

General Curriculum Report #246

UNIVERSITY OF IDAHO - REGISTRAR'S OFFICE

November 16, 2007

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.

Agricultural Science and Technology

1. Drop the following course [**Effective:** Summer 2008]

Ag ID416 Sustainable Small Acreage Farming and Ranching (3 cr) WSU Soils 404

Overview of small acreage production systems, evaluation of goals and resources, land evaluation, marketing options, and accessing community resources. Three field trips.

Recommended Equivalency: Soil 416

Animal and Veterinary Science

1. Change the prerequisites of the following course [**Effective:** Summer 2008]

AVS 271 Anatomy and Physiology (4 cr)

Structure and function of tissues and organ systems of domestic and wild animals. Three lec and one 2-hr lab a wk.

Prereq: [Biol 115](#) or [MABB 250](#)

2. Change the curricular requirements of **Animal and Veterinary Science (B.S.A.V.S.)** [**Effective:** Summer 2008]

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

AVS 101 Animal and Veterinary Orientation (2 cr)
AVS 109 The Science of Animals that Serve Humanity (3 cr)
AVS 209 Science of Animal Husbandry (3 cr)
[AVS 172 Principles and Practices of Dairy Science](#) or AVS 210 Animal Husbandry Lab (1-2 cr)
AVS 271 Anatomy and Physiology (4 cr)
AVS 305 Animal Nutrition (4 cr)
AVS 452 Physiology of Reproduction (4 cr)
Biol 115 Cells and the Evolution of Life (4 cr)
Chem 111 Principles of Chemistry I (4 cr)
Comm 101 Fundamentals of Public Speaking (2 cr)
Engl 313 Business Writing or Engl 317 Technical Writing (3 cr)
Math 143 Pre-calculus Algebra and Analytical Geometry (3 cr)
Stat 251 Statistical Methods (3 cr)

Complete one of the following four options:

A. Business Option

Acct 205 Fundamentals of Accounting (4 cr)
AgEc 278 Farm and Ranch Management (4 cr)
AgEc 289 Agricultural Markets and Prices (3 cr)
AgEc 301 Agricultural Economics I or AgEc 302 Agricultural Economics II (3 cr)
AVS 222 Animal Reproduction and Breeding (3 cr)
AVS 306 Feeds and Ration Formulation (4 cr)
AVS 363 Animal Products for Human Consumption (3 cr)
AVS 450 Issues in Animal Agriculture (1 cr)
AVS 466, 468, 472, 474, 476, or 478 Species Production (6 cr)
BLaw 265 Legal Environment of Business (3 cr)
Chem 275 Carbon Compounds (3 cr)
Econ 201 Principles of Economics (3 cr)
Econ 202 Principles of Economics (3 cr)
Business electives (6 cr)
6 cr of Upper Division Ag Econ
Electives to total 132 for the degree

B. Dairy Science Option

AgEc 278 Farm and Ranch Management (4 cr)
 AgEc 289 Agricultural Markets and Prices (3 cr)
 AVS 172 Principles and Practices of Dairy Science (2 cr)
 AVS 222 Animal Reproduction and Breeding (3 cr)
 AVS 306 Feeds and Ration Formulation (4 cr)
 AVS 330 Genetics of Livestock Improvement (3 cr)
 AVS 411 Ruminant Nutrition (3 cr)
 AVS 413 Physiology of Lactation (3 cr)
 AVS 450 Issues in Animal Agriculture (1 cr)
 AVS 471 Animal Disease Management (3 cr)
 AVS 472 Dairy Cattle Management (3 cr)
 AVS 475 Advanced Dairy Cattle Management (3 cr)
 Chem 275 Carbon Compounds (3 cr)
 Econ 202 Principles of Economics (3 cr)
 FST 429 Dairy Products (4 cr)
 MMBB 154 Introductory Microbiology (3 cr)
 MMBB 155 Introductory Microbiology Laboratory (1 cr)
 Electives to total 132 for the degree

C. Production Option

AgEc 278 Farm and Ranch Management (4 cr)
 AgEc 289 Agricultural Markets and Prices (3 cr)
 AVS 222 Animal Reproduction and Breeding (3 cr)
 AVS 306 Feeds and Ration Formulation (4 cr)
 AVS 330 Genetics of Livestock Improvement (3 cr)
 AVS 363 Animal Products for Human Consumption (3 cr)
 AVS 411 Ruminant Nutrition (3 cr)
 AVS 450 Issues in Animal Agriculture (1 cr)
 AVS 471 Animal Disease Management (3 cr)
 AVS 466, 468, 472, 474, 476, or 478 Species Production (6 cr)
 Chem 275 Carbon Compounds (3 cr)
 Econ 202 Principles of Economics (3 cr)
 MMBB 154 Introductory Microbiology (3 cr)
 MMBB 155 Introductory Microbiology Laboratory (1 cr)
 Rnge 221 Ecology (3 cr)
 Rnge 251 Principles of Range Resource Management (2 cr)
 Life science elective (4 cr)
 Electives to total 132 for the degree

D. Science/Preveterinary Option

AVS 472 Dairy Cattle Management or AVS 474 Beef Cattle Science (3 cr)
 Biol 116 Organisms and Environments (4 cr)
 Chem 112 Principles of Chemistry II (5 cr)
 Chem 277, 278 Organic Chemistry I and Lab (4 cr)
~~Biol 210 Genetics~~ or Gene 314 General Genetics (3-4 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 466, 468, 472, 474, 476, or 478 Species Production (6 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

3. Change the curricular requirements of **Animal Science** (Minor) [Effective: Summer 2008]

AVS 109 The Science of Animals that Serve Humanity (3 cr)
 AVS 222 Animal Reproduction and Breeding (3 cr)
 AVS 305 Animal Nutrition (4 cr)
 AVS 306 Feeds and Ration Formulation (4 cr)
 AVS 363 Animal Products for Human Consumption (3 cr)
~~AVS 452 Physiology of Reproduction (4 cr)~~
~~Two~~ ~~One~~ of the following (6-3 cr):
 AVS 466 Horse Science and Management (3 cr)

AVS 472 Dairy Cattle Management (3 cr)
 AVS 474 Beef Cattle Science (3 cr)
 AVS 476 Sheep Science (3 cr)
~~AVS 478 Swine Production (3 cr)~~

Architecture and Interior Design

1. Add the following courses [**Effective:** Summer 2008]

Arch 572 Integrated Design Seminar (1 cr, max 4)

This course is modified each semester by hosting outside expert lecturers in topics related to integrated energy design in buildings and inviting professionals and students together for an interactive learning experience. Every other week, the instructor hosts a discussion session with students based upon the presented content from the previous week.

Arch 573 Daylight Design and Simulation (3 cr)

This course teaches the fundamental principles for daylighting design in buildings through building tours, case studies, geometric approaches, as well as physical modeling and digital simulation methods. Students will understand implications of design decisions on visual comfort, thermal comfort and performance, energy efficiency and will have the skills to scientifically assess these factors during design stages. (Fall only)

Arch 574 Building Performance Simulation for Integrated Design (3 cr)

This course focuses on design decisions that impact energy, thermal, visual and acoustic comfort with a strong emphasis on building simulation tools. This course provides students with the understanding of the nature of building thermal comfort, building envelope behavior, ventilation requirements, indoor air quality, passive cooling systems, energy conservation, and the importance of iterative building simulation in achieving high performance buildings. (Spring only)

2. Change the description of the following course [**Effective:** Summer 2008]

Arch 385 History of Architecture I: Pre-Modern (3 cr)

~~A survey of Western and non-Western architecture from prehistory through the seventeenth century in Africa, Asia, Europe, and the Americas. The course addresses architecture within its diverse social, cultural, and physical contexts. Recommended Preparation: Arch 151. A history of Western architecture and the contextual factors that have shaped and sustained it from prehistory through the Seventeenth Century. Topics include prehistoric, Egyptian, Greek, Roman, Early Christian, Byzantine, Romanesque, Gothic, and Renaissance architecture.~~

3. Change the description, joint-list status and title of the following course [**Effective:** Summer 2008]

Arch 568 Technical Integration of Buildings in Design (2 cr)

~~Methods of integration of structure, enclosure, services, site and interior systems in the design and development of an architectural concept, and the tectonic possibilities of expressing these systems in architectural form and detail. See Arch J468/J568.~~

4. Change the curricular requirements of **Architecture (Minor)** [**Effective:** Summer 2008]

Arch 151 Introduction to the Built Environment (2 cr)
 Arch 385 History of Architecture I: Pre-Modern (3 cr)
 Arch 386 History of Architecture II: Modern (3 cr)

Courses selected from the following (~~40-11~~ 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 463 Environmental Control Systems (3 cr--no lab)
 Arch 464 Environmental Control Systems (3 cr--no lab)
 Arch 483 Urban Theory and Issues (3 cr)
 LArc 383 Architectural Site Design (3 cr)

Art and Design

1. Add the following course [**Effective:** Summer 2008]

Art 511 Readings in Art Education (3 cr)

Online course open to MAT students only. Assigned readings in current issues in art education pedagogy and contemporary art with weekly online meetings and a final paper. (Spring, alt/yrs)

2. Change the curricular requirements of **Art (B.A.)** [**Effective:** Summer 2008]

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

[Art 205 Visual Culture \(3 cr\)](#)
[Art 303 Contemporary Art and Theory \(3 cr\)](#)
[Art 407 New Media \(3 cr\)](#)
[Art 408 Readings in Art \(3 cr\)](#)
 Art 410 Professional Practices (2 cr)
[Art History courses \(200-400 level\) \(15 cr\)](#)
[Art History Electives selected with advisor approval \(6 cr\):](#)
[Art 202 Early Modern Art and Aesthetics \(3 cr\)](#)
[Art 208 Italian Renaissance Art and Culture \(3 cr\)](#)
[Art 213 History and Theory of Modern Design I \(3 cr\)](#)
[Art 302 Modern Art and Theory \(3 cr\)](#)
[Art 313 History and Theory of Modern Design II \(3 cr\)](#)
[Art 323 History of Typography \(3 cr\)](#)
[Art 382 History of Photography \(3 cr\)](#)
[Art 409 Visual Studies \(3 cr\)](#)

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) (15-18 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 360 Intermediate/Advanced Ceramics \(3 cr, max 9\)](#)
 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)

Electives to total 128 cr for the degree

3. Change the curricular requirements of **Studio Art (B.F.A.) [Effective: Summer 2008]**

The B.F.A. is a four-year degree divided into two parts: the preprofessional program (freshman and sophomore years) and the professional program (junior and senior years). Majors are eligible to apply for the professional program when they have completed the art core and the 200-level art course requirements, and earned a minimum 2.75 GPA. Applications for the professional BFA program will be requested each semester; students must be admitted to the professional BFA through the review process before being admitted to 490 BFA Art/Design Studio and 495 BFA Senior Thesis. Transcripts and a portfolio of the student's art work must accompany the application. Students accepted into the professional program must complete 15 credits of 300-level studio courses with at least 6 of the 15 credits in one sequential studio area and 12 credits of art history before enrolling in Art 490 and Art 495. Students must maintain a minimum GPA of 2.75 and receive a grade of C or better in the 300- and 400-level art courses. Students may reapply for entry into the professional program any semester after their sophomore year.

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

[Art 205 Visual Culture \(3 cr\)](#)
[Art 303 Contemporary Art and Theory \(3 cr\)](#)
[Art 407 New Media \(3 cr\)](#)
[Art 408 Readings in Art \(3 cr\)](#)
 Art 410 Professional Practices (2 cr)
 Art 490 BFA Art/Design Studio (12 cr)
 Art 495 BFA Senior Thesis (4 cr)
[Art history courses \(200-400 level\) \(15 cr\)](#)
[Art History Electives selected with advisor approval \(6 cr\):](#)
[Art 202 Early Modern Art and Aesthetics \(3 cr\)](#)
[Art 208 Italian Renaissance Art and Culture \(3 cr\)](#)
[Art 213 History and Theory of Modern Design I \(3 cr\)](#)
[Art 302 Modern Art and Theory \(3 cr\)](#)
[Art 313 History and Theory of Modern Design II \(3 cr\)](#)
[Art 323 History of Typography \(3 cr\)](#)
[Art 382 History of Photography \(3 cr\)](#)
[Art 409 Visual Studies \(3 cr\)](#)

200-level studio courses selected from the following (15 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)

300-400 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 360 Intermediate/Advanced Ceramics (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 6)
- Art 491 Information Design (3 cr, max 9)

Electives to total 128 cr for the degree

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

Biological Sciences

1. Add the following courses [**Effective:** Summer 2008]

Biol 408 Practicum in Human Physiology Laboratory Teaching (2-4 cr)

Organization, preparation, and teaching of human physiology laboratory objectives under faculty supervision. (Spring only)

Prereq: Biol 121 and Permission

Biol 489 Herpetology (4 cr)

Evolution, systematics, physiology, and ecology of reptiles and amphibians. Three lectures and one 3-hr lab a wk; field trip.

Prereq: Biol 115 and 116

2. Change the cooperative status of the following course [**Effective:** Summer 2008]

Biol ~~ID&WS~~551 Seminar on Reproductive Biology (1 cr)

Current topics in reproductive biology.

Prereq: Graduate standing

College of Letters, Arts and Social Sciences

1. Change the curricular requirements of **Bachelor of Science – College Requirements (B.S.)** [**Effective:** Summer 2008]

Requirements for the B.S. Degree:

Humanities. 3 credits (one course) in addition to the minimum university-wide core requirement of 14 credits in humanities/social sciences.

Social Sciences. 3 credits (one course) in addition to the minimum university-wide core requirement of 14 credits in humanities/social sciences.

Natural Sciences, Mathematics, and Statistics. 6 credits (two courses) in addition to the minimum university-wide core requirement of ~~44~~10 credits in natural sciences/math.

For the B.S. degree, the student may substitute the successful completion of an academic minor or area of emphasis of at least 18 credits approved by the department in which the student is majoring.

Conservation Social Sciences

1. Change the description of the following course [**Effective:** Summer 2008]

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, or Permission

Economics, Finance and Information Systems

1. Add the following courses [**Effective:** Summer 2008]

Bus 465 Introduction to Market Trading (3 cr)

The course provides students practical experiences in the analysis of financial conditions and markets with the objective of developing trading and risk management strategies. Professional trading analysis software is used. The major topics covered include financial instruments, fundamental and technical analysis of markets, inter-market analysis, and risk management. Recommended Preparation: Econ 201 and 202 or 272; and Stat 251. (Fall only)

Prereq: Permission

Bus 466 Market Trading Strategies (3 cr)

Continuation of BUS 465. The course provides students practical experiences in the analysis of financial conditions and markets with the objective of developing trading and risk management strategies. Professional trading analysis software is used. Students in this class will develop strategies that can be submitted for funding by the Barker Trading Program. (Spring only)

Prereq: Bus 465

Bus 467 Barker Capital Management Group (1 cr, max 4)

Graded P/F. The course is a 1-credit hour extra-curricular course taken on a Pass-Fail basis. Students in this course will function as a member of the Barker Capital Management Group (BCMG) and will work individually and in teams to manage a portion of the Barker Endowment Fund. The class will identify and research investment opportunities for the fund, develop and implement risk management strategies for the portfolio, monitor the results and make adjustments to the portfolio as required.

Prereq: Permission

2. Change the prerequisites of the following courses [**Effective:** Summer 2008]

Bus 340 Team Building and Group Dynamics (2 cr)

May only be repeated once. Student may petition to repeat a second time in consultation with the Dean and course faculty team. *May be used as core credit in J-3-d.* Open only to undergraduate CBE majors. Issues in the formation, development, and management of work groups and teams; problems and characteristics common to group situations and strategies for improving team productivity; specific topics include increasing self-awareness, clarifying and managing team-member roles, understanding intercultural communication, capitalizing on the potential of diverse work groups, problem-solving and decision-making, project planning, and identifying the role of leadership in teams. May involve evening exams.

Prereq: ~~upper division standing in CBE; BLaw 265;~~ Math 160 or 170

Coreq: Bus 341, Bus 342, Acct 310, and Econ 340

Econ 340 Managerial Economics (2 cr)

May only be repeated once. Student may petition to repeat a second time in consultation with the Dean and course faculty team. This course covers the fundamental economic principles in applied business decisions from both micro and macroeconomic perspectives.

Prereq: ~~Econ 201 and 202, or Econ 272~~

Coreq: Bus 340

Fish and Wildlife Resources

1. Change the curricular requirements of **Fishery Resources (B.S.Fish.Res.)** [**Effective:** Summer 2008]

Students pursuing a B.S. degree in fishery resources (management or aquaculture emphasis) must have received a grade of C or better in each of the following four indicator courses to register for fish- and wildlife-prefixed upper-division courses and to graduate with a B.S.Fish.Res.: Biol 116 and 213, Stat 251, and For 221.

To graduate, students must achieve a grade of C or better in Biol 481, and each fish- and wildlife-prefixed upper-division course listed in the requirements for the B.S. degree in fishery 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 (3 cr)

Comm 101 Fundamentals of Public Speaking (2 cr)
 Econ 202 Principles of Economics (3 cr)
 Fish 102 The Fish and Wildlife Professions (1 cr)
 For 221 Ecology [or Rnge 221 Ecology](#) (3 cr)
 For/CSS 235 Society and Natural Resources (3 cr)
 Geol 101 Physical Geology or Soil 205, 206 The Soil Ecosystem and Lab (4 cr)
 Math 160 Survey of Calculus (4 cr)
 NR 101 Exploring Natural Resources (1 cr)
 Phys 100 Fundamentals of Physics or Phys 111 General Physic I (4 cr)
 Stat 251 Statistical Methods (3 cr)

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/Rnge 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

2. Change the curricular requirements of **Wildlife Resources** (B.S.Fish.Res.) [Effective: Summer 2008]

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 Rnge 221 Ecology](#) (3 cr)
 For/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)
 Rnge 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)

Biol 484 Invertebrate Zoology (4 cr)

WLF 482 Ornithology (4 cr)

Approved work experience in major field required

Electives to total 128 credits for the degree

Foreign Language and Literatures

1. Drop the following courses [**Effective:** Summer 2008]

FLEN 211 Classical Mythology (Gods) (2 cr)

May be used as core credit in J-3-d. Intro to classical myths and legends and their survival in western literature and art.

Recommended Equivalency: FLEN 210

FLEN 212 Classical Mythology (Heroes) (2 cr)

May be used as core credit in J-3-d. Intro to classical myths and legends and their survival in western literature and art.

Recommended Equivalency: FLEN 210

2. Add the following courses [**Effective:** Summer 2008]

FLEN 210 Introduction to Classical Mythology (3 cr)

Introduction to classical myths and legends, focusing on the classical stories of creation, gods, and heroes.

Recommended Equivalency: FLEN 211 & FLEN 212

Fren 310 Practicum in Advanced Language Skills II (1 cr)

Coreq: Fren 307

Japn 301 Japanese Reading (3 cr)

Emphasis on the development of reading skills at the advanced intermediate level; some emphasis on grammar, vocabulary and kanji character acquisition. For students who have completed four semesters of elementary and intermediate Japanese or have an equivalent background. Recommended Preparation: Japn 202 or equivalent.

Japn 302 Japanese Writing (3 cr)

Emphasis on the development of writing skills at the advanced intermediate level; emphasis on grammar, sentence structure, style, tone, and vocabulary usage. For students who have completed four semesters of elementary and intermediate Japanese or have an equivalent background. Recommended Preparation: Japn 202 or equivalent.

Span 411 Chicano and Latino Literature (3 cr)

Survey of Chicano and Latino literature.

Prereq: Span 302 or Permission

Span 419 Latin America Theatre Through Literature (3 cr)

Study of representative dramatic works of Latin America.

Prereq: Span 302 or Permission

Span 420 Modern Spanish Theatre Through Literature (3 cr)

Study of representative dramatic works of modern Spain.

Prereq: Span 302 or Permission

3. Change the dormant status the following course [**Effective:** Summer 2008]

Span 449 (s) Practicum in Tutoring (1 cr, max 2)

Graded P/F. Tutorial services performed by advanced students under faculty supervision.

Prereq: Permission of Department

4. Reactivate the following dropped course [**Effective:** Summer 2008]

Span 310 Spanish for Professions (3 cr)

Spanish for law enforcement, tourism, [professional translation](#) and health professions.

Prereq: Span 302 or Permission

5. Change the credits, corequisites, prerequisites and title of the following course [**Effective:** Summer 2008]

Fren 309 Practicum in Advanced Language Skills I (1 cr, max-arr)

Coreq: [Fren 304](#)

Prereq: [Permission](#)

6. Change the description of the following course [**Effective:** Summer 2008]

Span 202 Intermediate Spanish II (4 cr)

May be used as core credit in J-3-d. Reading, grammar review, speaking, and writing. Recommended Preparation: Span [402201](#).

7. Change the curricular requirements of **Foreign Language (B.A.)** [**Effective:** Summer 2008]

B. Classical Studies Option

~~[FLEN 211 Classical Mythology \(Gods\) \(2 cr\)](#)~~

~~[FLEN 212 Classical Mythology \(Heroes\) \(2 cr\)](#)~~

[FLEN 210 Introduction to Classical Mythology \(3 cr\)](#)

FLEN 243 English Word Origins (2 cr)

FLEN 363-364 Literature of Ancient Greece & Rome (6 cr)

FLEN 441 Ancient Greek Civilization (3 cr)

FLEN 442 Civilization of Ancient Rome (3 cr)

GreK 341-342 Elementary Greek (or equivalent) (8 cr)

Latn 101-102 Elem Latin I-II (or equiv) (8 cr)

Additional Latin and/or Greek courses numbered above Latn 202 and Grek 342 (may include up to 3 cr of adv lab courses in each language--Latn 369;Grek 349 other than basic skills) (18 cr)

Related fields or minor as approved by major adviser

8. Change the curricular requirements of **Classical Studies (Minor)** [**Effective:** Summer 2008]

[FLEN 210 Introduction to Classical Mythology \(3 cr\)](#)

~~[FLEN 211 Classical Mythology \(Gods\) \(2 cr\)](#)~~

~~[FLEN 212 Classical Mythology \(Heroes\) \(2 cr\)](#)~~

FLEN 243 English Word Origins (2 cr)

And one of the following emphasis areas:

Language Emphasis

GreK 341-342 Elementary Greek (8 cr)

Latn 101-102 Elementary Latin I-II (8 cr)

Courses chosen from the following (3 cr):

Upper-division Latin or Greek

FLEN 363 Literature of Ancient Greece (3 cr)

FLEN 364 Literature of Rome (3 cr)

Ancient World Emphasis

FLEN 363 Literature of Ancient Greece (3 cr)

FLEN 364 Literature of Rome (3 cr)

FLEN 441 Ancient Greek Civilization (3 cr)

FLEN 442 Civilization of Ancient Rome (3 cr)

GreK 341 Elementary Greek or Latn 101 Elementary Latin I (4 cr)

Phil 320 Hist of Ancient and Medieval Philosophy or Arch 385 Hist of Architecture I: Pre-Modern (3 cr)

9. Change the curricular requirements of **Greek (Minor)** [**Effective:** Summer 2008]

[FLEN 210 Introduction to Classical Mythology \(3 cr\)](#)

~~[FLEN 211 and/or 212 Classical Mythology \(2-4 cr\)](#)~~

FLEN 363 Literature of Ancient Greece (3 cr)

GreK 341-342 Elementary Greek (8 cr)

GreK 349 Advanced Greek lab (other than basic skills) (1-3 cr)

Advanced Greek readings (400-level) (6-8 cr)

Courses to total 25 credits for the minor chosen from the following:

Additional upper-division Greek courses

FLEN 243 English Word Origins (2 cr)

FLEN 364 Literature of Rome (3 cr)

FLEN 441 Ancient Greek Civilization (3 cr)

Phil 320 History of Ancient and Medieval Philosophy (3 cr)

10. Change the curricular requirements of **Spanish (Minor)** [**Effective:** Summer 2008]

Span 101-102 Elementary Spanish I-II (8 cr)
 Span 201-202 Intermediate Spanish I-II (8 cr)
 Span 301 Advanced Grammar (3 cr)
 Span 302 Advanced Composition (3 cr)
 One additional 300-level course in Spanish (not including lab-based, and lit or film in translation, or one-credit conversation practice courses) (3 cr)

Forest Products

1. Change the curricular requirements of **Forest Products** (B.S.For.Prod.) [**Effective:** Summer 2008]

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/Rnge 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/~~Rnge~~AWLF 221 Ecology or Rnge 221 Ecology (3 cr)
 For/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 (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)
~~ForP 450 Wood Deterioration and Preservation (2 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 PISc 205 General Botany (4 cr)
~~For 330 Forest Ecosystem Processes (2 cr)~~
 For 424 Forest Dynamics and Management (~~4~~2 cr)
~~For 426 Wildland Fire Management and Ecology (3 cr)~~
 For 462 Watershed Science and Management (3 cr)
~~For 466 Diseases and Insects of Woody Plants (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)

Biol 102 Biology and Society (4 cr)

BLaw 265 Legal Environment of Business (3 cr)

Bus 301 Financial Management (3 cr)

Bus 311 Introduction to Management (3 cr)

Bus 321 Marketing (3 cr)

Bus 370 Introduction to Operations Management (3 cr)

Bus 424 Pricing Strategy and Tactics (3 cr)

Bus/Stat 456 Quality Management (3 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)

Engl 313 Business Writing or Engl 317 Technical Writing (3 cr)

For/Rnge/WLF 221 Ecology (3 cr)

For/CSS 235 Society and Natural Resources (3 cr)

[For 270 Principles of Forest Ecosystem Management \(2 cr\)](#)

For 383 Economics for Natural Resource Managers (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 425 Forest Products Marketing (3 cr)

ForP 430 Forest Engineering and Harvesting (3 cr)

ForP 436 Wood Composites (3 cr)

ForP 438 Wood Chemistry and Adhesives (3 cr)

ForP 444 Primary Wood Products Manufacturing (3 cr)

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)

ForP 498 Renewable Natural Resources Internship (1 cr)

Math 160 Survey of Calculus (4 cr)

NR 101 Exploring Natural Resources (1 cr)

Phys 111 General Physics I (3 cr)

Stat 251 Statistical Methods (3 cr)

Electives to total 128 cr for the degree

Forest Resources

1. Drop the following course [**Effective:** Summer 2008]

For 466 Diseases and Insects of Woody Plants (3 cr)

Fundamentals of pathology and entomology of woody plants; labs focus on diagnosis. Two lec and 3 hrs of lab a wk; two pathology and two entomology field trips. (Spring only)

Recommended Substitution:For 468 & For 469

2. Add the following courses [**Effective:** Summer 2008]

For 450 Combustion, Fire Behavior and Fuels (3 cr)

Understand the process of combustion in wildland fuels and how it is modeled in making fire behavior predictions; relate combustion, fire behavior and fuels to emissions. Lab sessions and field trips. (Spring only)

Prereq: Phys 111 and Rnge 244

Coreq: For 451

For 454 Air Quality and Smoke Management (3 cr)

Assessment of the controls and drivers of emission processes and impacts on air quality from agricultural, prescribed, and wildfires. Overview of the combustion and emission process, how these emissions impact the 'quality of air', and what models exist to monitor the emission. Other topics to include: recent EPA and other guidelines for smoke management planning, attainment issues, collaborative process for implementing smoke management plans.

Prereq: For 426

For 468 Forest and Plant Pathology (2 cr)

A survey of plant diseases. Emphasis on forest trees and other woody plants. Organisms that cause diseases. Strategies to minimize negative effects. Symbiotic roles of microbes in plants. Two hours of lecture, and two hours of lab per week, in addition to multiple field trips (as weather allows) to observe diseases and their effects. (Spring only)

Prereq: For 320 and For 330

For 469 Introduction to Forest Insects (2 cr)

Roles and impacts of insects within forest ecosystems. Current management techniques of arthropod pests (insects and mites) in natural and managed forest systems. Interactions of arthropods with other agents of forest disturbance (fire and fungi). Identification of some common arthropod pests of Rocky Mountain forests. 1-hr. lecture, 1 2-hr. lab, 2 all-day field trips.

Prereq: For 221

For 570 Advanced Remote Sensing Measurement Methods (3 cr)

Development of remote sensing methods to measure vegetation attributes from individual trees, to stands, to regional scales. Includes, LIDAR and hyperspectral data, non-traditional accuracy assessment, land-use/land-cover change assessment, linear and non-linear mixture models, autocorrelation, time series analysis, and application of object-orientated approaches. (Spring, alt/yrs)

Prereq: For 472 or Geog 483

3. Reactivate, change the description, title and prerequisites of the following course [**Effective:** Summer 2008]

For 324 ~~Silviculture~~ Forest Regeneration (2 cr)

Natural and artificial regeneration of forest ecosystems; ~~reproduction methods; management of the gene pool,~~ selection of seed source and stock type; ~~nursery cultural practices; tree improvement;~~ site preparation methods to establish regeneration. One lecture and one 42-hr lab a week. ~~Two all day field trips. Recommended Preparation: RRT 306—(Spring only)~~

Prereq: ~~For 270, For/Rnge/ForPAWLF/Fish/RRT 302, and Soil 205, 206.~~ For 274, For 330, Soil 205 and Soil 206

4. Change the description of the following course [**Effective:** Summer 2008]

For 472 Remote Sensing of the Environment (3-4 cr)

~~Same as Rnge 472.~~ Current airborne and satellite systems, data acquisition on ground and from remote locations, instrumentation, imagery interpretation and digital analysis, applications for natural resource management. One additional two-hour lab per week for fourth credit. ~~Recommended Preparation: Phys 100 or Phys 112.~~

5. Change the prerequisites of the following courses [**Effective:** Summer 2008]

For 221 Ecology (3 cr)

Fundamental principles of ecology. Major topics covered in the course include the physical environment, how organisms interact with each other and their environment, evolutionary processes, population dynamics, communities, energy flow and ecosystems, human influences on ecosystems, and the integration and scaling of ecological processes through systems ecology. Recommended preparation: introductory botany and zoology

Prereq: Biol 102, 115, ~~or~~ 116, or PISc 205; or Permission

For 427 Prescribed Burning Lab (3 cr)

Planning, conducting and evaluating prescribed burns designed to accomplish natural resource management objectives. Sampling, models and analysis used in writing required fire use plan. 5 days of field trips; some on Saturdays. (Fall only)

Prereq: ~~For 426~~ Rnge 244, Senior standing, and Permission

6. Change the description and prerequisites of the following course [**Effective:** Summer 2008]

For 274 Forest Measurement and Inventory (3 cr)

Practical techniques for the design and execution of the measurement and inventory of forest resources. One three hour lab and three one-hour lectures per week. (Spring-Fall only)

Prereq: Stat 251 or Permission

7. Change the description, prerequisites and title of the following course [**Effective:** Summer 2008]

For 426 Wildland Fire ~~Ecology and Management and Ecology~~ (3 cr)

~~Integrated fire-related ecological effects of fire on vegetation, soils, and air quality; natural and changing role of fire in forests, woodlands, shrublands and rangelands; influence of global change including climate and invasive species; fire as a management tool; application to current issues. One-day field trip. (Fall only)~~ ~~Integrated fire-related biological, ecological, physical, and economic information for land managers; autecology and synecology of plant and animal species in wildlands; natural role of fire; fire as a management tool; application to current issues. Two days of field trips.~~ Recommended Preparation: For/Rnge/AWLF 221.

Prereq: For 221 or Rnge 221

8. Change the credits, description and prerequisites of the following courses [**Effective:** Summer 2008]

For 330 Forest Ecosystem Processes (3-2 cr)

Chemical, physical, and physiological processes that determine how trees and forests function; emphasis on carbon budgets, productivity, process modeling of consequences of forest management, and global climate change. One 4-hr lec/lab a week~~Two lec and one 2-hr lab a wk~~; one field trip.

Prereq: Soil 205, and; Math 143 or 160, and, ~~and high school physics or~~ Phys 100 or 111, and For 221 or Rnge 221; ~~or Permission~~

For 424 Forest Dynamics and Management (4-2 cr)

Integrated methods and techniques for sustainable management of forest ecosystems including, stand and disturbance dynamics, exercises in forest assessment, thinning, harvesting, silviculture prescriptions, forest modeling and communicating management guidelines. This course will be accelerated and completed in the first 13 weeks of the semester to take advantage of the good weather for field exercises. Field trips required. One 4-hr lec/lab a wk.~~regeneration, exercises in forest assessment, forest modeling and communicating management guidelines. This course will be accelerated and completed in the first 13 weeks of the semester to take advantage of the good weather for field exercises. Field trips required. One 4-hr lec/lab and one 5-hr lec/lab a wk.~~

Prereq: Senior standing and For 274, 320, 324 and 330~~320 or 330~~

For 435 Remote Sensing of Active Fire and Post-fire Effects (2-3 cr)

Application, potential and limitations of methods for assessing active-fire behavior and post-fire effects (e.g., burn severity) in the field and from airborne and satellite remote sensing. Clarification of definitions of fire descriptors (fire intensity, fire severity, and burn severity) and relative merits of field and remote sensing tools for address them. Understanding of the ecological/physical impacts of fires on plants and soils and relation to field and remote measures. This course assumes that you understand fuels and fire behavior, and that you have experience and are adept with Windows-based software for presentation, word processing, database management, and spreadsheets, and that you understand and can use maps and GIS data layers. (Spring, alt/yrs)~~Application, potential and limitations of methods for the remote sensing of active fire and post-fire effects, and interpretation of the results. Clarification of definitions of fire descriptors (fire intensity, fire severity, and burn severity) and relative merits of remote sensing tools for address them. How to identify an appropriate mapping approach applicable to different types of imagery (depending on the specific questions to be addressed) and provide decision support for the user community. Critically review and synthesize relevant scientific literature. Field trips. Recommended preparation: This course assumes that you understand fuels and fire behavior, and that you have experience and are adept with Windows-based software for presentation, word processing, database management, and spreadsheets, and that you understand and can use maps and GIS data layers. You must have a working knowledge of fire ecology.~~

Prereq: For 426~~NR 402 or Rnge 402; or Permission~~

9. Change the credits, description, prerequisites and title of the following course [**Effective:** Summer 2008]

For 451 Fuels Inventory and Mapping-Management (2 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.~~In-depth analysis of recent developments in remote sensing, as well as tools to support fuels planning, including potential and limitations of mapping fuels with Lidar and from satellite imagery such as Landsat and ASTER (with and without gradient modeling). Application of tools for characterizing fuels over large, diverse areas. Quantitative analysis and interpretation of the ecological impacts of fires on plants and soils. Critically review and synthesize relevant scientific literature. Field trips. Recommended preparation: This course assumes that you understand fuels and fire behavior, and that you have experience and are adept with Windows-based software for presentation, word processing, database management, and spreadsheets, and that you understand and can use maps and GIS data layers. You must have a working knowledge of fire ecology.~~

Prereq: For 426~~For 375, For 450, Rnge 244 and For 274 or 357~~

10. Change the cross-list status of the following course [**Effective:** Summer 2008]

For 472 Remote Sensing of the Environment (3-4 cr)

Same as Rnge 472. Current airborne and satellite systems, data acquisition on ground and from remote locations, instrumentation, imagery interpretation and digital analysis, applications for natural resource management. One additional two-hour lab per week for fourth credit.

11. Change the curricular requirements of **Fire Ecology and Management** (B.S.Fire.Ecol.Mgmt.) [**Effective:** Summer 2008]

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-Forest resources~~Resources and Rangeland Ecology and Management~~ and to graduate with a B.S.Fire.Ecol.Mgmt.: Math 143, Stat 251, For 221, and For 274 and, For 221 or Rnge 221. Students must also have a minimum cumulative grade-point average of 2.00 in forest-Forest resource~~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 102-Introduction to Forest Management (1 cr)
- For 221 Ecology or Rnge 221 Ecology (3 cr)
- For 235 Society and Natural Resources (3 cr)
- For 274 Forest Measurement and Inventory or Rnge 357 Rangeland and Riparian Habitat Assessment (3 cr)
- For 330 Forest Ecosystem Processes (3-2 cr)

[For 375 Introduction to Spatial Analysis for Natural Resource Management \(3 cr\)](#)
 For 383 Economics for Natural Resource Managers (3 cr)
~~For 424 Forest Dynamics and Management (4 cr)~~
~~For 466 Diseases and Insects of Woody Plants (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)
[Rnge 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 (3 cr):
[Comm 331 Conflict Management \(3 cr\)](#)
~~CSS 385 Conservation Management and Planning I (3 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)
 Rnge 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)
 PISc 205 General Botany (4 cr)
 Fire Core (~~8-9~~14 cr):
~~For 375 Introduction to Spatial Analysis for Natural Resource Management or For 472 Remote Sensing of the Environment (3-4 cr)~~
 For 426 Wildland Fire Management and Ecology (3 cr)
[For 427 Prescribed Burning Lab \(3 cr\)](#)
[For 450 Combustion, Fire Behavior and Fuels \(3 cr\)](#)
[For 451 Fuels Inventory and Management \(2 cr\)](#)
[Rnge 244 Wildland Fire Management \(2 cr\)](#)
 Rnge 459 Rangeland Ecology (2 cr)
 Ecology (6 cr):
 Biol 311 Plant Physiology (4 cr)
 For/[Rnge 429 Landscape Ecology \(3 cr\)](#)
[For 469 Introduction to Forest Insects \(2 cr\)](#)
[Geog/Rnge 450 Global environmental Change \(3 cr\)](#)
 Rnge 440 Wildland Restoration Ecology (3 cr)
 WLF 440 Conservation Biology (3 cr)
~~WLF 448 Fish and Wildlife Population Ecology (4 cr)~~
~~Fuels and Fuels Management (3 cr):~~
~~For 427 Prescribed Burning Lab (3 cr)~~
~~For 433 Science-Based Fuels Management Planning (2 cr)~~
~~For 451 Fuels Inventory and Mapping (2 cr)~~
~~For 452 Quantification of Wildland Fire and Fuels Analysis (1 cr)~~
~~For 453 Fuels Analysis Techniques (1 cr)~~
 Applied Tools and Technology (4 cr):
~~For 434 Assessing Fire Effects and Burn Severity (2 cr)~~
 For 435 Remote Sensing of Active Fire and Post-fire Effects (2 cr)
~~For 437 LANDFIRE: Concepts, Data, and Methods (1 cr)~~
[For 472 Remote Sensing of the Environment \(3-4 cr\)](#)
 Geog 301 Meteorology (3 cr)
 Geog 401 Climatology (3 cr)
 NR 402 GIS Applications in Natural Resources (1 cr)
[Rnge 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
~~Geog 420 Land, Resources, and Environment (3 cr)~~
~~Geog 450 Global Climate Summit Course (3 cr)~~
 Rnge 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.

12. Change the curricular requirements of **Forest Resources** (B.S.For.Res.) [Effective: Summer 2008]

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/Rnge 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)
 For 221 Ecology (3 cr)
 For/CSS 235 Society and Natural Resources (3 cr)
 For 274 Forest Measurement and Inventory (3 cr)
 For 320 Dendrology (3 cr)
[For 324 Forest Regeneration \(2 cr\)](#)
 For 330 Forest Ecosystem Processes (~~3~~-2 cr)
 For 375 Introduction to Spatial Analysis for Natural Resource Management (3 cr)
 For 383 Economics for Natural Resource Managers (3 cr)
 For 424 Forest Dynamics and Management (~~4~~-2 cr)
 For 462 Watershed Science and Management (3 cr)
[For 466 Diseases and Insects of Woody Plants \(3 cr\)](#)
[For 468 Forest and Plant Pathology \(2 cr\)](#)
[For 469 Introduction to Forest Insects \(2 cr\)](#)
 For 474 Forest Inventory (3 cr)
 For 484 Forest Policy and Administration (2 cr)
 Math 143 Pre-calculus Algebra and Analytic Geometry (3 cr) or SAT math score of 610 or above, or ACT math score of 27 or above
 NR 101 Exploring Natural Resources (1 cr)
 Phys 100 Fundamentals of Physics or Phys 111 General Physics 1 (4 cr)
 Soil 205, 206 The Soil Ecosystem and Lab (4 cr)
 Stat 251 Statistical Methods (3 cr)
 Restricted Electives (16 cr):
 AgEc 477 Law, Ethics, and the Environment (3 cr)
 Biol 213 Principles of Biological Structure and Function (4 cr)
 Biol 421 Advanced Evolutionary Biology (3 cr)
 CSS 486 Public Involvement in Natural Resource Management (3 cr)
 CSS 490 Wilderness and Protected Area Management (3 cr)
 CSS 494 Public Relations for Natural Resources Professionals (3 cr)
 Fish 314 Fish Ecology (3 cr)
 Fish 415 Limnology (4 cr)
 For 426 Wildland Fire ~~Ecology and Management~~ [and Ecology](#) (3 cr)
 For/~~Rnge~~ 429 Landscape Ecology (3 cr)
 For/~~Rnge~~ 472 Remote Sensing of the Environment (3-4 cr)
 For 497 Senior Thesis (2-4 cr)
 ForP 430 Forest Engineering and Harvesting (3 cr)
 ForP 431 Forest Operations and Investment Analysis (3 cr)
 Geog 301 Meteorology (3 cr)
 Geog 385 GIS Primer (3 cr)
 Geol 111 Physical Geology for Science Majors (4 cr)
 Math 160 Survey of Calculus or Math 170 Analytic Geometry and Calculus I (4 cr)
 NR 402 GIS Application in Natural Resources [or Rnge 407 GIS Applications in Fire Ecology and Management](#) (1 cr)
 PoLS 364 Politics of the Environment (3 cr)
 Rnge 440 Wildland Restoration Ecology (3 cr)
 Rnge 459 Rangeland Ecology (2 cr)
 Soil 446 Soil Fertility (1-3 cr)
 Soil 454 Soil Development and Classification (3 cr)
 Stat 401 Statistical Analysis (3 cr)
 WLF 314 Wildlife Ecology I (3 cr)
 WLF 316 Wildlife Ecology II (3 cr)
 WLF 440 Conservation Biology (3 cr)
 At least 2 of the 16 cr [restricted electives](#) from the following:
 Fish 430 Riparian Ecology and Management (2 cr)
 For 423 Forest Community Ecology (1 cr)
 For 427 Prescribed Burning Lab (3 cr)
 For 463 Hydrologic Measurement Techniques (1 cr)
 Rnge 357 Rangeland and Riparian Habitat Assessment (3 cr)
 Rnge 460 Rangeland Ecology Current Topics and Field Studies (1 cr)
 Electives to total 128 credits for the degree

13. Change the curricular requirements of **Fire Ecology and Management** (Minor) [Effective: Summer 2008]

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

- For 530 Fire Regime Condition Class (1 cr)
- [Rnge 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 Mapping \(1 cr\)](#)

Ecology (~~2-3~~ 3 cr):

- For 330 Forest Ecosystem Processes (~~2~~ 3 cr)
- For/~~Rnge~~ 429 Landscape Ecology (3 cr)
- [Rnge 440 Wildland Restoration Ecology \(3 cr\)](#)
- Rnge 459 Rangeland Ecology (2 cr)
- [Rnge 460 Rangeland Ecology Current Topics and Field Studies \(1 cr\)](#)

~~Fuels and Fuels Management (2 cr):~~

- ~~For 427 Prescribed Burning Laboratory (3 cr)~~
- ~~For 433 Science-Based Fuels Management Planning (2 cr)~~
- ~~For 451 Fuels Inventory and Mapping (1 cr)~~
- ~~For 452 Quantification of Wildland Fire and Fuels analysis (1 cr)~~
- ~~For 453 Fuels Analysis (1 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 \(3 cr\)](#)
- ~~For 472 Remote Sensing of the Environment (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)
- [Rnge 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 (~~4~~ 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)
- Rnge 456 Integrated Rangeland Management (3 cr)
- WLF 492 Wildlife Management (4 cr)

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

14. Change the curricular requirements of **Forest Resources** (Minor) [**Effective:** Summer 2008]

- For/~~Rnge~~~~WLF~~ 221 Ecology (3 cr)
- For 235 Society and Natural Resources (3 cr)
- For 320 Dendrology (3 cr)
- For 484 Forest Policy and Administration (2 cr)
- One ~~or more~~ of the following courses (~~3~~ 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)

One ~~or more~~ of the following courses (~~2-3~~ 3 cr):

- For 330 Forest Ecosystem Processes (~~3~~ 2 cr)
- For 426 Wildland Fire ~~Ecology and Management and Ecology~~ (3 cr)
- For 462 Watershed ~~Science and~~ Management (3 cr)
- ForP 430 Forest Engineering and Harvesting (3 cr)
- WLF 314 Wildlife Ecology I (3 cr)

To complete this minor, students must complete a minimum of ~~18-19~~ credits from the list above

Geography

1. Change the prerequisites of the following courses [**Effective:** Summer 2008]

Geog 330 Urban Geography (3-4 cr)

Theory and models of the functions, origin, development, structure, and distribution of cities; land-use classification; geographic aspects of city planning. One hour additional meeting per week or project for fourth credit. One 1-day field trip. (Fall only)

~~Prereq: Geog-200 or Permission~~

Geog J340/J540 Business Location Decisions (3 cr)

Locational decision making in primary, secondary, and tertiary industries; resulting patterns of industrial location; importance of location and impact of industries on other characteristics of communities as demonstrated by examples from each sector. One 1-day field trip. Additional assignments and exams reqd for grad cr.

~~Prereq: Geog-200 or Permission~~

Geog J350/J550 Geography of Development (3-4 cr)

May be used as core credit in J-3-d. Geographic appraisal of resource problems and development potentials of the Third World. One hour additional meeting per week or project for fourth credit. Additional assignments and exams required for graduate credit.

Prereq: ~~Geog-200~~

Geog J360/J560 Population Dynamics and Distribution (3-4 cr)

May be used as core credit in J-3-d. Effects of fertility, mortality, and migration on population size and distribution; demographic trends in U.S. and other societies and how these relate to economic, political, environmental, and other factors. One hour additional meeting per week or project for fourth credit. Additional assignments and exams required for graduate credit. (Spring only)

Prereq: ~~Geog-200 or Permission~~

Geog 365 Political Geography (3 cr)

A survey of the geographical framework of the State and its development over the last 400 years. An examination of the ideas of geopolitics and the role of hegemony in interstate relations as well as the geographical implications of globalization are emphasized. The creation of diverse political landscapes of actual and imagined communities and their impact on ideas of nationalism and electoral behavior are also discussed. (Alt/yr)

Prereq: ~~Geog-200 or Permission~~

2. Change the title of the following courses [**Effective:** Summer 2008]

Geog J427/J526 Spatial ~~Multicriteria Analysis and Optimization~~ ~~Decision Support Techniques~~ (3 cr)

May be used as core credit in J-3-d. Multiple criteria decision-making (MCDM); decision alternatives and constraints; spatial weighting schemes (criterion weighting techniques); collaborative spatial decision-making, MCDM and GIS; linear programming (simple versus multiple objective function); location analysis; location-allocation models integrated with GIS; gravity models. Additional projects/assignments required for graduate credit. (Alt/yr)

Prereq for Geog 427: Geog 385, Math 143 or higher; or Stat 251; or Permission

Prereq for Geog 526: Geog 475, Math 326 or Permission

Geog 526 Spatial ~~Multicriteria Analysis and Optimization~~ ~~Decision Support Techniques~~ (3 cr)

See Geog J427/J526.

3. Change the curricular requirements of **Geography (B.S.)** [**Effective:** Summer 2008]

C. Geographic Information Systems (GIS) Option

This option focuses on teaching theoretical fundamentals, techniques, and practical applications of modern geoprocessing using spatial analysis and information systems technology. Students will study in GIS and spatial analysis including cartographic principles, computational technology, and geographic information problem solving. Required courses are listed below by subfields:

Computer Science, Systems and Engineering Tools (~~4013-42-16~~ cr):

Bus 250 Introductory Systems Development (3 cr)

CE 211 Engineering Measurements or CE 218 Elementary Surveying (2-4 cr)

~~CS 112 Introduction to Problem Solving and Programming or CS 120 Computer Science I (3-4 cr)~~

CS 360 Database Systems (3 cr)

Engr 105 Engineering Graphics (2 cr)

Math and Writing Courses (13 cr):

Engl 313 Business Writing or Engl 317 Technical Writing (3 cr)

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

Math 176 Discrete Mathematics (3 cr)

Math 330 Linear Algebra or Stat 401 Statistical Analysis (3 cr)

GIS Courses and Practicum (11-13 cr):

Geog 407 Spatial Analysis and Modeling (2 cr)

Geog 427 Spatial Decision Support Techniques (3 cr)

Geog 475 Advanced GIS (3 cr)

Geog 479 GIS Programming (2 cr)

Geog 497 Practicum (1-3 cr)

Spatial Techniques (6 cr):

For 375 Airphoto Interpretation and Mapping (3 cr)

For 472 Remote Sensing of Environment (3-4 cr)

Geog 424 Hydrologic Applications of GIS and Remote Sensing (3 cr)

Geog 483 Remote Sensing/GIS Integration (3 cr)

6 credits of Upper Division Geography Courses

Electives to total 128 cr for the degree

Geography

1. Change the cross-list status of the following course [**Effective:** Summer 2008]

Geog 450 Global Environmental Change (3 cr)

[Same as Rnge 450.](#) Major global environmental changes addressed using an interdisciplinary approach. Topics may include processes and principles of ecosystems, biogeochemical cycles, impacts and mitigation of climatic change, atmospheric chemistry, feedbacks between climate and various earth system processes, and trends in global biodiversity.

Prereq: Math 143 or Stat 251

Geological Sciences

1. Add the following course [**Effective:** Summer 2008]

Geol ID517 Pre-Quaternary Paleoclimatology (1-3 cr) WSU Geol 516

This course will cover the sedimentological, paleontological, geochemical, and numerical methods used to study climate in the pre-Quaternary Phanerozoic geologic record. Assignments will include written and oral presentations, and the choice of projects will be partially tailored to the students' scholarly needs. Students may elect to take this for 1-3 credits, with assignments made accordingly. (Alt/yr)

2. Add the following course, change the credits, description and joint-list status of the following course [**Effective:** Summer 2008]

Geol [J441/ID&WS-J541](#) (s) Structural Analysis (3 cr, [max arr](#)) WSU Geol 541

Structural analysis of complexly deformed rocks in orogenic belts. [Independent research projects will be required for graduate credit.](#) Field trip required.

Journalism and Mass Media

1. Drop the following courses [**Effective:** Summer 2008]

Jamm 442 Media Law and Ethics (3 cr)

Examination of First Amendment law and the ethical responsibilities of media professionals. Recommended preparation: PoIS 101.

Prereq: Senior standing

Recommended Equivalency: JAMM 448

JAMM 449 Media Criticism (3 cr)

Examination of critical approaches to the study of mass communication, including interdisciplinary interpretations of media and culture.

Recommended Equivalency: JAMM 440

2. Add the following courses [**Effective:** Summer 2008]

JAMM 341 Mass Media Ethics (3 cr)

A critical examination of ethical issues confronting journalists and other media practitioners. Includes moral analysis, argument and decision-making by media organizations. Case studies drawn from journalism, broadcasting, advertising, public relations and digital media.

JAMM 379 Hollywood Portrayals of Journalists (3 cr)

This course addresses the evolving relationship between the American people and their media. It examines the conflicting images of journalists in movies and television and discusses the influence of these images on the American public's perception of news gatherers in the 20th and 21st centuries.

JAMM 448 Law of Mass Media (3 cr)

An examination of the legal framework governing the gathering, preparation, and dissemination of information, advertising and entertainment in the United States and globally. Topics include First Amendment, defamation, invasion of privacy, intellectual property, copyright, access to governmental proceedings and records, and regulation of broadcasting, satellite, and cable television.

JAMM 465 Political Advertising (3 cr)

Using presidential and congressional campaigns as the foundation, this course will examine how political organizations and politicians use marketing, advertising and public relations principles, strategies and media and tactics to reinforce, change or justify public perceptions to gain public support, votes, money or credibility. Recommended preparation: JAMM 265.

3. Change the description of the following courses [**Effective:** Summer 2008]

JAMM 225 Reporting (3 cr)

Writing news for print, broadcast and online media. Introduction to newsroom structures and processes, news judgment and decision making. [Two 2-hr lectures/labs a wk.](#)

Prereq: JAMM 121

JAMM 324 News Editing and Production (3 cr)

News selection, evaluation, editing, display, pagination and design for print and online media. [Two 2-hr lectures/labs a wk. \(Spring only\)](#)

Prereq: JAMM 121 and 225, or Permission

JAMM 350 Public Relations Writing and Production (3 cr)

Public relations writing, publication and design processes for print, broadcast and online media. [Two 2-hr lectures/labs a wk.](#)

Prereq: JAMM 225 and JAMM 252

JAMM 445 History of Mass Media (3 cr)

[History of significant economic, social, cultural, and technological developments in the mass media, including contributions by underrepresented groups and the importance of a free press to democracy.](#) [Growth and development of mass media in the U.S.](#)

4. Change the curricular requirements of **JAMM Core Requirements** (B.A. or B.S.) [**Effective:** Summer 2008]

Comm 101 Fundamentals of Public Speaking (2 cr)

JAMM 100 Media and Society (3 cr)

JAMM 121 Media Writing (3 cr)

[JAMM 341 Mass Media Ethics \(3 cr\)](#)

[JAMM 448 Law of Mass Media \(3 cr\)](#)

[JAMM 442 Media Law and Ethics \(3 cr\)](#)

[JAMM 445 History of Mass Media \(3 cr\)](#)

Two of the following courses:

JAMM 340 Cultural Diversity and the Media (3 cr)

JAMM 377 Documentary (3 cr)

[JAMM 379 Hollywood Portrayals of Journalists \(3 cr\)](#)

JAMM 378 American Television Genres (3 cr)

JAMM 440 Culture and Mass Media (3 cr)

JAMM 443 Media Management and Economics (3 cr)

JAMM 444 Mass Media and Public Opinion (3 cr)

[JAMM 445 History of Mass Media \(3 cr\)](#)

[JAMM 465 Political Advertising \(3 cr\)](#)

[JAMM 449 Media Criticism \(3 cr\)](#)

JAMM 490 Global Media (3 cr)

Nine credits of electives in Journalism and Mass Media (three of which must be upper division credits)

Students in the School are required to complete 15 credit hours within one of the four majors: Advertising, Journalism, Public Relations or Radio/TV/Digital Media Production:

5. Change the curricular requirements of **Journalism** (B.A. or B.S.) [**Effective:** Summer 2008]

Required course work includes the university requirements (see regulation J-3), the School of Journalism and Mass Media core, and the following:

JAMM 225 Reporting (3 cr)

Twelve credits from this list:

JAMM 322 Broadcast News (3 cr)

JAMM 324 News Editing and Production (3 cr)

JAMM 325 Publications Editing (3 cr)

JAMM 420 Public Radio Journalism (3 cr)

JAMM 422 Advanced Broadcast News (3 cr)

JAMM 425 Feature Article Writing (3 cr)

[JAMM 426 Narrative Journalism \(3 cr\)](#)

JAMM 427 Public Affairs Reporting (3 cr)

JAMM 428 Environmental Journalism (3 cr)

(Journalism majors are encouraged to pursue their studies across media, including print, broadcast and online journalism.)

6. Change the curricular requirements of **Advertising** (Minor) [**Effective:** Summer 2008]

JAMM 100 Media and Society (3 cr)

JAMM 121 Media Writing (3 cr)

JAMM 265 Principles of Advertising (3 cr)

JAMM 361 Advertising Creativity (3 cr)

At least two of the following (6 cr):

[JAMM 341 Mass Media Ethics \(3 cr\)](#)

JAMM 364 Advertising Media Planning (3 cr)

[JAMM 442 Media Law and Ethics \(3 cr\)](#)

JAMM 444 Mass Media and Public Opinion (3 cr)

[JAMM 448 Law of Mass Media \(3 cr\)](#)

[JAMM 465 Political Advertising \(3 cr\)](#)

JAMM 468 The Advertising Agency (3 cr)

7. Change the curricular requirements of **Journalism** (Minor) [**Effective:** Summer 2008]

JAMM 100 Media and Society (3 cr)

JAMM 121 Media Writing (3 cr)
JAMM 225 Reporting (3 cr)
~~JAMM 442 Media Law and Ethics (3 cr)~~
~~JAMM 448 Law of Mass Media (3 cr)~~
Two journalism-related courses to meet specific career goals (6 cr)

8. Change the curricular requirements of **Public Relations** (Minor) [**Effective:** Summer 2008]

JAMM 100 Media and Society (3 cr)
JAMM 121 Media Writing (3 cr)
~~JAMM 225 Reporting (3 cr)~~
JAMM 252 Principles of Public Relations (3 cr)
~~JAMM 341 Mass Media Ethics (3 cr)~~
Two public relations-related courses to meet specific career goals (6 cr)

Landscape Architecture

1. Change the co-requisites and title of the following courses [**Effective:** Summer 2008]

LArc 256 Landscape Architecture ~~I-1.1~~ **(3 cr)**

Introduction to landscape architecture design; focus on landscape architecture design process and critical thinking; includes readings, lectures, field trips, small -scale design projects. Course is offered first half of semester. Recommended Preparation: Art 110, 111 and LArc 288, 289.

Prereq: Art 110 and Engl 102 with a minimum grade of 'C'

Coreq: LArc ~~257~~~~288~~ or Permission

LArc 261 Landscape Architecture ~~I-2.1~~ **(3 cr)**

Integration of principles acquired in plant materials, grading, and drainage, and in LArc 256 and 257 to small scale design with an added emphasis on design symbolism and narrative. Required attendance at outside events (lectures, symposiums, films). Course is offered first half of semester. Recommended Preparation: LArc 245, 246 and 288.

Prereq: LArc 257 or Permission

Coreq: LArc 262 or Permission

LArc 262 Landscape Architecture ~~I-2.2~~ **(3 cr)**

Integration and application of principles acquired in plant materials, grading, and drainage and LArc 261. Focus on design development with an emphasis on sustainable environmental and cultural values. Required attendance at outside events (lectures, symposiums, films). Course is offered second half of semester. Recommended Preparation: LArc 245, 246 and 288.

Prereq: LArc 261 or Permission

Coreq: LArc 261 or Permission

2. Change the co-requisites, prerequisites and title of the following courses [**Effective:** Summer 2008]

LArc 257 Landscape Architecture ~~I-1.2~~ **(3 cr)**

Continued emphasis on landscape architecture design process and design program development, with a focus on intermediate scale site design; includes readings, lectures, field trips, intermediate scale design projects. Course is offered second half of semester.

Prereq: ~~LArc 256~~ or Permission

Coreq: LArc ~~288~~~~257~~ or Permission

LArc 356 Landscape Architecture ~~II-3.1~~ **(3 cr)**

Intermediate site planning with a focus on community project done in cooperation with Department of Architecture and Interior Design. (Fall only)

Prereq: LArc 210, 245, 246, ~~260~~~~262~~, 268, and 269; or Permission

Coreq: LArc 257 or Permission

LArc 357 Landscape Architecture ~~II-3.2~~ **(3 cr)**

Intermediate site planning and design problems that emphasize the analysis, development and presentation for urban, rural and regional housing and open space planning projects; introduction of senior case study. Selected field trips at student expense. Recommended Preparation: LArc 288, 289. (Fall only)

Prereq: LArc 210, 245, 246, ~~260~~, ~~268~~, ~~and~~ 269 ~~and 356~~; or Permission

Coreq: LArc 356 or Permission

LArc 361 Landscape Architecture ~~II-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 ~~261~~, ~~262~~, ~~268~~, ~~and~~ ~~269~~~~357~~ or Permission

Coreq: LArc 362 or Permission

LArc 362 Landscape Architecture ~~II-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 or Coreq: LArc ~~268 and 269~~ 361 or Permission

LArc 456 Landscape Architecture III-5.1 (3 cr)

Capstone Professional Landscape Architecture Studio: Design Development. Includes a senior field trip at student expense; attendance at outside events (lectures, symposiums, films). Course is offered first half of semester.

Prereq: ~~LArc 268, 269, 368 and 369; and either LArc 357 and 362, or LArc 357 and 364, or LArc 362 and 364~~ LArc 362, 368 and 369; or Permission

Coreq: LArc 457 or Permission

LArc 457 Landscape Architecture III-5.2 (3 cr)

Capstone Professional Landscape Architecture Studio: Construction Documentation. Attendance at outside events (lectures, symposiums, films) required as well as faculty approval of LArc 460 Thesis proposal. Course is offered second half of semester.

Prereq: ~~LArc 268, 269, 368 and 369; and either LArc 357 and 362, or LArc 357 and 364, or LArc 362 and 364~~ LArc 368 and 369; or Permission

Prereq or Coreq: LArc 456 or Permission

3. Change the prerequisites and title of the following course [**Effective:** Summer 2008]

LArc 460 Landscape Architecture III-6.0 (6 cr)

Case study of a professional landscape architectural project; completion of a comprehensive project(s) demonstrating mastery in areas of land planning and/or design, plant materials, construction, graphics, and computer applications. (Spring only)

Prereq: LArc ~~456 and 457~~ or Permission

Mathematics

1. Drop the following courses [**Effective:** Summer 2008]

Math 585 (s) Recent Developments in Mathematics (3 cr, max arr)

For students with extensive background in specific areas of mathematics.

Math 586 (s) Recent Developments in Mathematics (3 cr, max arr)

For students with extensive background in specific areas of mathematics.

2. Change the description and title of the following course [**Effective:** Summer 2008]

Math 215 ~~Seminar in Topology of the Plane~~ Introduction to Higher Mathematics (3 cr)

Carries no credit after Math 411 or 471. ~~Primary goal is to teach students to prove theorems: open and closed sets, connectedness, compactness, continuity, etc. (Fall only)~~ The primary goal of this course is to teach students how to read and write mathematical proofs. Topics include logic and proof techniques, as well as fundamental mathematical structures such as sets, relations, functions, and number systems.

Prereq: Math 175 and permission

3. Change the curricular requirements of **47-Credit Mathematics Teaching Major** [**Effective:** Summer 2008]

A. 47-CREDIT MATHEMATICS TEACHING MAJOR

- CS 112 Introduction to Problem Solving and Programming (3 cr)
- Math 170 Analytic Geometry and Calculus I (4 cr)
- Math 175 Analytic Geometry and Calculus II (4 cr)
- Math 176 Discrete Mathematics (3 cr)
- Math 215 Seminar in Topology of the Plane (3 cr)
- Math 275 Analytic Geometry and Calculus III (3 cr)
- Math 330 Linear Algebra (3 cr)
- Math 386 Theory of Numbers (3 cr)
- Math 390 Axiomatic Geometry or Math 391 Modern Geometry (3 cr)
- Math 461 Abstract Algebra (3 cr)
- Math 471 Introduction to Analysis 1 (3 cr)

One of the following (3-4 cr):

Stat 251 Statistical Methods (3 cr)

Stat 271 Statistical Inference and Decision Analysis (4 cr)

Stat 301 Probability and Stat (3 cr)

Math 451 Probability Theory (3cr)

~~Stat 251 Statistical Methods or Stat 301 Probability and Stat or Math 451 Probability Theory (3 cr)~~

One 3 credit Math course numbered 400-490 (3 cr)

Two 3 credit Math courses numbered 310-490 (6 cr)

Three of the following courses (one must be above 400) (9 cr)

~~Math 310 Ordinary Differential Equations (3 cr)~~

[Math 326 Linear Optimization \(3 cr\)](#)
[Math 376 Discrete Mathematics II \(3 cr\)](#)
[Math 390 Axiomatic Geometry or Math 391 Modern Geometry \(3 cr\)](#)
[Math 411 Elementary Topology \(3 cr\)](#)
[Math 420 Complex Variables \(3 cr\)](#)
[Math 433 Numerical Analysis \(3 cr\)](#)
[Math 451 Probability Theory \(3 cr\)](#)
[Math 452 Mathematical Statistics \(3 cr\)](#)
[Math 462 Abstract Algebra \(3 cr\)](#)
[Math 472 Introduction to Analysis 2 \(3 cr\)](#)
[Math 476 Combinatorics \(3 cr\)](#)

Approved upper division mathematics electives to total 47 credits in the teaching major.

In addition to the above teaching major requirements, the following special methods sequence is also required:

EDCI 434 Secondary Mathematics Methods I (3 cr)
 EDCI 454 Secondary Mathematics Methods Lab (1 cr)

4. Change the curricular requirements of **32-Credit Mathematics Teaching Major [Effective: Summer 2008]**

B. 32-CREDIT MATHEMATICS TEACHING MAJOR

CS 112 Introduction to Problem Solving and Programming (3 cr)
 Math 170 Analytic Geometry and Calculus I (4 cr)
 Math 175 Analytic Geometry and Calculus II (4 cr)
 Math 176 Discrete Mathematics (3 cr)
 Math 215 Seminar in Topology of the Plane (3 cr)
 Math 330 Linear Algebra (3 cr)
 Math 386 Theory of Numbers (3 cr)
 Math 390 Axiomatic Geometry or Math 391 Modern Geometry (3 cr)
 Math 461 Abstract Algebra or Math 471 Introduction to Analysis 1 (3 cr)

One of the following (3-4 cr):

[Stat 251 Statistical Methods \(3 cr\)](#)
[Stat 271 Statistical Inference and Decision Analysis \(4 cr\)](#)
[Stat 301 Probability and Stat \(3 cr\)](#)
[Math 451 Probability Theory \(3cr\)](#)

~~Stat 251 Statistical Methods or Stat 301 Probability and Stat or Math 451 Probability Theory (3 cr)~~

In addition to the above teaching major requirements, the following special methods sequence is also required:

EDCI 434 Secondary Mathematics Methods I (3 cr)
 EDCI 454 Secondary Mathematics Methods Lab (1 cr)

Microbiology, Molecular Biology and Biochemistry

1. Change the curricular requirements of **Medical Technology (B.S.) [Effective: Summer 2008]**

MEDICAL TECHNOLOGY (B.S.)

The medical technologist performs critical laboratory tests and analytical procedures that aid physicians in the diagnosis and treatment of disease. The curriculum is of interest to students desiring professional careers in hospital and clinical laboratories, public health and research laboratories, and pharmaceutical laboratories. Students will have two options to obtain a BS degree in Medical Technology:

1. Upon completion of the B.S. degree in microbiology (medical technology option), those students who successfully complete 32 credits (MMBB 421) in a 12-month training course at an accredited hospital school of medical technology with a curriculum including clinical bacteriology, medical mycology, parasitology, clinical chemistry, toxicology, urinalysis, hematology, immunology-serology, immunohematology, and clinical correlations will be awarded the B.S. degree with major in medical technology. This second-degree option is open only to students who have earned the B.S. in microbiology at UI.

1.2. Students may also receive a BS in Medical Technology by completing the below coursework. With this option a student must successfully complete the below 96 credits of coursework in Microbiology, Molecular Biology and Biochemistry at the U of I and 32 credits of MMBB 421 in a 12-month training course at an accredited hospital school of medical technology with a curriculum including clinical bacteriology, medical mycology, parasitology, clinical chemistry, toxicology, urinalysis, hematology, immunology-serology, immunohematology, and clinical correlations.

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

[Biol 210 Genetics or Gene 314 General Genetics \(3-4 cr\)](#)
[Chem 111 Principles of Chemistry I \(4 cr\)](#)
[Chem 112 Principles of Chemistry II \(5 cr\)](#)
[Chem 253 Quantitative Analysis \(5 cr\)](#)
[Chem 277 Organic Chemistry I \(3 cr\)](#)
[Chem 278 Organic Chemistry I: Lab \(1 cr\)](#)
[Chem 372 Organic Chemistry II \(3 cr\)](#)
[Math 160 Survey of Calculus or Math 170 Analytic Geometry and Calculus I \(4 cr\)](#)

[MMBB 154 Introductory Microbiology \(3 cr\)](#)
[MMBB 250 General Microbiology \(3 cr\)](#)
[MMBB 255 General Microbiology Laboratory \(2 cr\)](#)
[MMBB 380 Introductory Biochemistry \(4 cr\)](#)
[MMBB 421 Hospital Internship \(32 cr\)](#)
[MMBB 400 Seminar \(1 cr\)](#)
[MMBB 440 Advanced Laboratory Techniques or MMBB 401 Undergraduate Research \(4 cr in one semester\)](#)
[MMBB 409 Immunology \(3 cr\)](#)
[Phys 111 General Physics I or Phys 211 Engineering Physics I \(4 cr\)](#)
[Phys 112 General Physics II or Phys 212 Engineering Physics II \(4 cr\)](#)
[Stat 251 Statistical Methods \(3 cr\)](#)
[One of the following English Courses \(3 cr\):](#)
[Engl 207 Persuasive Writing \(3 cr\)](#)
[Engl 208 Personal and Exploratory Writing \(3 cr\)](#)
[Engl 209 Inquiry-Based Writing \(3 cr\)](#)
[Engl 317 Technical Writing \(3 cr\)](#)
[One of the following MMBB electives \(3 cr\):](#)
[MMBB 412 Pathogenic Microbiology \(3 cr\)](#)
[MMBB 422 Cellular and Molecular Basis of Disease \(3 cr\)](#)
[MMBB 432 Virology \(3 cr\)](#)
[MMBB 463 Molecular Parasitology \(3 cr\)](#)
[MMBB 471 Advanced Pathogenesis: Host Pathogen Interactions \(3 cr\)](#)
[Electives to total 128 credits for the degree](#)

Music

- Drop the following course [**Effective:** Summer 2008]

MusH 411 Music of Greece: Rembetica, Folk, and Art Music (3 cr)

A chronological, geographical, and stylistic survey of Greek folk and art music, contemporary art, and popular music aimed for general education students. Content includes relationships between dance, history and Greek and Balkan culture. The course examines the development of Greek urban blues and offers the opportunity for active participation in Greek songs and dances. May be taken as an elective for credit by music majors. (Spring only)

- Change the description of the following courses [**Effective:** Summer 2008]

MusA 492 Elective Half Recital (0 cr)

For students who ~~have passed MusA 490 or 491 and~~ wish to ~~do~~ present an elective half recital. Graded P/F.

Prereq: audition and Permission

Coreq: MusA 324 or 334

MusA 493 Elective Recital (0 cr)

For students who ~~have passed MusA 490 or 491 and~~ wish to ~~do~~ present an elective full recital. Graded P/F.

Prereq: audition and Permission

Coreq: MusA 324 or 334

- Change the co-requisite and prerequisites of the following courses [**Effective:** Summer 2008]

MusT 432 (s) Practicum: Music Teaching (7 or 14 cr)

Supervised music teaching in public schools. Graded P/F.

Prereq: ~~ED 301 or 312, ED 302 or 314, MusA 490, successful~~ Successful completion of all required course work for the Music Education: Vocal, Instrumental, or Vocal-Instrumental major, keyboard proficiency exam. cumulative GPA of 2.~~50~~75, acceptance to the College of Education and Permission permission of the School of Music.

Coreq: MusT 445 ~~(Submit application via coordinator of music education to the director of clinical experiences in teacher education by December 1 of school yr before enrolling.~~

- Change the title of the following courses [**Effective:** Summer 2008]

MusA 314 (s) Individual Studio Instruction (1 cr, max arr)

See MusA 114 for description.

Prereq: Permission

MusA 514 (s) Individual Studio Instruction (1 cr, max arr)

See MusA 114 for description.

MusA 590 (s) Elective Master's Recital (0 cr)

For students whose emphasis is other than performance. May be repeated. Graded P/F.

Prereq: Audition and Permission of committee

Coreq: MusA 524

MusA 591 (s) Required Master's Recital (0 cr)

For students whose emphasis is in performance. May be repeated. Graded P/F.

Prereq: Audition and Permission of committee

Coreq: MusA 534

5. Change the curricular requirements of **Music Education: Vocal (B.Mus.) [Effective: Summer 2008]**

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

Required course work includes the university requirements (see regulation J-3) and the specific requirements in one of the two sections below:

A. VOICE

- 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)
- EDCI 463 Literacy Methods for Content Learning (3 cr)
- MusA 114 Studio Instruction: Piano (2 cr)*
- MusA 115 Studio Instruction (2 cr)
- MusA 124 Studio Instruction: Voice (~~8~~-6 cr)
- MusA 145-146, 245-246 Piano Class (4 cr)
- MusA 151 or 152 Guitar Class for Music Majors (1 cr)
- MusA 324 Studio Instruction: Voice (6 cr)
- MusA 380 Opera/Musical Theatre Studio (1 cr)
- MusA 387, 487 Conducting I, II (4 cr)
- MusA 490 Half Recital (0 cr)
- MusC 139-140, 239-240 Aural Skills (6 cr)
- MusC 141-142, 241-242 Theory of Music (10 cr)
- MusC 328 Instrumental and Choral Arranging (3 cr)
- MusH 111 Introduction to Music Literature (3 cr)
- MusH 321, 322, 323 Music in Western Civilization (9 cr)
- MusT 382 Elementary School Music Methods for Music Majors (3 cr)
- MusT 383 Principles of Music Teaching (3 cr)
- MusT 385 Choral Music in the Secondary School (2 cr)
- MusT 432 Practicum: Music Teaching (14 cr)
- MusT 435 Pedagogy and Materials: Voice (2 cr)
- MusT 445 Proseminar in Music Teaching (2 cr)
- MusT 485 Choral Ensemble Rehearsal Techniques (1 cr)
- MusX 101 Orientation for Music Majors (0 cr)
- MusX 140 Convocation (seven semesters) (0 cr)
- MusX 283-284 Diction for Singers (4 cr)
- Psyc 101 Introduction to Psychology (3 cr)
- Major ensemble (six different semesters chosen from MusA 116/316 Concert Choir - Vandaleers, 117/317 University Chorus) (6 cr)
- Other ensemble (one semester chosen from MusA 116/316 Concert Choir - Vandaleers, 117/317 University Chorus, 118/318 Jazz Choir, 365 Chamber Ensemble, 380 Opera/Musical Theatre Studio) (1 cr)

* Voice majors must register for piano class before enrolling in applied piano instruction.

B. KEYBOARD

Note: In order to graduate, piano students must pass a piano scale and arpeggio proficiency exam. This exam is to be completed either at the senior recital audition or at a piano jury during the student's final year in school.

- 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)
- EDCI 463 Literacy Methods for Content Learning (3 cr)
- MusA 114 Studio Instruction: Voice (5 cr)*
- MusA 115 Studio Instruction (2 cr)
- MusA 124 Studio Instruction: Piano (~~8~~-6 cr)
- MusA 147 Voice Class (1 cr)
- MusA 151 or 152 Guitar Class for Music Majors (1 cr)
- MusA 246 Piano Class (1 cr)
- MusA 315 Accompanying (2 cr)
- MusA 324 Studio Instruction: Piano (6 cr)
- MusA 380 Opera/Musical Theatre Studio (1 cr)
- MusA 387, 487 Conducting I, II (4 cr)
- MusA 490 Half Recital (0 cr)
- MusC 139-140, 239-240 Aural Skills (6 cr)
- MusC 141-142, 241-242 Theory of Music (10 cr)
- MusC 328 Instrumental and Choral Arranging (3 cr)

MusH 111 Introduction to Music Literature (3 cr)
 MusH 321, 322, 323 Music in Western Civilization (9 cr)
 MusT 382 Elementary School Music Methods for Music Majors (3 cr)
 MusT 383 Principles of Music Teaching (3 cr)
 MusT 385 Choral Music in the Secondary School (2 cr)
 MusT 432 Practicum: Music Teaching (14 cr)
 MusT 435 Pedagogy and Materials: Voice (2 cr)
 MusT 445 Proseminar in Music Teaching (2 cr)
 MusT 485 Choral Ensemble Rehearsal Techniques (1 cr)
 MusX 101 Orientation for Music Majors (0 cr)
 MusX 140 Convocation (seven semesters) (0 cr)
 MusX 283-284 Diction for Singers (4 cr)
 Psyc 101 Introduction to Psychology (3 cr)
 Major ensemble (six different semesters chosen from MusA 116/316 Concert Choir - Vandaleers, 117/317 University Chorus) (6 cr)
 Other ensemble (one semester chosen from MusA 116/316 Concert Choir - Vandaleers, 117/317 University Chorus, 118/318 Jazz Choir, 365 Chamber Ensemble, 380 Opera/Musical Theatre Studio) (1 cr)

* Keyboard majors must register for voice class before enrolling in applied voice instruction.

6. Change the curricular requirements of **Music Education: Vocal-Instrumental** (B.Mus.) [Effective: Summer 2008]

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

Required course work includes 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)
 EDCI 463 Literacy Methods for Content Learning (3 cr)
 MusA 114 Studio Instruction (voice) (3 cr)
[MusA 115 Studio Instruction \(2 cr\)](#)
 MusA 124 Studio Instruction (instrumental) (~~8~~6 cr)
 MusA 145-146, 245-246 Piano Class (4 cr)
 MusA 147 Voice Class (1 cr)
 MusA 324 Studio Instruction (6 cr)
 MusA 387, 487 Conducting I, II (4 cr)
 MusA 490 Half Recital (0 cr)
 MusC 139-140, 239-240 Aural Skills (6 cr)
 MusC 141-142, 241-242 Theory of Music (10 cr)
 MusC 328 Instrumental and Choral Arranging (3 cr)
 MusH 111 Introduction to Music Literature (3 cr)
 MusH 321, 322, 323 Music in Western Civilization (9 cr)
 MusT 251, 253, 254, 255, 352 Instrumental Techniques (5 cr)
 MusT 382 Elementary School Music Methods for Music Majors (3 cr)
 MusT 383 Principles of Music Teaching (3 cr)
 MusT 385 Choral Music in the Secondary School (2 cr)
 MusT 386 Instrumental Music in the Secondary School (2 cr)
 MusT 432 Practicum: Music Teaching (14 cr)
 MusT 445 Proseminar in Music Teaching (2 cr)
 MusT 465 Jazz Band Rehearsal Techniques (1 cr)
 MusT 466 Marching Band Techniques (1 cr)
 MusT 467 Band Literature and Rehearsal Techniques (1 cr)
 MusT 485 Choral Ensemble Rehearsal Techniques (1 cr)
 MusT 486 Orchestral Literature and Rehearsal Techniques (1 cr)
 MusX 101 Orientation for Music Majors (0 cr)
 MusX 140 Convocation (seven semesters) (0 cr)
 Psyc 101 Introduction to Psychology (3 cr)
 Major ensembles (six different semesters)* (6 cr)
 Major ensembles (two different semesters chosen from MusA 116/317 Concert Choir - Vandaleers, 117/ 317 University Chorus) (2 cr)
 Other ensembles (two different semesters chosen from MusA 119/319 Marching Band, 121/321 Concert Band, 122/322 Orchestra, 125/325 Symphonic Band, or 320 Wind Ensemble, 323 Jazz Ensemble, 365 Chamber Ensemble) (students whose major applied medium is keyboard must select MusA 315 Accompanying to satisfy this requirement) (2 cr)
 Electives to total 128 cr for the degree

Note: In order to graduate, piano students must pass a piano scale and arpeggio proficiency exam. This exam is to be completed either at the senior recital audition or at a piano jury during the student's final year in school.

* The major ensemble requirement must be completed in six different semesters; **wind and percussion majors** must register for three different semesters of MusA 119/319 Marching Band and three different semesters of MusA 121/321 Concert Band, or 320 Wind Ensemble. **Wind and percussion majors** may, by audition, substitute two semesters of MusA 122/322 Orchestra for MusA 121/321 Concert Band, 125/325 Symphonic Band, or 320 Wind Ensemble. **String majors** must register for six different semesters of MusA 122/322 Orchestra and one semester of MusA 119/319 Marching Band. **Keyboard and guitar majors** must enroll in one semester of

MusA 119/319 Marching Band. They may enroll in large vocal ensembles to satisfy the remaining major ensemble requirements. **Wind, percussion, and string majors** must have a total of four semesters of major ensemble participation (as defined above) at UI.

7. Change the curricular requirements of **Musical Theatre (B.F.A.) [Effective: Summer 2008]**

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

MusA 115 Studio Instruction (2 cr)

MusA 124 Studio Instruction (~~8~~6 cr)

MusA 145 Piano Class (1 cr)

MusA 146 Piano Class (1 cr)

MusA 324 Studio Instruction (8 cr)

MusA 380 Opera/Musical Theatre Studio (in six different semesters) (6 cr)

MusA 491 Recital (0 cr)

MusC 139 Aural Skills I (2 cr)

MusC 140 Aural Skills II (2 cr)

MusC 141 Theory of Music I (2 cr)

MusC 142 Theory of Music II (2 cr)

MusH 111 Introduction to Music Literature or MusH 101 Survey of Music (3 cr)

MusH 330 History of Music Theatre (3 cr)

MusX 101 Orientation for Music Majors (0 cr)

MusX 283 Diction for Singers (1 cr)

TheF 103 Theatre Technology I or TheF 104 Theatre Technology II (4 cr)

TheF 105 Basics of Performance (3 cr)

TheF 106 Basics of Performance (3 cr)

TheF 207 Theatrical Make-up (3 cr)

TheF 305 Intermediate Acting (3 cr)

TheF 306 Intermediate Acting (3 cr)

TheF 417 Movement for the Actor (4 cr over 4 semesters)

TheF 418 Voice for the Stage (1 cr)

TheF 425 BFA Acting Studio (12 cr)

TheF 444 The Business of Acting (2 cr)

TheF 468 Theatre History I (3 cr)

Dance Electives (4 cr over 4 semesters) to be chosen from Ballet I/II, Jazz I/II, Modern I/II, Beginning Tap, Country-Western, Ballroom, Swing, Hip-Hop and African

Major ensemble (four different semesters chosen from MusA 116/316 Concert Choir - Vandaleers, 117/317 University Chorus) (4 cr)

Natural Resources

1. Drop the following course [Effective: Summer 2008]

NR 506 Advanced GIS Applications in Fire Ecology and Management (1 cr)

Advanced applications of GIS and Remote Sensing to fire ecology and management, including fire regimes, fire effects and fire behavior. Includes independent study project; accelerated. GIS experience required. (Fall only)

Prereq: GIS experience and Permission

Recommended Substitution: Rnge 407

2. Change the curricular requirements of **Ecology and Conservation Biology (B.S.Ecol.-Cons.Biol.) [Effective: Summer 2008]**

Improving global environmental conditions requires researchers and other citizens who can understand ecological principles, who can analyze and interpret ecological conditions, and who can predict the consequences of alternative natural resource management decisions. Understanding the importance of social values and policy for ecology and management of rare, threatened, and endangered species and their habitat is necessary to reverse the order of their decline. In the ecology and conservation biology program, students learn to apply biological, ecological, social, and political understanding to solve problems related to long-term conservation of biological diversity and to sustainable management of ecosystems.

This degree combines the biological, ecological, and social sciences to provide (1) an interdisciplinary understanding of the composition, structure, and processes of ecosystems, and (2) the skills necessary to provide long-term planning for the conservation and sustainable management of populations, species, and ecosystems.

Students will examine topics from molecular to landscape scales and integrate the social and biophysical worlds. Graduates will be equipped to address the issues and problems of sustainable resource use, conservation of rare, threatened, or endangered biota, management of ecosystems, and long-term conservation of biological diversity. This program is flexible enough to adapt to the interests of individual students, while remaining firmly grounded in ecological principles applicable to species, populations, communities, landscapes, and ecosystems. It is distinctly different from the emphasis on management in the other forestry, wildlife, fisheries, range, and conservation social sciences programs, or the more general environmental science programs. Graduates of the program often continue advanced studies at national and international universities. This natural resources "liberal science" degree can also serve as pre-professional training for law school, or for professional positions in federal, state, and private environmental organizations including local and regional planning groups and consulting firms.

The program requires 128 credits, and students must choose either the natural resources ecology or conservation biology option.

Students pursuing a B.S. in Ecology & Conservation Biology must receive a grade of 'C' or better in each of the following 4 indicator courses to register in upper division courses in CSS/Fish/For/Rnge/WLF and to graduate with a B.S. in either option: Biol 116, Biol 213, Stat 251, For ~~221~~ or Rnge 221. Before students are allowed to begin their senior thesis or project (485 or 497), they must attend two evening thesis / project sessions and one senior poster presentation.

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/Rnge/WLF 483 Senior Project Presentation (1 cr)
 CSS/Fish/For/NR/Rnge/WLF 497 Senior Thesis or CSS/Fish/For/ForP/Rnge/WLF 485 Ecology and Conservation Biology Internship (2 cr)
 Econ 202 Principles of Economics (3 cr)
 Engl 317 Technical Writing (3 cr)
 For 221 Ecology or Rnge 221 Ecology (3 cr)
 For/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)
 Stat 251 Statistical Methods (3 cr)

And one of the following options:

A. Natural Resources Ecology Option

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

To graduate in this option, students must achieve a "C" or better in the following six core courses: ~~CSS/Fish/For/Rnge/WLF~~ NR 200, For 330, For ~~Rnge~~ 429, Soil 205/206, and WLF 316 or Fish 316.

~~CSS/Fish/For/Rnge/WLF~~ NR 200 Seminar (1 cr)
 For 330 Forest Ecosystem Processes (~~3~~ 2 cr)
 For ~~Rnge~~ 429 Landscape Ecology (3 cr)
 Phys 100 Fundamentals of Physics or Phys 111 General Physics I (4 cr)
 Soil 205/206 The Soil Ecosystem and Lab (4 cr)
 WLF 316 Wildlife Ecology II (4 cr) or Fish 316 Principles of Population Dynamics (2 cr)
 Quantitative Resource Analysis Restricted Electives (two courses from the following):
 CSS 310 Social Research Methods in Conservation (4 cr)
 For 375 Introduction to Spatial Analysis for Natural Resource Management (3 cr)
 For ~~Rnge~~ 472 Remote Sensing of Environment (~~3~~ 4 cr)
 For 474 Forest Inventory (3 cr)
 Geog 385 GIS Primer (3 cr)
 Rnge 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 (~~4~~ 2 cr)
 For 462 Watershed Science and Management (~~2~~ 3 cr)
 Rnge 454 Rangeland Weed Management (3 cr)
 Rnge 456 Integrated Rangeland Management (3 cr)
 WLF 492 Wildlife Management (4 cr)

Ecology Restricted Electives (at least 2 credits from Fish ~~314~~ 315, Fish 415, Fish 430, Fish 435, For 423, For 463, Rnge 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 ~~and Ecology~~ (3 cr)

For 463 Hydrologic Measurement Techniques (1 cr)
[For 466 Diseases and Insects of Woody Plants \(3 cr\)](#)
[For 468 Forest and Plant Pathology \(2 cr\)](#)
[For 469 Introduction to Forest Insects \(2 cr\)](#)
[Geog/Rnge 450 Global environmental Change \(3 cr\)](#)

MMBB 425 Microbial Ecology (3 cr)
 PISc 410 Biology of Weeds (3 cr)
 Rnge 440 Wildland Restoration Ecology (3 cr)
 Rnge 459 Rangeland Ecology (2 cr)
 Rnge 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, [CSS/Fish/For/Rnge/WLF/NR 200](#), [For/Rnge 429](#), Phil 452, CSS 493, Fish or WLF 316, and WLF 440.

Biol 421 Advanced Evolutionary Biology (3 cr)
[CSS/Fish/For/Rnge/WLF/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)
[For/Rnge 472](#) Remote Sensing of Environment (3-4 cr)
 For 474 Forest Inventory (3 cr)
 Geog 385 GIS Primer (3 cr)
 Rnge 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 (4-2 cr)
 For 462 Watershed Science and Management (2-3 cr)
 Rnge 454 Rangeland Weed Management (3 cr)
 Rnge 456 Integrated Rangeland Management (3 cr)
 WLF 492 Wildlife Management (4 cr)

Ecology Restricted Electives (at least 2 credits from Fish [314](#)[315](#), Fish 415, Fish 430, Fish 435, For 423, For 463, Rnge 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 (~~3~~2 cr)
 - For 423 Forest Community Ecology (1 cr)
 - For 426 Wildland Fire ~~Ecology and Management and Ecology~~ (3 cr)
 - For 463 Hydrologic Measurement Techniques (1 cr)
 - ~~For 466 Diseases and Insects of Woody Plants (3 cr)~~
 - [For 468 Forest and Plant Pathology \(2 cr\)](#)
 - [For 469 Introduction to Forest Insects \(2 cr\)](#)
 - [Geog/Rnge 450 Global environmental Change \(3 cr\)](#)
 - MMBB 425 Microbial Ecology (3 cr)
 - PISc 410 Biology of Weeds (3 cr)
 - Rnge 440 Wildland Restoration Ecology (3 cr)
 - Rnge 459 Rangeland Ecology (2 cr)
 - Rnge 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 \(4 cr\)](#)
 - Ent 211 Insect Biology (4 cr)
 - Rnge 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

3. Change the curricular requirements of **Natural Resources (Minor)** [Effective: Summer 2008]

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

- For 235 Society and Natural Resources (3 cr)
 - For 221 Ecology [or Rnge 221 Ecology](#) (3 cr)
 - Courses chosen from at least three of the following subjects, including at least 3 credits at the 300 level or above (~~4~~2-13 cr):
 - Conservation Social Sciences (CSS)
 - Fishery Resources (Fish)
 - Forest Products (ForP)
 - Forest Resources (For)
 - Rangeland ~~Ecology and Management~~ [Resources](#) (Rnge)
 - Wildlife Resources (WLF)
- [Minimum of 19 credits are required to complete this minor](#)

Plant, Soil and Entomological Sciences

1. Drop the following course [Effective: Summer 2008]

Ent 211 Insect Biology (4 cr)

May be used as core credit in J-3-b. Classification, structure, and ecology of insects, and their importance to human society. Three lec and one 3-hr lab a wk.

2. Add the following courses [Effective: Summer 2008]

PISc [J446/ID-J546 Plant Breeding \(3 cr\)](#) WSU CropS 546

Application of genetic principles to improvement of crop plants. Grad students reqd to complete additional term paper. (Alt/yr)
Prereq: Gene 314 or Equivalent

Soil ID416 Sustainable Small Acreage Farming and Ranching (3 cr) WSU Soils 404

Overview of small acreage production systems, evaluation of goals and resources, land evaluation, marketing options, and accessing community resources. Three field trips.

Recommended Equivalency: Ag 416

3. Change the description of the following course [**Effective:** Summer 2008]

PISc ID546 Plant Breeding (3 cr) WSU CropS 546

~~Application of genetic principles to improvement of crop plants. Grad students reqd to complete additional term paper. (Alt/yr) See PISc J446/J546.~~

~~Prereq: Gene 314 or Equivalent~~

4. Change the cooperative status of the following courses [**Effective:** Summer 2008]

Ent ID438 Pesticides in the Environment (3 cr) WSU IPM 452

See Soil 438.

Ent ID-J491/J591 Principles of Insect Pest Management (3 cr) WSU IPM 201

Quantitative analyses, ecological theory, and pest control tactics required to design and conduct integrated pest management programs for insects. Two written papers and one classroom seminar reqd for grad cr. Recommended Preparation: one course in statistics. (Alt/yr)

Ent ID540 Insect Identification (4 cr) WSU Entom 539

See Ent J440/J540.

Ent ID584 Insect Anatomy and Physiology (4 cr) WSU Entom 550

See Ent J484/J584.

5. Change the cooperative status and prerequisites of the following course [**Effective:** Summer 2008]

Ent ID-J440/ID-J540 Insect Identification (4 cr) WSU Entom 439/539

Survey of approximately 200 major families; collecting and preservation techniques. For grad cr, an additional 50 families and selected subfamilies and genera will be covered and a term paper is reqd. Two lec and two 2-hr labs a wk; two 1-day field trips. Recommended Preparation: Ent 211. (Alt/yr)

~~Prereq: Ent 322 or Permission~~

6. Change the credits of the following course [**Effective:** Summer 2008]

PISc 480 Field Trip (1 cr, max ~~2~~3)

Three-day field trip to production areas.

Prereq: Permission

7. Change the credits, description and title of the following course [**Effective:** Summer 2008]

Ent 322 ~~Economic~~ General and Applied Entomology (3-4 cr)

May be used as core credit in J-3-d. Identification, biology, and importance of insects and related arthropods to humans and agriculture; basic principles of arthropod pest management. ~~Two~~ ~~Three~~ lec and one 3-hr lab a wk.

8. Change the prerequisites of the following courses [**Effective:** Summer 2008]

Ent 398 Internship (1-6 cr, max 6)

Graded P/F.

~~Prereq: Ent 322 or Permission of department~~

Ent ID-J441/ID-J541 Insect Ecology (3 cr) WSU Entom 541

Population and community dynamics set in a systems framework; theory and applications in natural and altered systems. Requirements for graduate credit include a longer (10 vs. 5 pages), more synthetic term paper, and each 500-level student will lead a web-based or in-class discussion on a research paper of their choice. Two 1-day field trips. Recommended Preparation: General ecology.

~~Prereq: Ent 211-322 or Permission~~

Ent ID-J446/ID-J546 Host Plant Resistance to Insects and Pathogens (3 cr) WSU Entom 446/546

Principles and methodologies for developing pest-resistant crop varieties. Requirements for graduate credit include preparation of grant proposal, classroom presentation. Field trips. (Alt/yr)

~~Prereq: Ent 211-322 or Permission~~

Ent ID549 Insect-Plant Interactions (3 cr) WSU Entom 445/545

Ecology, evolution, and mechanisms of the interactions between insects and plants. Requirements for graduate credit include formal report of field study, term paper. (Alt/yr)

~~Prereq: Ent 211-322~~

Ent 598 (s) Internship (cr arr)

Prereq: [Ent 322 or Permission](#)

9. Change the curricular requirements of **Agroecology, Horticulture and Environmental Quality** (B.S.Agroecol.Hort.Envir.) [**Effective:** Summer 2008]

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

Biol 115 Cells and the Evolution of Life (4 cr)
 Biol 213 Principles of Biological Structure and Function or PISc 205 General Botany (4 cr)
 Chem 275 Carbon Compounds or Chem 277 Organic Chemistry I (3 cr)
 Comm 101 Fundamentals of Public Speaking (2 cr)
 Engl 313 Business Writing or Engl 317 Technical Writing (3 cr)
[Ent 322 General and Applied Entomology \(4 cr\)](#)
 Geog 385 GIS Primer (3 cr)
 PISc 102 The Science of Plants in Agriculture (3 cr)
 PISc 400 (s) Seminar (1 cr)
 PISc 415 Plant Pathology or Soil 425 Microbial Ecology (3 cr)
 PISc 438 Pesticides in the Environment (3 cr)
 Soil 205 The Soil Ecosystem (3 cr)
 Stat 251 Statistical Methods (3 cr)

And one of the following options:

A. Entomology Option

Biol 116 Organisms and Environments (4 cr)
 Biol 210 Genetics or Gene 314 General Genetics (3-4 cr)
 Biol 212 Molecular and Cellular Biology (4 cr)
 Biol 314 Ecology and Population Biology (4 cr)
 Chem 111 Principles of Chemistry I (4 cr)
 Chem 112 Principles of Chemistry II (5 cr)
~~Ent 211 Insect Biology (4 cr)~~
~~Ent 322 Economic Entomology (3 cr)~~
 Ent 440 Insect Identification (4 cr)
 Ent 484 Insect Anatomy and Physiology (4 cr)
 Math 143 Pre-calculus Algebra and Analytic Geometry or Math 160 Survey of Calculus (3-4 cr)
 MMBB 250, 255 General Microbiology and Lab (4 cr)
 Entomology electives (~~5-9~~ cr)
 Life Science electives (6 cr)
 Mathematics electives (4 cr)
 Physics electives (4 cr)
 Electives to total 132 cr for the degree

B. Crop and Weed Science Option

Chem 101 Introduction to Chemistry I or Chem 111 Principles of Chemistry I (4 cr)
 Chem 276 Carbon Compounds Lab or Chem 278 Organic Chemistry I: Lab (1 cr)
~~Ent 211 Insect Biology or Ent 322 Economic Entomology (3-4 cr)~~
 Gene 314 General Genetics (3 cr)
 Math 143 Pre-calculus Algebra and Analytic Geometry or Math 160 Survey of Calculus (3-4 cr)
 MMBB 154, 155 Introductory Microbiology and Lab or MMBB 250, 255 General Microbiology and Lab (4 cr)
 MMBB 300 Survey of Biochemistry ~~or MMBB 380 Introductory Biochemistry (3-4 cr)~~
[PISc 338 Weed Control \(3 cr\)](#)
 PISc 398 Internship or PISc 499 Directed Study (3 cr)
[PISc 401 Plant Growth and Development \(3 cr\)](#)
 PISc 407 Field Crop Production (3 cr)
[PISc 416 Plant Pathology Laboratory \(1 cr\)](#)
 Soil 206 The Soil Ecosystem Lab (1 cr)
[Soil 446 Soil Fertility \(3 cr\)](#)
 Ecology elective (~~3-2-4~~ cr):
[Biol 314 Ecology and Population Biology \(4 cr\)](#)
[For 221 Ecology \(3 cr\)](#)
[For 235 Society and Natural Resources \(3 cr\)](#)
[For 270 Principles of Forest Ecosystem Management \(2 cr\)](#)
[For 330 Forest Ecosystem Processes \(3 cr\)](#)
[PISc 410 Biology of Weeds \(3 cr\)](#)
[PISc 446 Plant Breeding \(3 cr\)](#)
[Rnge 221 Ecology \(3 cr\)](#)
 Crops electives (~~4-12~~ cr):
 PISc 360 World Agricultural Systems (3 cr)
 PISc 401 Plant Growth and Development (3 cr)
 PISc 408 Cereal Science (3 cr)
 PISc 410 Biology of Weeds (3 cr)
 PISc 433 Plant Tissue Culture Techniques (3 cr)

[PISc 446 Plant Breeding \(3 cr\)](#)

PISc 480 Field Trip (1 cr)

PISc 490 Potato Science (1-3 cr)

~~Biotechnology elective (3cr):~~

~~Biol 212 Molecular and Cellular Biology (4 cr)~~

~~CORS 210 Biotechnology and Society (3 cr)~~

~~MMBB 450 Molecular Mechanisms in Microbiology (2 cr)~~

~~MMBB 475 Molecular Biology of Cells (3 cr)~~

~~MMBB 487 Eukaryotic Molecular Genetics (3 cr)~~

~~MMBB 488 Genetic Engineering (3 cr)~~

~~PISc 433 Plant Tissue Culture Techniques (3 cr)~~

Specialization electives (~~40~~9 cr):

Accounting

Animal and Veterinary Sciences

Agricultural Economics

Biology

Business

Business Law

Chemistry

Computer Science

Economics

Entomology

Foreign Language (Max of 4 credits)

Forestry

Landscape Architecture

Microbiology, Molecular Biology and Biochemistry

Physics

Plant Science

Rangeland Ecology and Management

Soils

Electives to total 128 cr for the degree

C. Horticulture and Urban Landscape Management Option

Chem 101 Introduction to Chemistry I or Chem 111 Principles of Chemistry I (4 cr)*

[Chem 276 Carbon Compounds Lab or Chem 278 Organic Chemistry I: Lab \(1 cr\)](#)

~~Ent 211 Insect Biology or Ent 322 Economic Entomology (3-4 cr)~~

[Gene 314 General Genetics \(3 cr\)](#)

Math 143 Pre-calculus Algebra and Analytic Geometry or Math 160 Survey of Calculus (3-4 cr)

MMBB 154, 155 Introductory Microbiology and Lab or MMBB 250, 255 General Microbiology and Lab (4 cr)

[MMBB 300 Survey of Biochemistry \(3 cr\)](#)

PISc 201 Principles of Horticulture (3 cr)

[PISc 338 Weed Control \(3 cr\)](#)

[PISc 398 Internship \(1-6 cr, max 6\) or PISc 499 \(s\) Directed Study \(cr arr\)](#)

[PISc 401 Plant Growth and Development \(3 cr\)](#)

[PISc 416 Plant Pathology Laboratory \(1 cr\)](#)

[Soil 206 The Soil Ecosystem Lab \(1 cr\)](#)

[Soil 446 \(s\) Soil Fertility \(3 cr\)](#)

~~PISc 302 Golf and Sports Turf Management (3 cr)~~

~~PISc 334 Controlled Environments for Horticultural Production or PISc 340 Nursery Management (3 cr)*~~

~~PISc 470 Arboriculture (3 cr)~~

[Ecology elective \(2-4 cr\):](#)

[Biol 314 Ecology and Population Biology \(4 cr\)](#)

[For 221 Ecology \(3 cr\)](#)

[For 235 Society and Natural Resources \(3 cr\)](#)

[For 270 Principles of Forest Ecosystem Management \(2 cr\)](#)

[For 330 Forest Ecosystem Processes \(3 cr\)](#)

[PISc 410 Biology of Weeds \(3 cr\)](#)

[Rnge 221 Ecology \(3 cr\)](#)

Horticulture electives (~~40~~12 cr):

[PISc 300 Plant Propagation \(3 cr\)](#)

[PISc 302 Golf and Sports Turf Management \(3 cr\)](#)

PISc 310 Pomology (3 cr)

PISc 311 Pomology Laboratory (1 cr)

PISc 313 Viticulture and Small Fruits (3 cr)

PISc 320 Olericulture--Commercial Vegetable Crops (3 cr)

PISc 321 Olericulture Lab--Commercial Vegetable Crops (1 cr)

PISc 334 Controlled Environments for Horticultural Production (3 cr)*

PISc 340 Nursery Management (3 cr)*

PISc 341 Nursery Management Laboratory (1 cr)

PISc 418 Post-Harvest Biology and Technology (3 cr)

PISc 433 Plant Tissue Culture Techniques (3 cr)

[PISc 439 Ornamental Plant Production \(4 cr\)](#)

[PISc 446 Plant Breeding \(3 cr\)](#)

PISc 464 Landscape Maintenance (3 cr)

PISc 480 Field Trip (1 cr)

[PISc490 Potato Science \(3 cr\)](#)

PISc 499 Directed Study (cr arr)

~~Biotechnology elective (3cr):~~

~~Biol 212 Molecular and Cellular Biology (4 cr)~~

~~CORS 210 Biotechnology and Society (3 cr)~~

~~MMBB 450 Molecular Mechanisms in Microbiology (2 cr)~~

~~MMBB 475 Molecular Biology of Cells (3 cr)~~

~~MMBB 487 Eukaryotic Molecular Genetics (3 cr)~~

~~MMBB 488 Genetic Engineering (3 cr)~~

~~PISc 433 Plant Tissue Culture Techniques (3 cr)~~

Specialization electives (~~40-9~~ cr):

Accounting

Animal and Veterinary Sciences

Agricultural Economics

Biology

Business

Business Law

Chemistry

Computer Science

Economics

Entomology

Foreign Language (Max of 4 credits)

Forestry

Landscape Architecture

Microbiology, Molecular Biology and Biochemistry

Physics

Plant Science

Rangeland Ecology and Management

Soils

Electives to total 128 cr for the degree

*Note: Either PISc 334 or 340 may be used in the Horticulture electives if it was not taken as a degree requirement.

D. Soil and Land Resources Option

Chem 111 Principles of Chemistry I (4 cr)

Chem 112 Principles of Chemistry II (5 cr)

CS 101 Introduction to Computer Science (3 cr) or CS 112 Introduction to Problem Solving and Programming (3 cr)

~~Ent 211 Insect Biology or Ent 322 Economic Entomology (3-4 cr)~~

Geol 101 Physical Geology (4 cr)

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

MMBB 250, 255 General Microbiology and Lab (4 cr)

Phys 111 General Physics I (4 cr)

Phys 112 General Physics II (4 cr)

Soil 415 Soil and Environmental Physics (3 cr)

Soil 422 Environmental Soil Chemistry (3 cr)

Soil 425 Microbial Ecology (3 cr) or Soil 437 Soil Biology (3 cr)

Soil 454 Soil Development and Classification (3 cr)

Soil 499 Directed Study (1 cr)

Electives to total 128 cr for the degree

10. Change the curricular requirements of **Entomology** (Minor) [**Effective:** Summer 2008]

[Ent 322 General and Applied Entomology \(4 cr\)](#)

~~Ent 211 Insect Biology (4 cr)~~

Entomology electives (14 cr)

11. Change the curricular requirements of **Plant Protection** (Minor) [**Effective:** Summer 2008]

~~Ent 211 Insect Biology (4 cr)~~

[Ent 322 General and Applied Entomology \(4 cr\)](#)~~Ent 322 Economic Entomology (3 cr)~~

PISc 338 Weed Control (3 cr)

PISc 415 Plant Pathology (3 cr)

Courses selected from the following (~~5-6~~ cr):

Ent 446 Host Plant Resistance (3 cr)

Ent 447 Fundamentals of Biological Control (3 cr)

Ent 472 Aquatic Entomology (3 cr)

Ent 491 Principles of Insect Pest Management (3 cr)

PISc 410 Biology of Weeds (3 cr)

PISc 438 Pesticides in the Environment (3 cr)

12. Change the curricular requirements of **Soil Science** (Minor) [**Effective:** Summer 2008]

- Soil 205, 206 The Soil Ecosystem and Lab (4 cr)
- Soil 415 Soil Physics (3 cr)
- Soil 422 Environmental Soil Chemistry (3 cr)
- Soil 446 Soil Fertility (3 cr)
- Soil 454 Soil Development and Classification (3 cr)
- Courses selected from the following to total at least 18 cr for the minor ~~(0-2 cr)~~:
 - Soil 437 Soil Biology (3 cr)
 - Soil 447 Soil Fertility Management (1-3 cr, max 3)

Political Science

1. Add the following course [**Effective:** Summer 2008]

PoIS 456 Tribal Governments (3 cr)

The Tribal Government class shall assist in developing a clear understanding of the evolution of the American Tribal governmental system and their development in the United States. The class shall provide an overview of tribes and their governing structures prior to European entry into former native territories and lands within the United States Boundary.

Psychology and Communication Studies

1. Add the following course [**Effective:** Summer 2008]

Comm 492 Dark Side of Communication (3 cr)

Interdisciplinary study of how individuals cope with difficult, problematic, distressing, and disruptive social interaction. Topics included are the “hidden and forbidden” aspects of personal relationships that are often neglected by social scientists. Recommended Preparation: Comm 233.

Rationale: The addition of this course is simply formalizing what has been previously handled by creating sections of COMM 404 and COMM 499. The only foreseeable impact is that more students from other programs may become aware of this upper division course.

2. Change the credits of the following courses [**Effective:** Summer 2008]

Comm 498 (s) Internship (1-3 cr, max 3arr)

Graded P (pass)/ F (fail).

Prereq: Permission

Rationale: Currently, the course catalog allows a student to take one to three credits of COMM 498 Internship. Thus, a student can only earn up to three credits of Internship. The department would like to allow a student to take an unlimited number of credits of COMM498 Internship so long as the student has the approval of his/her advisor. All credits of COMM498 would count towards the 128 credits needed to graduate, but only three credits would count towards the needed 24 credits of upper-division COMM electives. (Please see Curriculum Change for Communication Studies Major for full explanation).

Psyc 498 (s) Internship (1-6 cr, max 6arr)

Directed internship in an approved setting that features psychological applications.

Prereq: Permission

Rationale: Currently, the course catalog allows a student to take one to six credits of PSYC498 Internship. Thus, a student can only earn up to six credits of Internship. The department would like to allow a student to take an unlimited number of credits of PSYC498 Internship so long as the student has the approval of his/her advisor. All credits of PSYC498 would count towards the 128 credits needed to graduate, but only three credits would count towards the required “12 additional upper-division psychology credits”.

3. Change the curricular requirements of **Communication Studies (B.A. or B.S.)** [**Effective:** Summer 2008]

Communication studies majors are required to take a sequence of courses that is intended to provide them with a comprehensive background in communication concepts, history, theory, and practice. A minimum 2.50 gpa is required to graduate with a degree in Communication Studies. Majors are required to take:

- Comm 101 Fundamentals of Speech (2 cr)
- Comm 111 Introduction to Communication Studies (3 cr)
- Comm 233 Interpersonal Communication (3 cr)
- Comm 235 Organizational Communication (3 cr)
- Comm 455 Communication Research Methods (3 cr)
- Stat 251 Statistical Methods (3 cr)

Twenty-four (24) credits selected, with faculty advisor’s guidance, ~~the~~ **The** following upper division courses are recommended to fulfill these requirements: **only three credits of Comm 498 may be used to fulfill this requirement:**

- Comm 331 Conflict Management (3 cr)
- Comm 332 Small Group Communication (3 cr)
- Comm 335 Intercultural Communication (3 cr)

Comm 347 Persuasion (3 cr)
 Comm 403 Workshop (cr arr)
 Comm 404 Special Topics (cr arr)
 Comm 431 Professional Presentation Techniques (3 cr)
 Comm 432 Gender and Communication (3 cr)
 Comm 433 Advanced Organizational Communication (3 cr)
 Comm 446 History of Communication Studies (3 cr)
 Comm 491 Communication and Aging (3 cr)
 Comm 498 (s) Internship (1-3 cr, ~~max-3~~)
 Comm 499 (s) Directed Study (cr arr)
 Psyc 310 Psychology of Personality (3 cr)
 Psyc 320 Social Psychology (3 cr)
 Psyc 416 Industrial/Organizational Psychology (3 cr)

Rationale: Currently, students may enroll in one to three credits of COMM498; the three credits count towards the 24 upper-division COMM elective credits required for the major and towards the required 128 credits needed to graduate. Now the department wants students to be able to take more than three credits of COMM498 Internship under the guidance of their advisor. Only three COMM498 credits would count towards the required 24 upper-division COMM electives for the major, but all COMM498 credits may count towards the needed 128 credits for graduation.

Rangeland Ecology and Management

1. Add the following courses [**Effective:** Summer 2008]

Rnge 244 Wildland Fire Management (2 cr)

Introduction to wildland fire management including fire behavior, fuels, fire prevention and suppression, fire policy and fire ecology. Includes discussion of current fire management issues.

Rnge 402 Applied Spatial Analysis in Natural Resources (2 cr)

Course reviews basic GIS concepts emphasizing hands-on experience and independent problem solving. The overarching goal is to guide students towards excellence in assessing and analyzing management issues in natural resources with GIS and other spatial analysis techniques. (Fall only)

Prereq: For 375 or Geog 385; or Permission

Rnge 407 GIS Application in Fire Ecology and Management (1 cr)

Introduces applications of GIS in fire ecology, research, and management including incident mapping, fire progression mapping, GIS overlay analysis, remote sensing fire severity assessments, fire atlas analysis and the role of GIS in the Fire Regime Condition Class concept and the National Fire Plan. (Spring only)

Prereq: NR 402 or GIS Primer

Rnge 410 Principles of Vegetation Measurement and Assessment (1 cr)

On-line course designed to give an overview of vegetation measurement techniques for grasslands, shrublands, woodlands, and forests. Students will gain a solid understanding of how to assess and monitor vegetation attributes relative to wildlife habitat, livestock forage, fire fuel characteristics, watershed function, and many other wildland values. Recommended Preparation: A basic statistics course and understanding of how to use computer spreadsheets such as Excel. (Fall only)

Rnge 450 Global Environmental Change (3 cr)

See Geog 450.

Rnge 472 Remote Sensing of the Environment (3-4 cr)

See For 472.

2. Change the curricular requirements of **Rangeland Ecology and Management (Minor)** [**Effective:** Summer 2008]

For 221 Ecology or Rnge 221 Ecology (3 cr)

Rnge 251 Principles of Range Resources Management (2 cr)

Rnge 353 Rangeland Plant Identification and Ecology (3 cr)

Rnge 459 Rangeland Ecology (2 cr)

Rnge 460 Rangeland Ecology Current Topics and Field Studies (1 cr)

Two of the following courses (5-6 cr):

Rnge 357 Rangeland and Riparian Habitat Assessment (3 cr)

Rnge 440 Wildland Restoration Ecology (3 cr)

Rnge 452 Western Wildland Landscapes (2 cr)

Rnge 456 Integrated Rangeland Management (3 cr)

One of the following courses (or a course not chosen above) (~~2~~-3 cr):

AVS 474 Beef Cattle Science (3 cr)

AVS 476 Sheep Science (3 cr)

For 426 Wildland Fire Management and Ecology (3 cr)

For 462 Watershed Science and Management (~~2~~-3 cr)

PISc 338 Weed Control (3 cr)

PISc 410 Biology of Weeds (3 cr)
Rnge 454 Rangeland Week Management (3 cr)
Soil 454 Soil Development and Classification (3 cr)
WLF 314 Wildlife Ecology I (3 cr)

3. Change the following subject prefix [**Effective:** Summer 2008]

Change the subject prefix **Rnge** to **REM**

Virtual Technology and Design

1. Add the following course [**Effective:** Summer 2008]

VTD 253 Virtual Design I (3 cr)

Investigation of the art and science of virtual design, integrating creative problem solving skills with computer technologies. Sequence of exercises explores the problem domains of virtual objects and environments. Two 3-hr studios a week and assigned work. (Fall only)

Prereq: Art 121, Art 122 and VTD 152; or Permission

VTD 254 Virtual Design II (3 cr)

Continued development of critical thinking and problem solving skills through a sequence of exercises that emphasize design process, concept and context driven solutions to virtual, tangible and integrated projects. Two 3-hr studios a week and assigned work. (Spring only)

Prereq: VTD 253 or Permission

VTD 346 Advanced Lighting and Materials (3 cr)

Exploration of methods for illuminating and texturing virtual objects and environments. Foreground, middleground and background rendering issues are examined through topics that include radiosity, ray-tracing, procedural materials and render engine options. Three 1hr lecture/lab a wk and associated work. (Fall only)

Prereq: VTD 244 or Permission

VTD 367 Advanced Animation (3 cr)

Exploration of advanced methods for communicating information through 3D computer-generated animation tools. Projects focus on issues associated with topics ranging from physics-based interactions to motion capture and rigging structures. Three 1hr lecture/lab a wk and associated work. (Spring only)

Prereq: VTD 366 or Permission

VTD 372 Advanced Interactive Technologies (3 cr)

Exploration of advanced methods for the creation and delivery of interactive and immersive applications. Focus on object-oriented, event-driven environments and Virtual Reality technologies. Two 1-1/2hr lecture/lab a wk and associated work. Recommended Preparation: VTD 371. (Spring only)

Prereq: VTD 244 and 371; or Permission

2. Change the description of the following course [**Effective:** Summer 2008]

VTD 345 Advanced Modeling (3 cr)

Exploration of methods for creating virtual objects and environments including visualization techniques and geometry optimization. Study of mesh, patch and NURBS modeling. ~~Two~~Three 1-1/2 hr lecture/lab a wk and associated work. (Fall only)

Prereq: VTD 244 or Permission

3. Change the description, prerequisites and title of the following courses [**Effective:** Summer 2008]

VTD 355 Virtual Design ~~Studio III~~ (4 cr)

Introduction to virtual design & relationship to human needs; focus on design process & expansion of vocabulary associated with virtual environments; experimentation & creativity encouraged. Three 3-hr Studios a wk and assigned work. (~~Fall only~~)

Prereq: ~~VTD 254~~ or Permission

VTD 356 Virtual Design ~~Studio II-IV~~ (4 cr)

Design development of conceptual & technical aspects of virtual environments; exploration of design issues from conception to delivery. Three 3-hr studios a wk and assigned work. (~~Spring only~~)

Prereq: VTD 355 ~~or Permission~~

FOR THE FACULTY'S INFORMATION

Correction to General Curriculum Report 245:

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: