5. Change the cooperative status and title of the following course [**Effective**: Summer 2009]

Math ID&WS563 Mathematical ~~Methods for Population~~ Genetics~~ and Evolution~~ (3 cr) WSU Math 563 and Biol 563
Same as Biol 563. Investigation of aspects of evolutionary biology with an emphasis on stochastic models and statistical methods; topics include: diffusion methods in molecular evolution, gene genealogies and the coalescent, inferring coalescent times from DNA sequences, population subdivision and F statistics, likelihood methods for phylogenic inference, statistical hypothesis testing, the parametric bootstrap. (Fall, Alt/yrs)
Prereq: Math 160 or Math 170 and Stat 251 or Stat 301

Mechanical Engineering

1. Change the cooperative status of the following courses [**Effective**: Summer 2009]

ME ~~ID&WS~~526 Statistical Thermodynamics (3 cr)~~ WSU Ch E and M E 526~~
Probability theory and quantum mechanics, statistical mechanics, thermodynamic probability, molecular interpretation of first and second laws; kinetic theories.
Prereq: Engr 320
Rationale: WSU is no longer teaching CHE - ME 526 (UI ME 526) and therefore the co-op listing should be removed.

ME ~~ID&WS~~547 Thermal Radiation Processes (3 cr) ~~WSU M E 514~~
Thermal radiation; radiation interchange among surfaces; radiation in absorbing-emitting gases; combined modes of heat transfer.
Prereq: ME 345 or Permission
Rationale: WSU is no longer teaching ME 514 (UI ME 547) and therefore the co-op listing should be removed.

2. Change the curricular requirements of **Mechanical Engineering** (B.S.M.E.) [**Effective**: Summer 2009]

This program is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

Note: Pre-advising is required to register in any ME course. To graduate in this program, a student may accumulate no more than five grades of D or F in the mathematics, science, or engineering courses used to satisfy graduation requirements. Included in this number are multiple repeats of a single course or single repeats in multiple courses and courses transferred from other institutions.

Required course work includes the university requirements (see regulation J-3), completion of the Fundamentals of Engineering (FE) examination and:

CE 411 Engineering Fundamentals (1 cr)
Chem 111 Principles of Chemistry I (4 cr)
Comm 101 Fundamentals of Public Speaking (2 cr)
Engl 317 Technical Writing (3 cr)
Engr 210 Engineering Statics (3 cr)
Engr 220 Engineering Dynamics (3 cr)
Engr 240 Introduction to Electrical Circuits (3 cr)
Engr 320 Engineering Thermodynamics and Heat Transfer (3 cr)
Engr 335 Engineering Fluid Mechanics (3 cr)
Engr 350 Engineering Mechanics of Materials (3 cr)
MSE 201 Elements of Materials Science (3 cr)
Math 170 Analytic Geometry and Calculus I (4 cr)
Math 175 Analytic Geometry and Calculus II (4 cr)
Math 275 Analytic Geometry and Calculus III (3 cr)
Math 310 Ordinary Differential Equations (3 cr)
Math 330 Linear Algebra (3 cr)
ME 123 Introduction to Mechanical Design (3 cr)
ME 223 Mechanical Design Analysis (3 cr)
ME 301 Computer Aided Design Methods (3 cr)
ME 313 Dynamic Modeling of Engineering Systems (3 cr)
~~ME 324 Dynamic Analysis in Machine Design (3 cr)~~
ME 325 Machine Component Design I (3 cr)
ME 330 Experimental Methods for Engineers (3 cr)
ME 341 Intermediate Mechanics of Materials (3 cr)
ME 345 Heat Transfer (3 cr)
ME 424 Mechanical Systems Design I (3 cr)
ME 426 Mechanical Systems Design II (3 cr)
ME 430 Senior Laboratory (3 cr)
ME 435 Thermal Energy Systems Design (3 cr)
Phil 103 Ethics or Phil 365 Biomedical Ethics (3 cr)
Phys 211 Engineering Physics I (4 cr)
Phys 212 Engineering Physics II (4 cr)
Phys 213 Engineering Physics III (4 cr)
One from the following (3-4 cr):
Econ 201 Principles of Economics (3 cr)
Econ 202 Principles of Economics (3 cr)
Econ 272 Foundations of Economics (4 cr)

~~Technical electives selected from ME 410, 411, 412, 413, 415, 416, 417, 420, 422, 425, 433, 443, 444, 451, 461, 481, plus one more technical elective that is from either the preceding list or from Math 330, 420, 432, 433, 480, Stat 301, 401, 446. (12 cr) **~~

Nine credits of the following Technical Electives (9 cr):
ME 404 Special Topics (cr arr)
ME 410 Principles of Lean Manufacturing (3 cr)
ME 411 Advanced Lean Manufacturing (3 cr)
ME 412 Gas Dynamics (3 cr)
ME 413 or ME 513 Engineering Acoustics (3 cr)
ME 414 or ME 514 HVAC Systems (3 cr)
ME 415 Materials Selection and Design (3 cr)
ME 417 or ME 517 Turbomachinery (3 cr)
ME 418 or ME 518 Discrete System Simulation and Animation (3 cr)
ME 420 or ME 520 Fluid Dynamics (3 cr)
ME 421 or ME 521 Advanced Computer Aided Design (3 cr)
ME 422 Applied Thermodynamics (3 cr)
ME 433 Combustion Engine Systems (3 cr)
ME 443 or ME 543 Analysis of Thermal Energy Systems (3 cr)
ME 444 Air Conditioning Engineering (3 cr)
ME 451 or ME 551 Experimental Methods in Fluid Dynamics and Heat Transfer (3 cr)
ME 461 Fatigue and Fracture Mechanics (3 cr)
ME 481 Control Systems (3 cr)
ME 525 Advanced Heat Transfer (3 cr)
ME 526 Statistical Thermodynamics (3 cr)
ME 527 Thermodynamics (3 cr)
ME 529 Combustion and Air Pollution (3 cr)
ME 534 Mechanics of Composite Materials (3 cr)
ME 539 Advanced Mechanics of Materials (3 cr)
ME 540 Continuum Mechanics (3 cr)
ME 541 Mechanical Engineering Analysis (3 cr)
ME 542 Optimal Control of Dynamic Systems (3 cr)
ME 543 Analysis of Thermal Energy Systems (3 cr)
ME 544 Conduction Heat Transfer (3 cr)
ME 546 Convective Heat Transfer (3 cr)
ME 547 Thermal Radiation Processes (3 cr)
ME 548 Elasticity (3 cr)
ME 549 Finite Element Analysis (3 cr)

ME 578 Neural Network Design (3 cr)
ME 580 Linear System Theory (3 cr)
ME 581 Fuzzy Logic Control Systems (3 cr)
ME 583 Reliability of Engineering Systems (3 cr)
ME 585 Design for Six Sigma (3 cr)

Six credits of the following Technical Electives (6 cr):

Bus 414 Entrepreneurship (3 cr)
Bus 456 Quality Management (3 cr)
Bus 531 Managing the Design Process (3 cr)
Engr 360 Engineering Economy (2 cr)
Math 330 Linear Algebra (3 cr)
Math 371 or Phys 371 Mathematical Physics (3 cr)
Math 420 Complex Variables (3 cr)
Math 432 Numerical Linear Algebra (3 cr)
Math 433 Numerical Analysis (3 cr)
Math 437 Mathematical Biology (3 cr)
Math 451 Probability Theory (3 cr)
Math 452 Mathematical Statistics (3 cr)
Math 453 Stochastic Models (3 cr)
Math 471 Introduction to Analysis 1 (3 cr)
Math 472 Introduction to Analysis 2 (3 cr)
Math 480 Partial Differential Equations (3 cr)
ME 401 Engineering Team Projects (2-3 cr)
ME 410 Principles of Lean Manufacturing (3 cr)
ME 411 Advanced Lean Manufacturing (3 cr)
ME 412 Gas Dynamics (3 cr)
ME 413 or ME 513 Engineering Acoustics (3 cr)
ME 414 or ME 514 HVAC Systems (3 cr)
ME 415 Materials Selection and Design (3 cr)
ME 417 or ME 517 Turbomachinery (3 cr)
ME 418 or ME j518 Discrete System Simulation and Animation (3 cr)
ME 420 or ME 520 Fluid Dynamics (3 cr)
ME 421 or ME 521 Advanced Computer Aided Design (3 cr)
ME 422 Applied Thermodynamics (3 cr)
ME 433 Combustion Engine Systems (3 cr)
ME 443 or ME 543 Analysis of Thermal Energy Systems (3 cr)
ME 444 Air Conditioning Engineering (3 cr)
ME 451 or ME 551 Experimental Methods in Fluid Dynamics and Heat Transfer (3 cr)
ME 461 Fatigue and Fracture Mechanics (3 cr)
ME 481 Control Systems (3 cr)
ME 499 Directed Study (cr arr)
ME 525 Advanced Heat Transfer (3 cr)
ME 526 Statistical Thermodynamics (3 cr)
ME 527 Thermodynamics (3 cr)
ME 529 Combustion and Air Pollution (3 cr)
ME 534 Mechanics of Composite Materials (3 cr)
ME 539 Advanced Mechanics of Materials (3 cr)
ME 540 Continuum Mechanics (3 cr)
ME 541 Mechanical Engineering Analysis (3 cr)
ME 542 Optimal Control of Dynamic Systems (3 cr)
ME 543 Analysis of Thermal Energy Systems (3 cr)
ME 544 Conduction Heat Transfer (3 cr)
ME 546 Convective Heat Transfer (3 cr)
ME 547 Thermal Radiation Processes (3 cr)
ME 548 Elasticity (3 cr)
ME 549 Finite Element Analysis (3 cr)
ME 578 Neural Network Design (3 cr)
ME 580 Linear System Theory (3 cr)
ME 581 Fuzzy Logic Control Systems (3 cr)
ME 583 Reliability of Engineering Systems (3 cr)
ME 585 Design for Six Sigma (3 cr)
Phys 351 Introductory Quantum Mechanics I (3 cr)
Phys 305 Modern Physics (3 cr)
Phys 352 Introductory Quantum Mechanics II (3 cr)
Phys 411 Physical Instrumentation I (3 cr)
Phys 425 or Phys 525 Relativity (3 cr)
Phys 428 or Phys 528 Computational Physics (3 cr)
Phys 443 or Phys 543 Optics (3 cr)
Phys 444 or Phys 544 Quantum Optics (3 cr)
Phys 463 Solid State Physics(3 cr)
Phys 465 or Phys 565 Particle and Nuclear Physics (3 cr)
Phys 484 or Phys 584 Astrophysics (3 cr)
Stat 301 Probability and Statistics (3 cr)
Stat 401 Statistical Analysis (3 cr)
Stat 446 Six Sigma Innovation (3 cr)
Any approved 400/500 level course in another engineering discipline

A maximum of 3 credits of the following may be used:
ME 307 Group Mentoring I (1 cr)
ME 308 Group Mentoring II (1 cr)
ME 407 Group Mentoring III (1 cr)
ME 408 Group Mentoring IV (1 cr)
Electives to total 128 credits

~~The minimum number of credits for the degree is 128, not counting Engl 101, Math 143, and other courses that might be required to remove deficiencies.~~

To continue in the program, students majoring in mechanical engineering may accumulate no more than three grades of D or F in the mathematics, science or engineering courses used to satisfy certification requirements. Included in this number are multiple repeats of a single course or single repeats in multiple courses and courses transferred from other institutions. In addition, students must also earn at least five grades better than a C in mathematics, science or engineering courses used to satisfy lower division requirements before registration is permitted in upper-division mechanical engineering courses. The specific lower-division courses are: Chem 111; Engr 210, 220, and 240; Math 170, 175, 275; ME 123, 223, 225; MSE 201; and Phys 211, 212, and 213. In addition, a grade higher than C must be earned in at least five of these courses. A grade of P (pass) in any of these courses is considered as a C grade in satisfying this certification requirement.

~~** With departmental approval, a graduate-level or special topics (ME 404) course may be used as a Technical Elective.~~

Music

1. Change the credits of the following courses [**Effective**: Summer 2009]

MusT 510 Portfolio 1 (~~2~~ 1 cr)
First semester of work on the required capstone electronic portfolio. Must be taken the first semester of study. Offered via the Web only.

MusT 560 Portfolio 2 (~~2~~ 1 cr)
Final semester of work to complete the required capstone electronic portfolio. Offered via the Web only.
Prereq: MusT 510

Natural Resources

1. Change the curricular requirements of **Ecology and Conservation Biology** (B.S.Ecol.-Cons.Biol.) [**Effective**: Summer 2009]

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

Biol 115 Cells and the Evolution of Life (4 cr)
Biol 116 Organisms and Environments (4 cr)
Biol 213 Principles of Biological Structure and Function (4 cr)
~~Biol 341 Systematic Botany or For 320 Dendrology (3 cr)~~
Chem 101 Introduction to Chemistry I or 111 Principles of Chemistry I (4 cr)
Comm 101 Fundamentals of Public Speaking (2 cr)
~~CSS/Fish/For/ForP/REM/WLF 483 Senior Project Presentation (1 cr)~~
~~CSS/Fish/For/NR/REM/WLF 497 Senior Thesis or CSS/Fish/For/ForP/REM/WLF 485 Ecology and Conservation Biology Internship (2 cr)~~
Econ 202 Principles of Economics or Econ 272 Foundations of Economic Analysis (3-4 cr)
Engl 317 Technical Writing (3 cr)
For 221 Ecology or REM 221 Ecology(3 cr)
For 235 or CSS 235 Society and Natural Resources (3 cr)
For 383 Economics for Natural Resource Managers or CSS 383 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)~~
Math 160 Survey of Calculus or 170 Analytic Geometry and Calculus I (4 cr)
NR 101 Exploring Natural Resources (1 cr)
NR 200 (s) Seminar (1 cr)
REM 341 Systematic Botany (3 cr) or For 320 Dendrology (3 cr)
Stat 251 Statistical Methods (3 cr)
Choose one of the following (1 cr):
CSS 483 Senior Project Presentation (1 cr)
Fish 483 Senior Project Presentation (1 cr)
For 483 Senior Project Presentation (1 cr)
ForP 483 Senior Project Presentation (1 cr)
REM 483 Senior Project Presentation (1 cr)
WLF 483 Senior Project Presentation (1 cr)
Choose one of the following (2 cr):
CSS 485 Ecology and Conservation Biology Internship (2 cr)
CSS 497 Senior Thesis (2 cr)
Fish 485 Ecology and Conservation Biology Internship (2 cr)

Fish 497 Senior Thesis (2 cr)
ForP 485 Ecology and Conservation Biology Internship (2 cr)
For 485 Ecology and Conservation Biology Internship (2 cr)
For 497 Senior Thesis (2 cr)
NR 497 Senior Thesis (2 cr)
REM 485 Ecology and Conservation Biology Internship (2 cr)
REM 497 Senior Thesis (2 cr)
WLF 485 Ecology and Conservation Biology Internship (2 cr)
WLF 497 Senior Thesis (2 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 six core courses: NR 200, For 330, For/REM 429, Soil 205/206, and WLF 316 or Fish 316.

~~NR 200 Seminar (1 cr)~~
For 330 Forest Ecosystem Processes (2 cr)
For 429 or REM 429 Landscape Ecology (3 cr)
Phys 100 Fundamentals of Physics or Phys 111 General Physics I (4 cr)
Soil 205 The Soil Ecosystem (3 cr)
Soil 206 The Soil Ecosystem Lab (1 cr)
WLF 316 Wildlife Ecology II or Fish 316 Principles of Population Dynamics (2-4 cr)
Quantitative Resource Analysis Restricted Electives (two courses from the following):
- CSS 310 Social Research Methods in Conservation (4 cr)
- For 375 Introduction to Spatial Analysis for Natural Resource Management (3 cr)
- For 472 or REM 472 Remote Sensing of Environment (3 cr)
- For 474 Forest Inventory (3 cr)
- Geog 385 GIS Primer (3 cr)
- REM 357 Rangeland and Riparian Habitat Assessment (3 cr)
- Stat 401 Statistical Analysis (3 cr)
- Stat 422 Sample Survey Methods (2 cr)
- WLF 448 Fish & Wildlife Population Ecology (4 cr)

Resource Management Restricted Electives (one course from the following):
- CSS 385 Conservation Management and Planning I (3 cr)
- CSS 490 Wilderness and Protected Area Management (3 cr)
- CSS 496 Monitoring Impacts in Protected Areas and Wilderness (3 cr)
- Fish 418 Fisheries Management (4 cr)
- For 424 Forest Dynamics and Management (2 cr)
- For 462 Watershed Science and Management (3 cr)
- REM 454 Rangeland Weed Management (3 cr)
- REM 456 Integrated Rangeland Management (3 cr)
- WLF 492 Wildlife Management (4 cr)

Ecology Restricted Electives (at least 2 credits from Fish 315, Fish 415, Fish 430, Fish 435, For 423, For 463, REM 460, and/or WLF 315) (10 cr):
- Biol 421 Advanced Evolutionary Biology (3 cr)
- Biol 478 Animal Behavior (3 cr)
- Ent 472 Aquatic Entomology (3 cr)
- Fish 314 Fish Ecology (3 cr)
- Fish 315 Fish Ecology Lab (1 cr)
- Fish 415 Limnology (4 cr)
- Fish 430 Riparian Ecology and Management (3 cr)
- Fish 435 Wetland Ecology and Management (3 cr)
- For 423 Forest Community Ecology (1 cr)
- For 426 Wildland Fire Ecology and Management (3 cr)
- For 463 Hydrologic Measurement Techniques (1 cr)
- For 468 Forest and Plant Pathology (2 cr)
- For 469 Introduction to Forest Insects (2 cr)
- Geog 310 Biogeography (3 cr)
- Geog 450 or REM 450 Global Environmental Change (3 cr)
- MMBB 425 Microbial Ecology (3 cr)
- PlSc 410 Biology of Weeds (3 cr)
- REM 440 Wildland Restoration Ecology (3 cr)
- REM 459 Rangeland Ecology (2 cr)
- REM 460 Rangeland Ecology Current Topics and Field Studies (1 cr)
- WLF 314 Wildlife Ecology I (3 cr)
- WLF 315 Wildlife Ecology I Lab (1 cr)
- WLF 440 Conservation Biology (3 cr)

Social/Political Restricted Electives (one course from the following):
- Comm 331 Conflict Management (3 cr)
- CSS 387 Environmental Communication Skills (3 cr)

CSS 481 Conservation Leadership (3 cr)
CSS 486 Public Involvement in Natural Resource Management (3 cr)
CSS 489 Personalities and Philosophies in Conservation (2 cr)
CSS 493 International Land Preservation and Conservation Systems (3 cr)
CSS 494 Public Relations for Natural Resources Professionals (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 382 Philosophy of Ecology (3 cr)
Phil 452 Environmental Philosophy (3 cr)
Phil 457 Natural Resource Ethics (3 cr)
PolS 364 Politics of the Environment (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 training to work in jobs aimed at conserving the earth's biodiversity. This option provides a broad-based education that covers biological diversity 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."

To graduate in this option, students must achieve a "C" or better in the following seven core courses: Biol 421, NR 200, For/REM 429, Phil 452, CSS 493, Fish or WLF 316, and WLF 440.

Biol 421 Advanced Evolutionary Biology (3 cr)
~~NR 200 Seminar (1 cr)~~
CSS 493 International Land Preservation and Conservation Systems (3 cr)
For 429 Landscape Ecology (3 cr)
Gene 314 General Genetics (3 cr)
Phil 452 Environmental Philosophy (3 cr)
WLF 316 Wildlife Ecology II or Fish 316 Principles of Population Dynamics (2-4 cr)
WLF 440 Conservation Biology (3 cr)
Quantitative Resource Analysis Restricted Electives (two courses from the following):
CSS 310 Social Research Methods in Conservation (4 cr)
For 375 Introduction to Spatial Analysis for Natural Resource Management (3 cr)
For472 or REM 472 Remote Sensing of Environment (3-4 cr)
For 474 Forest Inventory (3 cr)
Geog 385 GIS Primer (3 cr)
REM 357 Rangeland and Riparian Habitat Assessment (3 cr)
Stat 401 Statistical Analysis (3 cr)
Stat 422 Sample Survey Methods (2 cr)
WLF 448 Fish & Wildlife Population Ecology (4 cr)
Resource Management Restricted Electives (one course from the following):
CSS 385 Conservation Management and Planning I (3 cr)
CSS 490 Wilderness and Protected Area Management (3 cr)
CSS 496 Monitoring Impacts in Protected Areas and Wilderness (3 cr)
Fish 418 Fisheries Management (4 cr)
For 424 Forest Dynamics and Management (2 cr)
For 462 Watershed Science and Management (3 cr)
REM 454 Rangeland Weed Management (3 cr)
REM 456 Integrated Rangeland Management (3 cr)
WLF 492 Wildlife Management (4 cr)
Ecology Restricted Electives (at least 2 credits from Fish 315, Fish 415, Fish 430, Fish 435, For 423, For 463, REM 460, and/or WLF 315) (6 cr):
Biol 478 Animal Behavior (3 cr)
Ent 472 Aquatic Entomology (3 cr)
Fish 314 Fish Ecology (3 cr)
Fish 315 Fish Ecology Lab (1 cr)
Fish 415 Limnology (4 cr)
Fish 430 Riparian Ecology and Management (3 cr)
Fish 435 Wetland Ecology and Management (3 cr)
For 330 Forest Ecosystem Processes (2 cr)
For 423 Forest Community Ecology (1 cr)
For 426 Wildland Fire Ecology and Management (3 cr)
For 463 Hydrologic Measurement Techniques (1 cr)
For 468 Forest and Plant Pathology (2 cr)
For 469 Introduction to Forest Insects (2 cr)
Geog 310 Biogeography (3 cr)
Geog 450 or REM 450 Global Environmental Change (3 cr)
MMBB 425 Microbial Ecology (3 cr)
PlSc 410 Biology of Weeds (3 cr)
REM 440 Wildland Restoration Ecology (3 cr)
REM 459 Rangeland Ecology (2 cr)

REM 460 Rangeland Ecology Current Topics and Field Studies (1 cr)
WLF 314 Wildlife Ecology I (3 cr)
WLF 315 Wildlife Ecology I Lab (1 cr)

Organismal Biology Restricted Elective (one course from the following):
Biol 481 Ichthyology (4 cr)
Biol 483 Mammalogy (3 cr)
Biol 489 Herpetology (4 cr)
REM 353 Rangeland Plant Identification and Ecology (3 cr)
WLF 482 Ornithology (4 cr)

Social/Political Restricted Electives (one course from the following):
Comm 331 Conflict Management (3 cr)
CSS 387 Environmental Communication Skills (3 cr)
CSS 486 Public Involvement in Natural Resource Management (3 cr)
CSS 489 Personalities and Philosophies in Conservation (2 cr)
CSS 494 Public Relations for Natural Resources Professionals (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 382 Philosophy of Ecology (3 cr)
Phil 457 Natural Resource Ethics (3 cr)
PolS 364 Politics of the Environment (3 cr)

Electives to total 128 credits for the degree

Nuclear Engineering

1. Add the following courses [**Effective**: Summer 2009]

NE R533 Monte Carlo Methods (3 cr)
Applications of the Monte Carlo method to neutron transport calculations from introductory concepts to advanced simulations of criticality in fissile materials.
Prereq: NE 450 or Permission

NE R535 Nuclear Criticality Safety I (3 cr)
Physics of criticality, factors that affect reactivity, hand calculation techniques, experiments and the development of subcritical limits, criticality accidents, standards and regulations, evaluations.
Prereq: NE 450 or Permission

NE R555 Nuclear Criticality Safety II (3 cr)
Applications of criticality safety techniques to facility design and review, requirements for unique isotopes, criticality safety evaluations, connections to nuclear materials management, applications of monte carlo analysis.
Prereq: NE 535 or Permission

Physics

1. Change the co-requisites and prerequisites of the following course [**Effective**: Summer 2009]

Phys 305 Modern Physics (3 cr)
Quantum and relativity theories with applications to atomic, solid state, nuclear, and elementary particle physics. (Spring only)
Prereq: Phys 212~~, 213~~
Coreq: Math 275 and Phys 213

2. Change the description and prerequisites of the following courses [**Effective**: Summer 2009]

Phys ID&WS-J484/J584 Astrophysics (3 cr) WSU Astr 435
Celestial mechanics; planets and planetary systems; ~~Structure~~ structure and evolution of stars and star systems; ~~celestial mechanics;~~ special and general relativity; cosmology. Additional projects/assignments required for graduate credit.
Prereq for Phys 484: ~~Phys 103,~~ Phys 305~~,~~ or Math 275~~,~~; or Permission
Prereq for Phys 584: Admission to physics graduate program or Permission

Plant, Soil and Entomological Sciences

1. Change the curricular requirements of **Entomology** (Minor) [**Effective**: Summer 2009]

Ent 322 General and Applied Entomology (4 cr)
Entomology electives (~~14~~ 16 cr)

Political Science

1. Add the following courses [**Effective**: Summer 2009]

PolS 335 American Interest Groups & Social Movements (3 cr)
Study of American interest groups, lobbying, campaign finance, grassroots political activism, and social movements including the American civil rights, anti-war and environmental activism movements.

PolS J423/J523 Politics, Policy and Gender (3 cr)
Same as WmSt Examination of the gendered social construction of political processes, outputs, and public policy formation on the national and international level. Study of the historical evolution of women's participation in American politics as well as other countries. Analysis of the politics of gendered representation and political leadership in American politics and elsewhere. Additional projects/assignments reqd for grad cr.

PolS J435/J535 Advanced Political Science and Research Methods (3 cr)
Course covers advanced research design, social science quantitative methods and data collection issues. Additional projects/assignments reqd for grad cr.
Prereq: PolS 235 and Stat 251

PolS J436/J536 Policy Deliberation in the New Information Society (3 cr)
Study of how policymakers use information in the course of deliberating increasingly new and complex public policy choices, the sources of policy information and the quality of policy deliberations in government agencies and legislative institutions at the state and national level. Additional projects/assignments reqd for grad cr.

PolS J453/J553 Public Management Techniques (3 cr)
Emphasizes management styles and the empirical basis for decision; focus on conflict management through control or participatory strategies, and the acquisition and analysis of management information. Additional projects/assignments reqd for grad cr.

2. Change the curricular requirements of **Political Science** (B.S.) [**Effective**: Summer 2009]

The B.S. degree emphasizes methodology and requires increased course work in behavioral research methods. Course work also includes the university requirements (see regulation J-3), the general requirements for the B.S. degree, and:

PolS 101 Intro to Political Science and American Government (3 cr)
PolS 235 Political Research Methods and Approaches (3 cr)
PolS 425 or PolS 426 History of Political Philosophy I or II (3 cr)
PolS 435 Advanced Political Science and Research Methods (3 cr)
Stat 251 Statistical Methods (3 cr)
Other courses in political science (including a minimum of 20 credits in upper-division courses and at least 6 credits in each of the following areas: (1) American government/public law/public administration and (2) comparative/international politics) (23 cr)
Research methods (may be counted as related field cr if upper-division) (~~6~~ 3 cr)
Courses in upper-division related fields (20 cr)

Note: A maximum of 6 credits of political science internship and/or directed study courses may be counted toward meeting the political science credit requirements.

Rangeland Ecology and Management

1. Drop the following course [**Effective**: Summer 2009]

REM 470 Interdisciplinary Natural Resource Planning (3 cr)
See CSS 470.
Recommended Substitution: None

2. Add the following courses [**Effective**: Summer 2009]

REM 341 Systematic Botany (3 cr)
Classification and identification of vascular plants. Emphasis on Pacific Northwest flora. (Spring only)
Prereq: Biol 115 and 116; or Plsc 205
Recommended Equivalency: Biol 341

REM 360 Rangeland Entomology (2 cr)
Much of the world's population depends upon the resources available from rangeland habitats. Rangeland resources are not only an economic asset, but they also serve a multitude of ecological functions. Students will be introduced to the complex community of insects that inhabit rangeland ecosystems and will be better able to understand the roles played by insects in rangeland systems and the impact that selected management practices may have on their ability to fulfill those roles. Recommended Preparation: Stat 251 and REM 221. (Fall only)

REM 507 Landscape and Habitat Dynamics (3 cr)
Students explore landscape change occurring a variety of spatial and temporal scales, including global change, succession, disturbance events, and change induced by humans. Via scientific readings, models and spatial analysis students will learn how to quantify landscape change and how a change in environmental conditions and disturbance regimes may affect the composition of landscapes, specifically plant and animal habitats. Recommended Preparation: courses in ecology, statistics, and GIS. (Spring, alt/yrs)
Prereq: Permission

3. Change the title of the following course [**Effective**: Summer 2009]

REM 454 ~~Rangeland Weed~~Invasive Plant Management (3 cr)
Ecological principles and management options for invasive plant control on rangelands; focus on landscape-level management approaches including detection, monitoring, and prevention of weed invasions, restoration of weed-infested rangeland and coordinated weed management planning. One 2-day field trip. Recommended Preparation: PlSc 338. (Spring, Alt/odd yrs)

4. Change the description and title of the following course [**Effective**: Summer 2009]

REM 251 Rangeland Principles ~~of Range Resources Management~~ (2 cr)
Rangelands are vast landscapes that cover most of western North America and the earth. Students will examine the ecological principles that cause these grasslands, shrublands, woodlands and deserts to change or stay the same. How humans use and manage these ecosystems will also be explored. The modern challenges of rangeland management must be met with broad thinking and new, sustainable practices to maintain and restore rangelands and the human communities that rely on them.~~Development of range use and range resource management, rangeland vegetation types, current management issues, relationship of grazing use with other land uses and values. (Fall only)~~

5. Change the credits, description and prerequisites of the following course [**Effective**: Summer 2009]

REM 452 Western Wildland Landscapes (~~2~~ 1 cr)
Survey of wildland plant communities of western North America, focusing on their natural history, including the effects of use by human beings, based on their physical, climatic, and biological characteristics. Recommended Preparation: REM 221 or For 221. (Spring only)
Prereq: ~~REM 221 or For 221~~Geog 310

6. Change the curricular requirements of **Rangeland Ecology and Management** (B.S.Rangeland Ecol.-Mgt.) [**Effective**: Summer 2009]

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

First and Second Years
Biol 115 Cells and the Evolution of Life (4 cr)
Biol 116 Organisms and Environments (4 cr)
Biol 213 Principles of Biological Structure and Function (4 cr)
Chem 101 Introduction to Chemistry I or Chem 111 Principles of Chemistry I (4 cr)
Chem 275 Carbon Compounds (3 cr)
Comm 101 Fundamentals of Public Speaking (2 cr)
Econ 201, 202 Principles of Economics (6 cr)
For 235 or CSS 235 Society and Natural Resources (3 cr)
Math 143 Pre-calculus Algebra and Analytic Geometry or Math 160 Survey of Calculus (3-4 cr)
~~REM 102 Opportunities in Rangeland Ecology and Management (1 cr)~~
REM 221 Ecology or For 221 Ecology or (3 cr)
REM 251 Principles of Range Resources Management (2 cr)
Soil 205 The Soil Ecosystem (3 cr)
Soil 206 The Soil Ecosystem Lab (1 cr)
Stat 251 Principles of Statistics (3 cr)

Third and Fourth Years
~~Biol 341 Systematic Botany (3 cr)~~
~~CSS/ForP/For/REM 470 Interdisciplinary Natural Resource Planning (3 cr)~~
Engl 317 Technical Writing or Engl 313 Business Writing (3 cr)
Fish 430 Riparian Ecology and Management ~~or Fish 435 Wetland Ecology and Management~~ (3 cr)
~~Geog 385 GIS Primer (3 cr)~~
REM 341 Systematic Botany (3 cr)
REM 351 Wildland Plant Identification Field Studies (3 cr)
REM 357 Rangeland and Riparian Habitat Assessment (3 cr)
REM 402 Applied Spatial Analysis in Natural Resources or For 375 Introduction to Spatial Analysis for Natural Resource Management (2-3 cr)
REM 440 Wildland Restoration Ecology (3 cr)
REM 452 Western Wildland Landscapes (1 cr) and Geog 310 Biogeography (3 cr); or For 429 Landscape Ecology (3 cr)
REM 456 Integrated Rangeland Management (3 cr)
REM 459 Rangeland Ecology (2 cr)
REM 460 Rangeland Ecology Current Topics and Field Studies (1 cr)
Soil 454 Soil Development and Classification (3 cr)

Students must also complete 19 credits of advisor approved electives in emphasis areas that include: Restoration Ecology, Field Botany, Spatial Ecology, Watershed Science, Wildland Fire Management, Invasive Plant Management, Wildlife Habitat Management, Tribal Land Management, Rangeland Economics, Natural Resource Communication, and Environmental Consulting.
Electives to total 128 credits for the degree

7. Change the curricular requirements of **Rangeland Ecology and Management** (Minor) [**Effective**: Summer 2009]

Note: At least 12 credits in courses numbered 300 or higher are required to satisfy the requirements of this minor.

REM 221 Ecology or For 221 Ecology or (3 cr)
REM 251 Principles of Range Resources Management (2 cr)
REM 353 Rangeland Plant Identification and Ecology (3 cr)
REM 459 Rangeland Ecology (2 cr)
REM 460 Rangeland Ecology Current Topics and Field Studies (1 cr)
Two of the following courses (~~5~~ 6 cr):
REM 357 Rangeland and Riparian Habitat Assessment (3 cr)
REM 429 Landscape Ecology (3 cr)
REM 440 Wildland Restoration Ecology (3 cr)
~~REM 452 Western Wildland Landscapes (2 cr)~~
REM 456 Integrated Rangeland Management (3 cr)
One of the following courses (or a course not chosen above) (3 cr):
AVS 474 Beef Cattle Science (3 cr)
AVS 476 Sheep Science (3 cr)
Fish 430 Riparian Ecology and Management (3 cr)
For 426 Wildland Fire Ecology and Management (3 cr)
For 462 Watershed Management (3 cr)
PlSc 338 Weed Control (3 cr)
PlSc 410 Biology of Weeds (3 cr)
REM 244 Wildland Fire Management (2 cr)
REM 454 Rangeland Week Management (3 cr)
Soil 454 Soil Development and Classification (3 cr)
WLF 314 Wildlife Ecology I (3 cr)

Sociology/Anthropology/Justice Studies

1. Add the following courses [**Effective**: Summer 2009]

JS 335 Terrorism, Society and Justice (3 cr)
Same as Soc 335. Analysis of the concepts, issues and dilemmas related to domestic and international terrorism. Terrorist tactics within the context of the global world-system is considered. Examines counterterrorist strategies and the media and government response to terrorism.
Prereq: Soc 101
Rationale: Since the beginning of the millennia there has been a heightened interest in terrorism, counterterrorism and the phenomena's impact on society both at home and abroad. The topic has generated much interest among majors and non-majors alike, enrolling at least 35 students when it was offered as a special topics course in Spring 2008. Sociology and Justice Studies is uniquely situated to address the multidisciplinary topic of terrorism, provide analysis and cover issues related to terrorism and counterterrorism. This has been a regularly taught and popular special topics course, no net increase or decrease on teaching load.

Soc 335 Terrorism, Society and Justice (3 cr)
See JS 335.

Statistics

1. Add the following courses [**Effective**: Summer 2009]

Stat 511 Design for Six Sigma and Lean Management (3 cr)
See Bus 531.

Stat 546 Spatial Statistics (3 cr)
See Geog 542.

2. Change the cross-list status of the following course [**Effective**: Summer 2009]

Stat ID446 Six Sigma Innovation (3 cr) WSU Stat 446
Same as Bus 446. Six Sigma is a highly structured strategy for acquiring, assessing, and applying customer, competitor, and enterprise intelligence for the purposes of product, system or enterprise innovation and design. It has two major thrusts, one that is directed toward significant innovation or improvement of an existing product, process or service that uses an approach called DMAIC (Define - Measure -

Analyze - Improve - Control) and a second dedicated to design of new processes, products or services. This course focuses on the innovation aspects of Six Sigma. Recommended preparation: Stat 401. (Spring, Alt/yrs)
Prereq: Stat 251, Stat 271, or Stat 301

Stat 598 (s) Internship (cr arr)
Students gain experience in statistical consultation and / or statistical data analysis in their present place of employment or an arranged internship organization. Students are jointly accountable to a faculty advisor and a person providing oversight of the individual's efforts within the organization. All internship experiences must be pre-approved.

3. Change the description of the following courses [**Effective**: Summer 2009]

Stat 501 (s) Seminar (cr arr)
This course addresses statistical ethics; statistically oriented research; and deeper and more extensive consideration of topics relevant to but not addressed in other graduate level statistics courses offered during that semester. Formal presentations and reports in journal format are used to enhance written, oral, and presentation communication experience and ability.

4. Change the description and title of the following course [**Effective**: Summer 2009]

Stat 597 (s) Consulting Practicum (cr arr)
Students will gain experience in statistical consulting and data analysis, using multiple statistical software packages in the analysis process. Topics include communication of statistical information and analysis to non-statisticians, ethics, and computing. Emphasis is placed on written and oral presentation of statistical analysis plans and results.

Women's Studies

1. Change the curricular requirements of **Women'sStudies** (Minor) [**Effective**: Summer 2009]

WmSt 201 Women, Culture, and Society: Intro to Women's Studies (3 cr)
Elective Courses chosen from a minimum of two disciplines~~the following~~ (~~12~~ 18 cr):
- Comm 432 Gender and Communication (3 cr)
- Engl 481 or FLEN 481 Women's Literature (3 cr—may be retaken once to total 6 credits)
- FCS 240 Intimate Relationships (3 cr)
- FCS 440 Contemporary Family Relationships (3 cr)
- FCS 445 Issues in Work and Family Life (3 cr)
- FCS 462 Eating Disorders (2 cr)
- FLEN 421 Women in Cinema: The International Scene (3 cr)
- H&S 311 Acquaintance Rape (3 cr)
- Hist 357 Women in Pre-Modern European History (3 cr)
- Hist 385 History of Sexuality (3 cr)
- Hist 420 History of Women in American Society (3 cr)
- Phil 425 Philosophy and Feminism (3 cr)
- ~~Psyc 330 Human Sexuality (3 cr)~~
- PolS 423 or PolS 523 Politics, Policy and Gender (3 cr)
- Psyc 320 Introduction to Social Psychology (3 cr)
- Soc 325 Sociology of the Family (3 cr)
- Soc 427 or Anth 427 Racial and Ethnic Relations (3 cr)
- Soc 424 Soc of Gender (3 cr)
- WmSt 499 Directed Study (3 cr)

~~Courses in two different disciplines from the list above or the following (6 cr)~~
- ~~Comm 432 Gender and Communication (3 cr)~~
- ~~FCS 240 Intimate Relationships (3 cr)~~
- ~~FCS 346 Personal and Family Finance and Management (4 cr)~~
- ~~FCS 462 Eating Disorders (2 cr)~~
- ~~FCS 419 Dress and Culture (3 cr)~~
- ~~FCS 440 Contemporary Family Relationships (3 cr)~~
- ~~H&S 311 Acquaintance Rape (3 cr)~~
- ~~Phil 365 Biomedical Ethics (3 cr)~~
- ~~Psyc 320 Introduction to Social Psychology (3 cr)~~
- ~~Soc 325 Sociology of the Family (3 cr)~~

~~WmSt 499 (a synthetic paper) (1 cr)~~

With prior approval of the Women's Studies committee, a student may also include credit from survey courses, special topics courses, or seminars meeting the guidelines for inclusion of courses in a Women's Studies minor. No more than 3 credits may count toward both the student's major and minor.

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FOR THE FACULTY'S INFORMATION

Correction to General Curriculum Report 250:

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)

Other Informational Changes:

1. Change the curricular requirements of **Public Administration** (M.P.A.) [Effective: Summer 2009]

Master of Public Administration. Although no specific undergraduate preparation is required for the M.P.A., all applicants must have a 3.0 GPA and submit GRE General Test scores that are no more than five years old. Three letters of recommendations are also required. Students with a lower GPA may, on occasion, be admitted provisionally. Students must have an appropriate background in American National Government and have taken Statistics 251 or its equivalent.

The MPA degree requires a minimum of 30 course credits. In addition a 3 credit public service internship is required for students without appropriate work experience in the public or nonprofit sectors. Students may use credits earned in approved courses taken at any of the cooperating universities (University of Idaho, Idaho State University, and Boise State University).

At least 18 credits must be taken from the Political Science Department with 15 credits required from core areas plus PolS 535. (See Political Science & Public Affairs Home Page for list of core classes). At least 12 credits are required in an area of emphasis. (Currently, the approved fields are: general public administration; community, state, and regional planning; criminal justice administration; environmental and natural resources administration; local government administration; public finance, budgeting, and administrative management; and public works engineering.)

Students may select a thesis or non-thesis option. The preparation and oral defense of the thesis count as six credits in the area of emphasis. Students selecting a non-thesis option must take comprehensive examinations.