

General Curriculum Report #237

UNIVERSITY OF IDAHO - REGISTRAR'S OFFICE

November 04, 2005

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 and Extension Education

1. Change the curricular requirements of **Agricultural Education** (B.S.Ag.Ed.) [Effective: Summer 2006]

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

A. Teaching Option

The following option is approved by the State Board of Professional-Technical Education for the preparation of high school agriculture instructors. Graduates who have completed at least 28 credits in agricultural education, and who meet the state certification requirements for a Standard Secondary Teaching Certificate, are eligible to teach secondary agricultural science and technology in Idaho. Students must be admitted to the Teacher Education Program, which requires a grade-point average of at least 2.75, before being allowed to enroll in upper-division teacher education courses and participate in student teaching. The Idaho teaching certificate transfers to most states in the US. In addition, government and business agencies and the Cooperative Extension System that seek persons with education in both agriculture and education provide employment opportunities for graduates of this curriculum.

AgEd 180 Introduction to Agricultural Education (1 cr)
AgEd 351 Principles and Philosophy of Professional-Technical Education (3 cr)
AgEd 358 Supervising FFA and SAE Programs (2 cr)
AgEd 452 Methods of Teaching Agriculture (3 cr)
AgEd 453 Program Planning in Secondary and Adult Ag Education (3 cr)
AgEd 454 Facilities Organization and Management (2 cr)
AgEd 460 Practicum: Secondary School Teaching in Agriculture (10 cr)
AgEd 461 Student Teaching Portfolio (2 cr)
AgEd 470 Proseminar in Agricultural Education (2 cr)
ASM 107 Beginning Welding (2 cr)
ASM 202 Agricultural Shop Practices (2 cr)
ASM 210 Small Engines (2 cr)
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)
EDTE 463 Literacy Methods for Content Learning (3 cr)
Engl 313 Business Writing or Engl 317 Technical Writing ~~or Engl 207 Persuasive Writing or Engl 209 Inquiry-Based Writing~~ (3 cr)
PTTE 461 Using Internet-Based Career Information in the Classroom (2 cr)
One course from the following (3-4 cr):
Math 130 Finite Math (3 cr)
Math 143 Pre-calculus Algebra & Analytical Geometry (3 cr)
Math 160 Survey of Calculus (4 cr)
Math 170 Analytical Geometry & Calculus I (4 cr)
Computer applications course or Idaho Technology Certification (3 cr)
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B. Agricultural Industry Management and Communications Option

The Agricultural Industry Management and Communications option is designed for students who desire a career in non-formal instruction, human resources development, and training in the food, fiber, and natural resource system. Graduates of this program will have a strong foundation in education, communications, and presentation and communications skills.

AgEd 451 Communicating in Agriculture (2 cr)
AgEd 498 Internship (max 10 cr)
Comm 101 Fundamentals of Public Speaking (2 cr)
Comm 431 Professional Presentation Techniques (3 cr)
Engl 313 Business Writing ~~(3 cr)~~ or Engl 317 Technical Writing (3 cr)
Agricultural education electives chosen from the following (11 cr):
AgEd 180 Introduction to Agricultural Education (1 cr)
AgEd 181 Introduction to Extension Education (1 cr)

AgEd 252 Developing Organizations (1 cr)
 AgEd 253 Parliamentary Procedure (1 cr)
 AgEd 306 Exploring International Agriculture (2 cr)
 AgEd 359 Developing 4-H Youth Programs (2 cr)
 AgEd 448 Principles and Practices of Extension Education (3 cr)
 AgEd 450 Developing Leaders (2 cr)

Business and accounting electives chosen from the following (6 cr):

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2. Change the curricular requirements of **Agricultural Science and Technology** (B.S.Ag.Sc.Tech.) [Effective: Summer 2006]

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

Acct 201 Introduction to Financial Accounting (3 cr)
 AgEc 278 Farm and Agribusiness Management (4 cr)
 AgEc 289 Agricultural Markets and Prices (3 cr)
 AgEc 356 Agricultural and Rural Policy or AgEc 361 Farm and Natural Resource Appraisal (3 cr)
 Comm 101 Fundamentals of Public Speaking (2 cr)
~~Engl 207 Persuasive Writing or Engl 209 Inquiry-Based Writing or~~ Engl 313 Business Writing or Engl 317 Technical Writing (3 cr)
 Stat 150 Intro to Statistics or Stat 251 Statistical Methods (3 cr)
 AgEc 300 or 400 level elective (3 cr)
 One course from the following (3-4 cr):
 Math 130 Finite Math (3 cr)
 Math 143 Pre-calculus Algebra & Analytical Geometry (3 cr)
 Math 160 Survey of Calculus (4 cr)
 Math 170 Analytical Geometry & Calculus I (4 cr)
 Computer applications course, or Idaho Technology Certification, or equivalent

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Agricultural Economics and Rural Sociology

1. Change the curricular requirements of **Agricultural Economics Core** (B.S.Ag.Econ) [Effective: Summer 2006]

~~Acct 201 Introduction to Financial Accounting (3 cr)~~
~~Acct 202 Introduction to Managerial Accounting (3 cr)~~
~~Acct 205 Fundamentals of Accounting (4 cr)~~
 AgEc 101 The Business of Agriculture (~~3-1~~ cr)
 AgEc 278 Principles of Farm and Agribusiness Management (4 cr)
 AgEc 289 Agricultural Markets and Prices (3 cr)
 AgEc 301 Agricultural Economics I (3 cr)
 AgEc 302 Agricultural Economics II (3 cr)
 AgEc 356 Agricultural Programs and Policies (3 cr)
 Biol 102 Biology and Society or Biol 115 Cells and the Evolution of Life or MMBB 250, 255 General Microbiology (4-5 cr)
 Chem 101 Introduction to Chemistry I or Chem 111 Principles of Chemistry I (4 cr)
 Comm 101 Fundamentals of Public Speaking (2 cr)
 Econ 201, 202 Principles of Economics (6 cr)
 Engl 317 Technical Writing (agribusiness majors may substitute Engl 313) (3 cr)
 Math 143 Pre-calculus Algebra and Analytic Geometry (3 cr)
 Stat 251 Statistical Methods (3 cr)
 Humanities and social sciences (at least 6 cr of each) (14 cr)

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2. Change the curricular requirements of **Agricultural Economics** (B.S.Ag.Econ) [Effective: Summer 2006]

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

~~AgEc 451 Land and Natural Resource Economics (3 cr)~~
 AgEc 478 Advanced Agribusiness Management (3 cr)
 AgEc 481 Agricultural Markets in a Global Economy (3 cr)
 Econ 351 Intermediate Macroeconomic Analysis (3 cr)
 Econ 352 Intermediate Microeconomic Analysis (3 cr)
 Math 170 Analytic Geometry and Calculus I (4 cr)
~~Select from the following (3 cr):~~
 ~~AgEc 383 Economics for Natural Resource Managers (3 cr)~~
 ~~Econ 385 Environmental Economics (3 cr)~~

Agricultural economics electives (3 cr)
 Economics electives (6 cr)
 Technical agriculture electives (12 cr)
 Electives to total 128 cr for the degree

3. Change the Curricular Requirements of **Agribusiness** (B.S.Ag.Econ) [Effective: Summer 2006]

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

~~Acct 381 Accounting for Managers and Investors (3 cr)~~

~~Acct 310 Accounting for Business Decisions I (2 cr)~~

~~Acct 311 Accounting for Business Decisions II (2 cr)~~

AgEc 478 Advanced Agribusiness Management (3 cr)

Select from the following (3 cr):

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

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

AgEc 481 Agricultural Markets in a Global Economy (3 cr)

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

Select two of the following (6 cr):

BLaw 265 Legal Environment of Business (3 cr)

Bus 321 Marketing (3 cr)

Bus 413 Organizational Behavior (3 cr)

Ag economics, economics, or business electives (12 cr)

Technical agriculture electives (12 cr)

Electives to total 128 cr for the degree

4. Change the description of the following course [**Effective:** Summer 2006]

AgEc **525 Econometrics** (3 cr). Same as Econ ~~and Stat~~ 525. Theory and practice of multiple regression methods; applications to the study of economic and other phenomena; use of computer regression programs. Prereq: 3 cr in statistics.

5. Change the credits and description of the following course [**Effective:** Summer 2006]

AgEc **101 The Business of Agriculture** (3 cr). *May be used as core credit in J-3-d.* ~~Applications of economic and business principles to the agriculture industry; factors affecting production and marketing of agricultural products.~~ An examination of current issues in agriculture and how economic and business principles can be used to analyze issues.

American Indian Studies

1. Change the curricular requirements of the **American Indian Studies Minor** [**Effective:** Summer 2006]

AIST 401 Contemporary American Indian Issues (3 cr)

Anth 329 North American Indians (3 cr)

Engl 484 American Indian Literature (3 cr)

Hist 431 History of Indian-White Relations (3 cr)

Elective courses selected from the following (6 cr):

AIST 320 The Celluloid Indian: American Indians in Popular Film (3 cr)

AIST 404 Special Topics (3 cr)

AIST 495 Practicum (cr arr)

AIST 498 Internship (cr arr)

AIST 499 Directed Study (cr arr)

Anth 422 Plateau Indians (3 cr)

Anth 436 North American Prehistory (3 cr)

Anth 443 Plateau Prehistory (3 cr)

Hist 313 Red, White, and Black: The Peopling of Early America (3 cr)

Hist 404 ST: The Nez Perce: Then and Now (3 cr)

NezP 101-102 Elementary Nez Perce I, II (8 cr)

~~Phil 381 American Indian Environmental Philosophy (3 cr)~~

Soc/Anth 427 Racial and Ethnic Relations (3 cr)

American Studies

1. Add the following course [**Effective:** Summer 2006]

AmSt **305 (s) Jazz Lecture/Film Series** (1 cr, max arr). This course operates in conjunction with a series of lectures and films concerning jazz in American culture, sponsored by the International Jazz Collections at the University of Idaho, and occurring during the Lionel Hampton Jazz Festival. Assignments relate to the series' theme, which changes every year. (Spring Only).

2. Change the curricular requirements of American Studies (B.A. or B.S.) [**Effective:** Summer 2006]

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B. History Emphasis

Hist 111-112 Introduction to U.S. History (6 cr)

Four courses selected from the following list (12 cr):

Art 302 Modern Art and Theory (3 cr)

Hist 313 Red, White and Black: The Peopling of Early North America (3 cr)

Hist 315 Comparative African-American Cultures (3 cr)

Hist 411 Colonial North America, 1492-1763 (3 cr)

Hist 412 Revolutionary North America and Early National Period, 1763-1828 (3 cr)

Hist 415 Civil War and Reconstruction, 1828-1877 (3 cr)

Hist 416 Rise of Modern America, 1877-1900 (3 cr)

Hist 417 United States, 1900-1945 (3 cr)
 Hist 418 Recent America, 1945-Present (3 cr)
 Hist 419 Twentieth-Century American West (3 cr)
 Hist 420 History of Women in American Society (3 cr)
 Hist 422 The American Landscape (3 cr)
 Hist 423 Idaho and the Pacific Northwest (3 cr)
[Hist 425 Immigration and Ethnicity in the United States \(3 cr\)](#)
 Hist 424 American Environmental History (3 cr)
 Hist 428 History of the American West (3 cr)
 Hist 430 U.S. Diplomatic History (3 cr)
 Hist 431 History of Indian-White Relations (3 cr)
 Hist 435 Latin America: The Colonial Era (3 cr)
 Hist 438 Modern Mexico and the Americas (3 cr)
 Hist 439 Modern Latin America (3 cr)
 Hist 440 Social Revolution in Latin America (3 cr)
 Hist 441 Comparative Slavery and Emancipation in the Atlantic World (3 cr)
 MusH 440 Studies in American Music (3 cr)
[TheF 419 U.S. Independent Film \(3 cr\)](#)

Courses in literature and social science, which include at least 6 cr in each (selected from courses listed under the social science emphasis and literature emphasis) (18 cr)

C. Social Science Emphasis

Three of the following courses (9 cr):

Anth 329 North American Indians or Hist 431 Hist of Indian-White Relations (3 cr)
 Geog 240 Economic Geography (3 cr)
 PolS 235 Political Research Methods and Approaches (3 cr)
 Soc 230 Social Problems (3 cr)

Courses from at least two different academic disciplines (at least 12 cr must be upper division) (18 cr):

Anth 100 Introduction to Anthropology (3 cr)
 Anth 422 Plateau Indians (3 cr)
 Anth 431 Historical Archaeology (3 cr)
 Anth 436 North American Prehistory (3 cr)
 Anth 443 Plateau Prehistory (3 cr)
 Arch 483 Urban Theory and Issues (3 cr)
 Arch 486 American Architecture (2 cr)
 Dan 421 Dance History (3 cr)
 Econ 201, 202 Principles of Economics or Econ 272 Foundations of Economic Analysis (4-6 cr)
 Econ 385 Environmental Economics (3 cr)
 Econ 407 Public Finance (3 cr)
 Econ 441 Labor Economics (3 cr)
 Geog 165 Human Geography (3 cr)
 Geog 330 Urban Geography (3-4 cr)
 Geog 360 Population Dynamics and Distribution (3-4 cr)
 Jamm 100 Media and Society (3 cr)
[Jamm 440 Culture and Mass Media \(3 cr\)](#)
 Jamm 445 History of Mass Communication (3 cr)
 MusH 440 Studies in American Music (3 cr)
 Phil 472 Social and Political Philosophy (3 cr)
 PolS 275 American State and Local Government (3 cr)
 PolS 331 American Political Parties and Elections (3 cr)
 PolS 332 American Congress (3 cr)
 PolS 333 American Political Culture (3 cr)
 PolS 360 Law and Society (3 cr)
 PolS 437 American Presidency (3 cr)
 PolS 438 Conduct of American Foreign Policy (3 cr)
 PolS 467 Constitutional Law (3 cr)
 PolS 468 Civil Liberties (3 cr)
 Soc 101 Introduction to Sociology (3 cr)
 Soc 313 Collective Behavior (3 cr)
 Soc 322 Racial and Ethnic Relations (3 cr)
 Soc 325 Sociology of the Family (3 cr)
 Soc 414 Development of Social Theory (3 cr)
 Soc 423 Social Stratification (3 cr)
 Soc 424 Sociology of Gender (3 cr)
 TheF 386 Documentary Film/Television (3 cr)

Three courses in literature and history, including at least 3 cr in each (selected from the literature and history emphases list) (9 cr)

Animal and Veterinary Science

1. Add the following course [**Effective:** Summer 2006]

AVS J409/J509 **Growth Physiology Inquisition** (2 cr). This course will develop skills in critical review of literature in Growth Physiology. Students will study set journal articles describing original research and present their review to the study group in a team

participation format. Active participation of the study group, led by the primary reviewer is an essential component of the course. Graduate students are encouraged to take the course multiple times (e.g., each semester). Student performance is evaluated using a six criterion Rubric. For undergraduate credit, students are evaluated across 2-3 achievement levels per criterion. For graduate credit, students are evaluated across 4 achievement levels per criterion as shown in the Course Outline. Recommended Preparation: AVS J451/J551.

2. Change the curricular requirements of **Animal Science** (B.S.An.Sc.) [**Effective:** Summer 2006]

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 110 Animal Husbandry Lab I \(1 cr\)](#)
 AVS 209 Science of Animal Husbandry (3 cr)
 AVS 210 Animal Husbandry Lab II (1 cr)
 AVS 221/[Biol 212](#) Molecular and Cellular Biology (4 cr)
 AVS 305 Animal Nutrition (4 cr)
 AVS 306 Feeds and Ration Formulation (4 cr)
 AVS 371 Anatomy and Physiology (4 cr)
 AVS 450 Issues in Animal Agriculture (1 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)
[Computer applications course \(3 cr\)](#)

Complete one of the following four options:

A. Business Option

[Acct 201 Introduction to Financial Accounting \(3 cr\)](#)
[Acct 202 Introduction to Managerial Accounting \(3 cr\)](#)
[Acct 205 Fundamentals of Accounting \(4 cr\)](#)
 AgEc 278 Principles of 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 363 Animal Products for Human Consumption (3 cr)
 AVS 472, 474, 476, or 478 Species Production (3 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 crs of Upper Division Ag Econ
 Electives to total 132 for the degree

B. Dairy Science Option

AgEc 278 Principles of 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 330 Genetics of Livestock Improvement (3 cr)
 AVS 411 Ruminant Nutrition (3 cr)
 AVS 413 Physiology of Lactation (3 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)
[PISc 407 Field Crop Production \(3 cr\)](#)
 Electives to total 132 for the degree

C. Production Option

AgEc 278 Principles of Farm and Ranch Management (4 cr)
 AgEc 289 Agricultural Markets and Prices (3 cr)
 AVS 222 Animal Reproduction and Breeding (3 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 471 Animal Disease Management (3 cr)
 AVS 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 330 Genetics of Livestock Improvement (3 cr)
 AVS 471 Animal Disease Management (3 cr)
 AVS 472, 474, 476, or 478 Species Production (36 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)
 Chem 372 Organic Chemistry II (3 cr)
 Gene 314 General Genetics (3 cr)
[MMBB 154, 155 Introductory Microbiology or MMBB 250, 255 General Microbiology \(4-5 cr\)](#)
[MMBB 154 Introductory Microbiology \(3 cr\)](#)
[MMBB 155 Introductory Microbiology Laboratory \(1 cr\)](#)
 MMBB 300 Survey of Biochemistry (3 cr)
 Phys 111-112 General Physics I-II (8 cr)
 Biol or MMBB elective, 300-level or above (3 cr)
 Electives to total 132 for the degree

3. Change the curricular requirements of **Range Livestock Management** (B.S.R.L.M.) [Effective: Summer 2006]

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

[ASM 240 Computer Applications in Biological Systems \(or advanced placement test by department\) \(3 cr\)](#)
 AVS 101 Animal and Veterinary Orientation or [Rnge 200 Seminar \(1-2 cr\)](#) [Rnge 102 Opportunities in Rangeland Ecology and Management \(1-2 cr\)](#)
 AVS 109 The Science of Animals that Serve Humanity (3 cr)
 AVS 209 Science of Animal Husbandry (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 450 Issues in Animal Agriculture (1 cr)
 AVS 474 Beef Cattle Science or [AVS 476 Sheep Science](#) (3 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)
 Biol 341 Systematic Botany (3 cr) or [Rnge 353 Rangeland Plant Identification and Ecology \(3 cr\)](#)
 Chem 111 Principles of Chemistry I (4 cr)
 Chem 275 Carbon Compounds (3 cr)
 Comm 101 Fundamentals of Public Speaking (2 cr)
[CSS 287 Foundations of Conservation Leadership and Management \(2 cr\)](#)
 Econ 201, 202 Principles of Economics (6 cr)
 Engl 317 Technical Writing (3 cr)
[Fish 430 Riparian Ecology and Management or Fish 435 Wetland Ecology and Management \(3 cr\)](#)
 For/CSS 235 Society and Natural Resources (3 cr)
 Math 143 Pre-calculus Algebra and Analytic Geometry or Math 160 Survey of Calculus (3-4 cr)
 Rnge 221 Ecology (3 cr)
 Rnge 251 Principles of Range Resources Management (2 cr)
[Rnge 354 Wildland Vegetation Management and Restoration \(3 cr\)](#)
 Rnge 357 Rangeland and Riparian Habitat Assessment (3 cr)
[Rnge 430 Riparian Ecology and Management \(2 cr\)](#)
[Rnge 440 Wildland Restoration Ecology \(3 cr\)](#)
 Rnge 456 Integrated Rangeland Management (3 cr)
 Rnge 459 Rangeland Ecology (3 cr)
 Soil 205, 206 The Soil Ecosystem and Lab (4 cr)
 Stat 251 Statistical Methods (3 cr)
 Courses selected from the following (a minimum of 3 cr in each college) (8 cr):
 AVS 218 Artificial Insemination and Pregnancy Detection (2 cr)
 AVS 263 Live Animal and Carcass Evaluation (3 cr)
 AVS 330 Genetics of Livestock Improvement (3 cr)
 AVS 371 Anatomy and Physiology (4 cr)
[AVS 411 Ruminant Nutrition \(3 cr\)](#)
 AVS 452 Physiology of Reproduction (4 cr)

~~AVS 466 Horse Production (3 cr)~~
~~AVS 476 or 474 (if not taken above) (3 cr)~~
AVS 466 Horse Production, AVS 472 Dairy Cattle Management or AVS 476 Sheep Science (3 cr)
CSS 287 Foundations of Conservation Leadership and Management (2 cr)
 Fish/WLF 290 Fish and Wildlife Ecology, Mgt, and Conservation (3 cr)
 For 270 Principles of Forest Ecosystem Mgt (2 cr)
 Rnge 353 Rangeland Plant Identification and Ecology (3 cr)
Rnge 429 Landscape Ecology (2 cr)
 Rnge 452 World Biomes: North American Ecosystems (2 cr)
 Rnge 454 Rangeland Weed Management (3 cr)
 Electives to total 132 cr for the degree

4. Change the curricular requirements of **Science/Preveterinary** (B.S.Vet.Sc.) [Effective: Summer 2006]

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 110 Animal Husbandry Laboratory I (1 cr)~~
 AVS 209 Science of Animal Husbandry (3 cr)
 AVS 210 Animal Husbandry Laboratory II (1 cr)
 AVS 221 Molecular and Cellular Biology (3 cr)
 AVS 305 Animal Nutrition (4 cr)
 AVS 371 Anatomy and Physiology (4 cr)
 AVS 452 Physiology of Reproduction (3 cr)
AVS 472 Dairy Cattle Management or AVS 474 Beef Cattle Science (3 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)~~
 Chem 111-112 Principles of Chemistry I-II (9 cr)
 Chem 277, 278 Organic Chemistry I and Lab (4 cr)
 Comm 101 Fundamentals of Public Speaking (2 cr)
 Engl 313 Business Writing or Engl 317 Technical Writing (3 cr)
 Gene 314 General Genetics ~~or Biol 210 Genetics (3-4 cr)~~
 Math 143 Pre-calculus Algebra and Analytic Geometry (3 cr)
~~MMBB 154, 155 Introductory Microbiology (3 cr) or MMBB 250, 255 General Microbiology (4-5 cr)~~
MMBB 155 Introductory Microbiology Laboratory (1 cr)
 MMBB 300 Survey of Biochemistry (3 cr)
 Phys 111-112 General Physics I-II (8 cr)
 Stat 251 Statistical Methods (3 cr)
~~Computer application course (3 cr)~~
 Electives to total 132 cr for the degree
 First year in veterinary school (32 cr)

Architecture

1. Drop the following courses [Effective: Summer 2006]

Arch **251 Principles of Architecture** (2 cr). Slide lec course introducing architecture and interior architecture; methods of critical analysis; history of modern movement to contemporary design.

Arch **455-456 Architectural Design III** (5 cr). Expansion to the urban scale of the student's design awareness and ability; to acquaint the student with the multiplicity of considerations involved as project scope increases beyond a single site; to encourage creative and broad-scope thought and action on the future configuration of our cities. In Arch 456, the student undertakes a self-directed architectural design study with faculty consultation. Three 3-hr studios a wk and assigned work; field trips will be reqd at student expense; some class jury sessions will meet outside of scheduled hours. Prereq for Arch 455:: Arch 453-454. Prereq for Arch 456: Arch 401.

ID **441 Design and Human Performance** (2 cr). Introduction to the concepts of human factors and the built environment in relation to design; emphasis areas include ergonomics, performance, anthropometrics, and perception.

2. Add the following courses [Effective: Summer 2006]

Arch **467 Wellness and Design** (2 cr). Principles and exploration of the designed environment's impact on our sense of wellness. Special focus on how light, air, views and exercise can be promoted or degraded through design. Recommended preparation: Arch 463-464 and Architecture Site Design. (Fall only)

Arch **515 Environment and Behavior** (3 cr). A study of the relationship between architecture, planning and human behavior. (Fall only)

Arch **584 Urban Morphology** (3 cr). Seminar style course that explores the theory, research, documentation and interpretive practices of urban morphology (study of urban form). Through case studies students will interpret the physical structure of urban contexts and forces that impact their formal transformation over time. Field Trip and field documentation activities required. Recommended preparation: Arch 483, background in architecture or the related fields of landscape architecture, geography and anthropology. (Spring only)

3. Change the title of the following courses [**Effective:** Summer 2006]

ID 351 Interior Design IV-III (4 cr). Sequence of advanced residential and small scale contract design projects requiring integration of design theories and process in relationship to critical problem solving. Emphasis on formation of interior spaces to correspond to function and flow patterns. Seven and one-half hrs of studio a wk; field trips reqd at student expense; some class jury sessions outside of scheduled hours. Prereq: ID 152 and 254 or perm.

ID 352 Interior Design V-IV (4 cr). Sequence of large scale contact and other design problems requiring application of expanded design process including problem identification, analysis, program development, conceptual and design development and solution presentation. Implementation of lighting, codes, systems furniture, and interior specifications in the design process. Seven and one-half hrs of studio a wk; field trips reqd at student expense; some class jury sessions outside of scheduled hours. Prereq: ID 351.

ID 451 Interior Design VI-V (5 cr). Advanced problems in mixed use contract interior design requiring synthesis of related course work into comprehensive design resolution that communicates design impact on sense of place and place making; projects will seek to refine the design decision making process by requiring in-depth programming, client participation, and development beyond schematic phases, e.g., integration of building systems, lighting design, interdisciplinary investigation, and understanding of cultural/environmental context. Nine hrs of studio a wk and assigned work; field trips reqd at student expense; some class jury sessions will meet outside of scheduled hours. Recommended Preparation: VTD 244. Prereq: ID 352.

ID 452 Interior Design VII-VI (5 cr). Capstone studio course featuring advanced applications of design theories and processes focusing on complex design issues, synthesis and implementation of previous course work in appropriate student selected project, from the initial programming through the final complete design documentation and presentation. Nine hrs of studio a wk and assigned work; field trips reqd at student expense; some class jury sessions will meet outside of scheduled hours. Prereq: ID 451.

Art and Design

1. Change the title and description of the following courses [**Effective:** Summer 2006]

Art 100 Visual Art World Art and Culture (3 cr). ~~May be used as core credit in J-3-d. Introductory historical overview of important visual arts to promote an understanding and appreciation of artistic output with primary emphasis on painting, sculpture, and architecture. Two lec and one 1 1/2-hr quiz/recitation a wk.~~ An introductory historical survey of art and culture in Western and non-Western contexts. Major cultural sites, monuments, image traditions and technologies will be examined alongside the historical, religious, political, economic, and aesthetic contexts which produced them. Cultures studied include China, Islam, Pre-Columbian civilizations in North and South America, Africa, India, Japan, Oceania, the ancient Near-East, Greece and Rome, Western Medieval, the European Renaissance, and Western and non-Western Modernism. A theoretically comparative approach will be followed, towards an understanding of both similarities and differences between Western and non-Western cultural production. 2 hours of lecture with one 2-hour lab/recitation.

Art 213 History and Theory of Modern Design I (3 cr). ~~May be used as core credit in J-3-d. A broad introduction to the historical and theoretical components of design from the Industrial Revolution to the present day. Graphic design, product design, industrial design, packaging and advertising are studied in terms of their historical development and their translation and application within contemporary concepts of design in various professional fields. This course explores the historical and theoretical components of design from the Industrial Revolution to WWII. Products, furniture, textiles, packaging, advertising, industrial design, and graphic design will be studied in terms of their historical development, theoretical components, and their translation and application within contemporary concepts of design in various professional fields. Throughout the course we will critically examine and address the theoretical and critical vocabulary of contemporary design. Topics considered include industrialization and modernism; design and propaganda; design and the modernist avant-garde; design and nationalism; design, multinational corporations, and global economics; design, promotion, profession, and management; the politics and economics of design, and design and advertising.~~

2. Change the description of the following course [**Effective:** Summer 2006]

Art 121 Design Process I (2 cr). ~~Intro to visual communication and design process; studio problems to familiarize students with basic design process, elements of design and individual design criteria as related to traditional and experimental concepts of visual communication; studio problems explore basic design through the two and three dimensional production, experiences, readings, and written analysis. Two 2-hr studios a wk and assigned work; attendance at outside events (lects, symposiums, Prichard and Univ Gallery openings).~~ Introduction to design process; studio problems to familiarize students with basic design process, principles and elements of design. Studio experiences, readings, and written analysis challenge students to explore basic two- and three-dimensional design and color. Two 2-hr studios a wk and assigned work; attendance at outside events (lects, symposiums, Prichard and Univ Gallery openings). Prereq or coreq: Art 110.

3. Change the description and prerequisites of the following course [**Effective:** Summer 2006]

Art 122 Design Process II (3 cr). ~~Intro to visual communication and design process; studio problems to familiarize students with basic design process, elements of design and individual design criteria as related to traditional and experimental concepts of visual communication; studio problems explore basic design through the two and three dimensional production, experiences, readings, and written analysis. Two 3-hr studios a wk and assigned work; attendance at outside events (lects, symposiums, Prichard and Univ Gallery openings).~~ Continuation of study of design process; studio problems challenge students to apply elements and principles of design to studio problems that include traditional and experimental concepts of design. Studio experiences, readings, and written analysis allow for further exploration of two- and three-dimensional design as well more complex concepts such as context, time, and light. Two 3-hr studios a wk and assigned work; attendance at outside events (lects, symposiums, Prichard and Univ Gallery openings). Prereq: Art 121. Prereq or coreq: Art 110.

4. Change the description, prerequisites and title of the following courses [**Effective:** Summer 2006]

Art ~~221-222~~ **Graphic Design I-II Introduction to Graphic Design** (3 cr). ~~Art 221: Creative problem solving with emphasis on 2-D solutions to conceptual problems; translation of concept into form using word, image, and layout; intro to history of graphic design and typography. Art 222: May be used as core credit in J-3-d. Continuation of translation of concept into form with emphasis on typography, letterforms, and typographic syntax, type specification, and preparation of art for print media. Prereq for Art 221: Art 111-112, 121-122 or perm. Prereq for Art 222: Art 221 or perm.~~ Creative problem solving with emphasis on 2-D solutions to conceptual problems; translation of concept into form using word, image, and layout; introduction to graphic design theory. Two 3-hr studios a wk and assigned work. Prereq: Art 121-122 or permission.

Art ~~221-222~~ **Graphic Design I-II Introduction to Typography** (3 cr). ~~Art 221: Creative problem solving with emphasis on 2-D solutions to conceptual problems; translation of concept into form using word, image, and layout; intro to history of graphic design and typography. Art 222: May be used as core credit in J-3-d. Continuation of translation of concept into form with emphasis on typography, letterforms, and typographic syntax, type specification, and preparation of art for print media. Prereq for Art 221: Art 111-112, 121-122 or perm. Prereq for Art 222: Art 221 or perm.~~ Continued translation of concept into form with emphasis on typography, letterforms, and typographic syntax. The potential of type as image is emphasized; introduction to history and theory of typography. Two 3-hr studios a wk and assigned work. Prereq: Art 121-122 or permission.

Art ~~271-272~~ **Interface Design I-III Interaction Design I** (3 cr). ~~Art 271: May be used as core credit in J-3-d. Intro to technical and aesthetic concepts of interface design, including interface design for the Web, preparation of basic assets (graphics, video, and sound) for Internet delivery. Art 272: Intro to basic interactive multi-media programs, intermediate asset preparation, and delivery systems (Internet, CD, kiosk, etc.). Six hrs of lab a wk and assigned work.~~ Introduction to technical and aesthetic concepts of interaction design, including user based interaction design methodologies and standards based practices for the Web and other interactive media. Preparation of basic media assets (graphics, video, animation and sound) for interactive delivery. Introduction to basic design methodologies; structured versus unstructured projects, project brief, personas, scenarios, flowcharting, storyboarding and development and production project workflows. Prereq for Art 271: Art 121, 122, or perm. Prereq for Art 272: Art 271.

Art ~~271-272~~ **Interface Design I-III Interaction Design II** (3 cr). ~~Art 271: May be used as core credit in J-3-d. Intro to technical and aesthetic concepts of interface design, including interface design for the Web, preparation of basic assets (graphics, video, and sound) for Internet delivery. Art 272: Intro to basic interactive multi-media programs, intermediate asset preparation, and delivery systems (Internet, CD, kiosk, etc.). Six hrs of lab a wk and assigned work.~~ Intermediate interaction design. Self-initiated interactive design projects using industry standard methodologies and practices, to include pre-design project analysis and description, design development and production. Introduction to information design concepts and practices and to various technologies for providing user based interaction; scripting, Flash, and databases, etc. Readings in current design issues and industry trends. Prereq for Art 271: Art 121, 122, or perm. Prereq for Art 272: Art 271. Prereq: Art 271 or perm.

Art ~~321~~ **Graphic Design III Design Concepts** (3 cr, max 6). ~~Advanced design problems with emphasis on individual development and exploration of contemporary design issues. Two 3-hr studios a wk and assigned work.~~ Advanced design problems that center on individual development and the exploration of contemporary design issues. The conceptual potential of words and images is emphasized. Two 3-hr studios a wk and assigned work. Prereq: art core, Art 221 and 222, or perm.

Art ~~322~~ **Graphic Design IV Design Studio** (3 cr, max 6). ~~Graphic problem solving in the community environment; advanced production techniques for the graphic designer. Two 3-hr studios a wk and assigned work.~~ Graphic problem solving in the community environment; client interaction, project presentation and production techniques for the graphic designer. Two 3-hr studios a wk and assigned work. Prereq: Art 321 or perm. Art 221 and 222, or perm.

Art ~~370~~ **Advanced Interface-Interaction Design** (3 cr, max 9). ~~Intermediate: multi-media and interface design for computer applications with emphasis on individual development and exploration of contemporary technical and aesthetic design issues. Advanced: multi-media and interface design for computer applications with emphasis on team design projects, Web site development and management, and development for stand alone delivery. Six hrs of lab a wk and assigned work.~~ Advanced interaction design projects. Individual and small team design projects. Emphasis on team dynamics, project analysis and description, development and production. Focus on interactive information design projects, project management and production. Readings and assigned writings focus on current design industry issues, practices, trends and methodologies. Prereq: art core and Art 271-272 or perm.

5. Change the number of the following course [**Effective:** Summer 2006]

Art ~~304~~~~202~~ **Early Modern Art and Aesthetics** (3 cr). (~~Art 301~~). A survey of the major artistic movements and theoretical developments in European art and aesthetics from c. 1750-1880. The close study of the principal artists of the period will include the examination of concomitant historical, philosophical, political, and cultural developments that informed the theoretical and artistic advancements in 18th century and 19th Century art. Special consideration is given to the philosophical, theoretical, and political groundings of European Neoclassicism, Romanticism, Realism, and Impressionism.

6. Change the prerequisites and title of the following course [**Effective:** Summer 2006]

Art ~~490~~ **BFA Art/Design Studio** (6 cr, max 12). Open only to BFA studio art majors. Intensive tutorial studio closely monitored by all the faculty, culminating in development of a portfolio and a professional exhibition. Outside lec and special events may be assigned. Twelve formal hrs of studio a wk plus outside work to equal 18 hrs of involvement a wk; field trips and guest lectures may be required. Prereq: Sr standing and completion of 15 cr in 300-level art courses with a minimum grade of C and a minimum GPA of ~~2-52~~ 75

7. Add the following courses [**Effective:** Summer 2006]

Art ~~313~~ **History and Theory of Modern Design II** (3 cr). Study, analysis, and critique of design history and theory from 1945 to the present. Historical and theoretical analysis of the emergence of the industrial, product, graphic, and information design professions in America and Europe, and the relationship between design, corporations, and global products. Other topics under consideration include Swiss design, the New York School and the American poster movement; the emergence of Japanese design; semiotics and design; postmodernism and design; and design and new media. Prereq: Art 213.

Art 323 History of Typography (3 cr). History and Theory of Typography: Historical and theoretical survey of typography and graphic technologies from the invention of writing to the present. The course begins with the study of writing before the printing press and continues detailing the origin of European typography and design for printing through the Industrial Revolution and the invention of photography. The study of typography in the modernist era follows, including close examination of Bauhaus and *Neue Typographie*, the Swiss *Neue Graphik* and subsequent developments in America and abroad. A detailed study of the practical, historical, and theoretical implications of digital typography will conclude the course.

Art 407 New Media (3 cr). Study, analysis, and critique of the cultural, technological, and aesthetic dimensions and practices of new media. The course entails a detailed examination of the genealogy, historical and cultural ramifications of the computer as an expressive medium. We will study the history of the computer and the digital, from its pre-conception in literature and science, to its various manifestations today in information, political, aesthetic, technological, and cultural contexts. Throughout the course students will analyze and evaluate the constantly changing provocations of new media in terms of communication, language, art, design, architecture, and the general ontological issues of time and space.

Art J409/J509 Visual Studies (3 cr). Examination, evaluation, and critique of the expanding interdisciplinary field of visual studies. Visual practices, technologies, communicative, and epistemological models and structures are studied in terms of their implications for art, design, architecture, and cultural and scientific practices and production in general. The historical, theoretical, and aesthetic provocations of visualization in such varied fields as biology, medicine, law, forensics, genetics, and information technologies is addressed as well as the cultural dimensions of the social ubiquitousness of the visual in general. Additional projects/assignments reqd for grad cr. Recommended preparation: Art 205. Prereq: 12 credits of Art History/Visual Culture courses.

Art 470 Internet Portfolio Development (3 cr). Preparation of an online portfolio suitable for critiques and reviews. Limited to students admitted to a graduate Art & Design degree program.

Art 509 Visual Studies (3 cr). See Art J409/J509.

Biological and Agricultural Engineering

1. Change the curricular requirements of **Agricultural Systems Management** (B.S.A.S.M.) [Effective: Summer 2006]

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

Acct 201 Introduction to Financial Accounting [and Acct 202 Introduction to Managerial Accounting; or Acct 205 Fundamentals of Accounting \(3 cr\)\(4-6 cr\)](#)
~~Acct 202 Introduction to Managerial Accounting (3 cr)~~
 AgEc 278 Farm and Agribusiness Management (3 cr)
 ASM 112 Introduction to Agricultural Systems Management (3 cr)
 ASM 200 Seminar (1 cr)
 ASM 202 Agricultural Shop Practices (2 cr)

A. Agricultural Information Systems Option

BAE 143 Engineering Problem Solving (2 cr)
 Bus 250 Introductory Systems Development (3 cr)
 CS 112 Introduction to Problem Solving & Programming (3 cr)
[CS 120 Computer Science I \(4 cr\)](#)
 Geog 385 GIS Primer (3 cr)
 Math 160 Survey of Calculus or Math 170 Analytical Geometry and Calculus (4 cr)
 PTTE 428 Teaching and Learning Computer Operating Systems for Technology (4 cr)
 Agriculture Electives (See list in Dept. Office) (9 cr)
 Advisor approved electives to total 128 for the degree (See list in Dept. Office)

C. Agricultural Production Management Option

ASM 304 Agricultural Fluid Power (2 cr)
 ForP 230 Forest Harvesting Field Measurement or CE 218 Elementary Surveying (2 cr)
 Math 143 Pre-calculus Algebra and Analytic Geometry or Math 160 Survey of Calculus (3-4 cr)
 Agricultural Economics Elective (3 cr)
 Structures Elective (See list in Dept. Office) (3 cr)
 Agriculture and Technical Electives (See list in Dept. Office) (14 cr)
 Life Science Electives (See list in Dept. Office) (3 cr)
 Business Electives (See list in Dept. Office) (3 cr)
[Upper Division \(300 level or higher\) AgEc or Bus elective \(3 cr\)](#)
 Advisor approved electives to total 128 for the degree (See list in Dept. Office)

Conservation Social Sciences

1. Change the recommended preparation of the following course [Effective: Summer 2006]

CSS 470 Interdisciplinary Natural Resource Planning (3 cr). Same as ForP/For/Rnge 470. *May be used as core credit in J-3-d.* Examines how ecological and social sciences are interrelated and how they influence natural resource decisions; students learn how to work effectively in teams to make sound management decisions and communicate those decisions to a variety of constituents. Three hrs of lec and three hrs of recitation a wk; one 2-day field trip. ~~Recommended Preparation: For/Rnge/ForP/CSS/WLF/Fish 302 or CSS 306.~~ Prereq: Sr standing, CSS/For 235, and For/Rnge 221, or perm.

2. Drop the following courses [**Effective:** Summer 2006]

CSS 302 Wildland Field Ecology (2 cr). Same as Fish/For/WLF 302. Field studies of ecological and socio-political processes in terrestrial, aquatic, and human ecosystems at individual, population, community, landscape, regional, and global scales; application of ecological principles to integrated natural resource management. Two weeks all-day lec/lab immediately following spring semester; overnight field excursions reqd; special fee assessed. Recommended Preparation: For/CSS 235 and For/Rnge 221.

CSS 306 Winter Field Ecology (2 cr). Hands-on field study in a winter setting of ecological processes in terrestrial, aquatic, and human ecosystems from the individual to landscape and regional scales; application of ecological principles in a region of dynamic interaction of human and wildland management regimes. Seven days of classes and field laboratories and three days of individual project work. Recommended Preparation: one college-level biology course; chemistry and physics recommended.

3. Change the curricular requirements for Resource Recreation and Tourism (B.S.Res.Rc.) [**Effective:** Summer 2006]

A total of 128 credits is required for the degree. This includes the university requirements (see regulation J-3), and the course work listed below. Students must select any academic minor (including those in the Department of Conservation Social Sciences). Students are also required to do an advisor-approved internship and attend one, two-week long field studies course during summer session. Special fees are required for this and a few other courses. To graduate, an average GPA in CSS courses must be 2.3 or higher.

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

Biol 115 Cells and the Evolution of Life (4 cr)
 Chem 101 Introduction to Chem I or Chem 111 Principles of Chem I or Geol 101 Physical Geology (4 cr)
 Comm 101 Fundamentals of Public Speaking or one semester of a foreign language (2-4 cr)
 Econ 202 or 201 Principles of Economics (3 cr)
 For/Rnge/WLF 221 Ecology (3 cr)
 For 320 Dendrology or LArc 288 Plant Materials I or Rnge 353 Rangeland Plant Ident and Ecology or PISc 205 General Botany (3-4 cr)
 For 375 Airphoto Interpretation and Mapping or LArc 395 GIS in Land Planning or Geog 385 GIS Primer (3 cr)
 Math 143 Pre-calculus Algebra and Analytic Geometry or 160 Survey of Calculus or 170 Survey of Calculus II (3-4 cr)
 NR 101 Exploring Natural Resources (taken simultaneously with CSS 287) (1 cr)
 PolS 101 Intro to Political Science and American Government (3 cr)
 PolS 462 Natural Resource Policy or PolS 364 Politics of the Environment or For 484 Forest Policy and Administration (2-3 cr)
 CSS/For 235 Society and Natural Resources (3 cr)
 CSS 287 Foundations of Conservation Leadership and Management (taken simultaneously with NR 101) (2 cr)
 CSS 304 Conservation Social Sciences Field Studies (3 cr)
 CSS 310 Social Research Methods in Conservation (4 cr)
 CSS 383 Resource Economics for Environmental Policymaking (~~3-cr~~) or Econ 385 Environmental Economics (3 cr)
 CSS 385 Conservation Management and Planning I (3 cr)
 CSS 386 Conservation Management and Planning II (3 cr)
 CSS 387 Environmental Communication Skills (3 cr)
 CSS/For/Rnge/WLF/Fish/ForP 470 Interdisciplinary Natural Resource Planning (3 cr)

English

1. Add the following courses [**Effective:** Summer 2006]

Engl 431 Contemporary Poetry (3 cr). Important poets from the latter part of the 20th century to the present. The instructor may survey the works of numerous poets, or may focus on as few as six. Recommended preparation: Engl 102 and Engl 175 or 210.

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

Family and Consumer Science

1. Change the curricular requirements of **Clothing, Textiles and Design** (B.S.F.C.S.) [**Effective:** Summer 2006]

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

Art 100 Visual Art (3 cr)
 Bus 321 Marketing (3 cr)
 Comm 101 Fundamentals of Public Speaking (2 cr)
 Econ 201 or 202 Principles of Economics or Econ 272 Foundations of Economic Analysis (3-4 cr)
 FCS 105 Individual and Family Development (3 cr)
 FCS 119 Fashion from Concept to Consumer (3 cr)
 FCS 123 Textiles (3 cr)

FCS 205 Concepts in Human Nutrition or FCS 462 Eating Disorders (2-3 cr)
 FCS 223 Evaluation of Apparel and Textiles (3 cr)
 FCS 224 Apparel Design I (3 cr)
 FCS 324 Apparel Design II (3 cr)
 FCS 329 History of Western Dress (3 cr)
 FCS 419 Dress and Culture (3 cr)
 FCS 424 Aesthetics for the Apparel Professional (3 cr)
 FCS 448 Consumer Economic Issues (3 cr)
 Psyc 101 Intro to Psychology or Soc 101 Intro to Sociology (3 cr)
 Anthropology elective (3 cr)
 Computer applications elective (2-3 cr)
~~Advisor approved clothing, textiles, and design electives (9 cr)~~
 Additional FCS credits outside of the CTD curriculum (6 cr)
 An area of emphasis selected with the guidance of an advisor (18 cr)
 Electives to total ~~132~~ 128 cr for the degree

2. Change the curricular requirements of **Food and Nutrition** (B.S.F.C.S.) [Effective: Summer 2006]

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

A. Coordinated Program in Dietetics

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

Acct 201 Introduction to Financial Accounting or Acct 202 Introduction to Managerial Accounting (3 cr)
 Biol 120 Human Anatomy (4 cr)
 Biol 121 Human Physiology (4 cr)
 Chem 101 Intro to Chemistry I or Chem 111 Principles of Chemistry I (4 cr)
 Chem 275, 276 Carbon Compounds and Lab (4 cr)
 Econ 201 or 202 Principles of Economics (3 cr)
~~Engl 317 Technical Writing (3 cr)~~
 FCS 105 Individual and Family Development (3 cr)
 FCS 170 ~~Introductory Foods: Science and Practice~~ (3 cr)
FCS 175 Introductory Foods Laboratory (1 cr)
 FCS 205 Concepts in Human Nutrition (3 cr)
 FCS 270 Intermediate Foods (3 cr)
 FCS 305 Nutrition Related to Fitness and Sport (3 cr)
 FCS 361 Advanced Nutrition (3 cr)
 FCS 362 Introduction to Clinical Dietetics (4 cr)
 FCS 363 Diet Therapy (4 cr)
 FCS 364 Clinical Dietetics I (4 cr)
 FCS 361 Advanced Nutrition Lab (1 cr)
 FCS 384 Quantity Food Production and Equipment (3 cr)
 FCS 385 Quantity Food Production Lab (2 cr)
 FCS 387 Food Systems Management (3 cr)
 FCS 388 Food Systems Management Lab (1 cr)
 FCS 462 Eating Disorders (2 cr)
FCS 463 Helping Skills in Dietetics (2 cr)
 FCS 411 Global Nutrition (2 cr)
 FCS 472 Clinical Dietetics II (6 cr)
 FCS 473 Community Nutrition (4 cr)
 FCS 474 Food Research and Development (3 cr)
 FCS 485 Computer Applications in Food Administration (2 cr)
 FCS 486 Nutrition in the Life Cycle (4 cr)
 FCS 487 Management Supervised Practice I (2 cr)
 FCS 488 Management Supervised Practice II (6 cr)

B. Nutrition Option

This option prepares students for careers with government agencies, commodity groups, health and fitness agencies and businesses, and some components of the food industry. In addition, the course work would provide excellent background for those wishing to pursue advanced degrees in medicine or nutrition.

Biol 120 Human Anatomy (4 cr)
 Biol 121 Human Physiology (4 cr)
 Chem 101 Introduction to Chemistry I or Chem 111 Principles of Chemistry I (4 cr)
 Chem 112** Principles of Chemistry II (5 cr)
 Chem 275, 276* Carbon Compounds and Lab or Chem 277, 278** Organic Chem I and Lab (4 cr)
~~Engl 317 Technical Writing (3 cr)~~
 FCS 105 Individual and Family Development (3 cr)
 FCS 170 Food: Science and Practice (3 cr)

FCS 205 Concepts in Human Nutrition (3 cr)
 FCS 270 Intermediate Foods (3 cr)
 FCS 305 Nutrition Related to Fitness and Sport (3 cr)
 FCS 361 Advanced Nutrition (3 cr)
 FCS 362 Introduction to Clinical Dietetics (4 cr)
 FCS 462 Eating Disorders (2 cr)
 Math 143 Pre-calculus Algebra and Analytic Geometry (3 cr)
 MMBB 154, 155* Introductory Microbiology and Lab or MMBB 250, 255** General Microbiology and Lab (4-5 cr)
 MMBB 300 Survey of Biochemistry (3 cr)
 Phys 111-112** General Physics I-II (8 cr)
 Stat 251 Statistical Methods (3 cr)
 FCS electives (12 cr)
 Electives to total 128 cr for the degree

3. Add the following courses [**Effective:** Summer 2006]

FCS 175 Introductory Foods Laboratory (1 cr). Laboratory experiences to accompany FCS 170. Coreq: FCS 170. (Fall only)

FCS 463 Helping Skills in Dietetics (2 cr). Application and integration of the Skilled Helper and nutritional counseling models in dietetics. Development of communication skills essential for effective helping. This course requires role-playing. Students are assessed on the knowledge and skills they have acquired. Prereq: FCS 362. (Fall only)

4. Change the description and title of the following course [**Effective:** Summer 2006]

FCS 487 ~~Management Supervised Practice I~~ Research in Food Systems Management (2 cr). ~~Research related to analysis and evaluation of food service facilities and resources; research writing and presentations, facility tours. Food service management; program organization, analysis, and evaluation of food service facilities and resources; equipment/purchasing tours; pre-practicum experience. Two hrs of lecture and one hour field experience a week. One lec and 3 hrs of supervised practice a wk.~~ **Research related to analysis and evaluation of food service facilities and resources; research writing and presentations, facility tours. Food service management; program organization, analysis, and evaluation of food service facilities and resources; equipment/purchasing tours; pre-practicum experience. Two hrs of lecture and one hour field experience a week. One lec and 3 hrs of supervised practice a wk.** Prereq: FCS 387 and senior standing in CPD. (Fall only)

5. Change the description of the following courses [**Effective:** Summer 2006]

FCS 270 Intermediate Foods (3 cr). ~~Web-assisted course focusing on food safety, menu planning, and cultural and religious influences on food choices, and role of food in promotion of a healthy lifestyle.. Practice in communicating foods information through food demonstrations and news articles. Web-based modules, with one 2-hr face-to-face lab per week. Sensory evaluation, meal planning, consumer issues, cultural influences on food choices. Two lec and one 2-hr lab a wk.~~ **Web-assisted course focusing on food safety, menu planning, and cultural and religious influences on food choices, and role of food in promotion of a healthy lifestyle.. Practice in communicating foods information through food demonstrations and news articles. Web-based modules, with one 2-hr face-to-face lab per week. Sensory evaluation, meal planning, consumer issues, cultural influences on food choices. Two lec and one 2-hr lab a wk.** Prereq: FCS 170. (Spring only)

FCS 485 Computer Applications in Food Administration (2 cr). ~~Word processing, presentation and spreadsheet software applicable to foodservice operations, development of nutrition educational and marketing material, professional presentations, and analysis of nutritional software programs. Nutrient analysis and management of ingredients, recipes, menus, and related functions. Two hr of lec a wk. One hr of lec and 2 hrs of lab a wk.~~ **Word processing, presentation and spreadsheet software applicable to foodservice operations, development of nutrition educational and marketing material, professional presentations, and analysis of nutritional software programs. Nutrient analysis and management of ingredients, recipes, menus, and related functions. Two hr of lec a wk. One hr of lec and 2 hrs of lab a wk.** Prereq or coreq: FCS 384 or perm. (Spring only)

6. Change the title of the following course [**Effective:** Summer 2006]

FCS 488 ~~Management Supervised Practice II~~ (6 cr). Supervised practice with dietitians and employees in school and hospital food service settings in Idaho or Washington. Prereq: FCS 487. (Spring only)

7. Drop the following courses [**Effective:** Summer 2006]

FCS WS208 Visual Merchandising and Promotion (3 cr). WSU AMT 208. Examination of fashion promotion components of visual display store layout, fashion show, and fashion forecasting. (Spring only)

FCS WS417 Social and Psychological Aspects of Dress (3 cr). WSU AMT 417. Students engage a multidisciplinary framework in considering the social importance of the body and dress. (Fall only)

8. Change the cooperative status of the following courses [**Effective:** Summer 2006]

FCS ~~ID119 Fashion from Concept to Consumer~~ (3 cr). ~~WSU AMT 314.~~ Introduction to the sewn product manufacturing and merchandising industry; focus on social-psychological, cultural, historic, aesthetic, design, business, and economic factors; emphasis on careers in the sewn products industry. (Fall only)

FCS ~~ID&WS223 Evaluation of Apparel and Textiles~~ (3 cr). ~~WSU AMT 218.~~ Analysis of textile and apparel products relative to production methods, product performance, and consumer value. Three lec and 2 hrs of lab a wk; field trips. Prereq: FCS 123 or perm. (Fall only)

FCS ~~ID&WS224 Apparel Design I~~ (3 cr). ~~WSU AMT 216.~~ Design conception, fabric characteristics, garment assembling, principles of fitting, quality control for the apparel industry. One lec and five hrs of lab a wk. Prereq: CTD or FCS Education major or perm. (Spring only)

FCS ~~ID&WS324 Apparel Design II~~ (3 cr). ~~WSU AMT 311.~~ Methods and principles of flat pattern design; use of pattern making skills to create original designs; development and application of computer skills in designing apparel for the industry. One lec and five hrs of lab a wk. Prereq: FCS 224 or perm. (Fall only)

9. Change the cooperative status, title and description of the following course [**Effective:** Summer 2006]

FCS ~~ID170 Food: Science and Practice~~**Introductory Foods** (3 cr). ~~Same as FST 170. WSU FSHN 170. Basic concepts and techniques of food preparation; applied sensory evaluation of food. Fundamental processes underlying food preparation with emphasis on physical and chemical aspects. Two lec and one 3-hr lab a wk.~~ (Fall only)

Fish and Wildlife Resources

1. Change the title and description of the following courses [**Effective:** Summer 2006]

Fish ~~102 The Fish and Wildlife Fishery Resources Professions~~ (1 cr). ~~Same as WLF 102. Orientation of students to the profession of fishery resources and wildlife resources: introduction to fish and wildlife faculty, review of fish and wildlife curriculum, awareness of career opportunities, employment procedures, associated job duties/responsibilities, job preparation, educational preparation, and management challenges in the Pacific Northwest. Orientation of students to the profession of fishery resources; career opportunities, employment, duties of a fishery biologist, job preparation, management challenges in the Pacific Northwest.~~ (Fall only)

WLF ~~102 The Fish and Wildlife Professions~~ (1 cr). ~~See Fish 102. Overview of the field of wildlife conservation including kinds of professional positions, duties of wildlifers, employment opportunities, and educational preparation.~~ (Fall only)

2. Add the following courses [**Effective:** Summer 2006]

Fish **315 Fish Ecology Lab** (1 cr). Laboratory and field experience in fish ecology with emphasis on field techniques, laboratory experimentation, and habitat assessment. One weekend field trip and several day trips required. Coreq: Fish 314. Prereq: For/Rnge 221 or Biol 314. (Fall only)

Fish **WS469 Aquaculture Systems Design** (2 cr). WSU AgTM 469. Aquaculture production system design, species adaptation to aquaculture, management of water flows, oxygen and nutrient consumption, system impacts and economics. Prereq: Permission of Department.

Fish **540 Wetland Restoration** (3 cr). This web-based course contains modules covering wetland science, restoration ecology, freshwater restoration, coastal restoration, and monitoring/maintenance. The emphasis is on the science of wetland ecosystems and the applied ecology/practice of restoration, with additional consideration of cultural and socio-political contexts. Extensive readings, an assignment, and a study guide are required for each module. Students apply their learning in and contribute relevant professional experience to weekly online discussions. Students are also responsible for obtaining documentation of at least one wetland restoration site in their region and conducting a site visit in order to evaluate the success of the restoration project. A final exam (re-design of a failed restoration project) is administered online, with partial credit earned through discussion with an interdisciplinary team of classmates and the remaining credit earned through individual analysis and synthesis. Prereq: Biol 115 and 116; and For/Rnge 221 or Biol 314 or perm. (Fall only)

WLF **J416/J516 Molecular Methods in Population Biology** (1 cr). Introductory workshop on basic procedures in molecular biology that have applications in ecology and evolutionary biology. Course includes DNA/RNA extraction, PCR, simple recombinant DNA procedures, DNA sequencing, and data analysis. Graduate level will require independent study project. Recommended preparation: Introductory level genetics, general and organic chemistry courses. Prereq: perm. (Fall only)

3. Drop the following course [**Effective:** Summer 2006]

Fish **513 Aquatic Restoration Ecology** (3 cr). A review of the response of impacted lake, stream, and wetland ecosystems to rehabilitation and restoration. Theory and working examples of each will be addressed. (Irregular offering)

4. Change the cooperative status, description and prerequisites of the following course [**Effective:** Summer 2006]

Fish ~~ID&WS415 Limnology~~ (4 cr). ~~Same as Biol 435. WSU ES/RP and Biol 411.~~ Physical, chemical, and biological features of lakes and streams. Four 1-day field trips. Prereq: ~~Stat 251 and~~ For/Rnge 221 or Biol 314. (Fall only)

5. Change the cooperative status of the following course [**Effective:** Summer 2006]

WLF ~~ID445 Nongame Management~~ (2 cr). ~~WSU Biol 445.~~ Review of principles, methodology, and concepts applied to management and conservation of nongame wildlife in relation to current land-use practices. Prereq: For/Rnge 221 and Jr. standing, or perm. (irregular offering)

Fish ~~ID512 Aquatic Pollution Ecology~~ (3 cr). ~~WSU Zool 512.~~ Principles and working examples of the ecology of polluted aquatic stream and lake habitats. Two 1-day field trips. Prereq: Fish 415 or perm. (Irregular offering)

6. Change the credits and description of the following course [**Effective:** Summer 2006]

WLF **485 Ecology and Conservation Biology Senior Project** (1-3 cr, max 3). Same as CSS/Fish/ForP/For/Rnge 485. Scholarly work; learning objectives include development and formal proposal of a specific project and conducting the project or research with the guidance of a faculty mentor. ~~Professional work experience in ecology and conservation biology; learning objectives and a specific plan for the internship experience must be developed in For 480 before starting the internship; after completing the internship, students will prepare oral and written presentation of their work experience in For 483.~~

7. Change the curricular requirements of **Fishery Resources** (B.S.Fish.Res.) [**Effective:** Summer 2006]

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 Fishery Resources Profession (1 cr)
 For/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 371 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

8. Change the curricular requirements of **Fishery Resources Minor** [Effective: Summer 2006]

Fish 314 Fish Ecology (3 cr)
[Fish 315 Fish Ecology Lab \(1 cr\)](#)
 Fish 495 Seminar (1 cr)
 For/Rnge 221 Ecology or Biol 314 Ecology and Population Biology (3-4 cr)
 Four of the following courses (12-15 cr):
 Biol 481 Ichthyology (4 cr)
 Fish 415 Limnology (4 cr)
 Fish 418 Fisheries Management (4 cr)
 Fish 422 Concepts in Aquaculture (3 cr)
 Fish 424 Fish Health Management (4 cr)
 Fish 430 Riparian Ecology and Management (3 cr)
 Fish 435 Wetland Ecology and Management (3 cr)

Food Science and Toxicology

1. Add the following courses [Effective: Summer 2006]

FST 110 Food Science (3 cr). Introduction to chemistry, microbiology, and processing of food and food products; concepts of food preservation, packaging and marketing of foods; food additives and regulations; world food problems.

FST 432 Food Engineering (3 cr). Fundamentals of food engineering for improving the efficiency of food processing operations and the quality of processed food. Coreq: FST 303. (Spring only)

2. Drop the following courses [Effective: Summer 2006]

FST ID170 Food: Science and Practice (3 cr). See FCS 170.
Equivalent Course: FST 110

FST 474 Food Research and Development (3 cr). See FCS 474.

3. Change the cooperative status of the following courses [Effective: Summer 2006]

FST ID&WS220 Food Safety and Quality (3 cr). WSU FSHN 220. Regulation, safety, and wholesomeness of food products; microbiological, chemical, and physical risks associated with food; hazard analysis as related to food safety, processing and quality; sanitation and pest management principles; methods for analyzing the sensory qualities of food products; problem management associated with food quality assurance. This course is also available on-line as a web-based course.

FST [ID&WS303](#) **Food Processing** (3 cr). WSU FSHN 303. Specialized techniques and practices of food processing and marketing. Field trip reqd. Recommended preparation: MMBB 250, Chem 275 and 276.

FST [ID&WS304](#) **Cereal Products** (2 cr). WSU FSHN 304. Technical principles related to production and commercial processing of legume and cereal foods. Field trip reqd. Prereq: Chem 275, 276.

FST [ID&WS-J408/J518](#) **Seminar in Food Science** (1 cr). WSU FSHN 408. Critical analysis of contemporary topics in food science. Organization and communication of scientific information. Resume preparation and job interviewing skills. Additional projects/assignments required for graduate credit.

FST [ID&WS-J415/ID&WS-J515](#) **Evaluation of Dairy Products II** (1 cr). WSU FSHN 407/507. Credit not granted for both FST 415 and 515. Prereq: FST 414 or 514. (Fall only)

FST [ID&WS416](#) **Food Microbiology** (2 cr). Same as MMBB 416. WSU FSHN 416. Purpose for enumeration, detection, and identification of microorganisms in food products; physical, chemical, and environmental factors influencing growth and survival of foodborne microorganisms; pathogenic and spoilage microorganisms in food and their control. Prereq: MMBB 154 or 250.

FST [ID&WS417](#) **Food Microbiology Laboratory** (2 cr). Same as MMBB 417. WSU FSHN 417. Methods for enumeration, detection, and identification of spoilage and pathogenic microorganisms in foods. Two 3-hr labs a wk. Prereq or coreq: FST/MMBB 416.

FST [ID&WS-J429/ID&WS-J529](#) **Dairy Products** (4 cr). WSU FSHN 429/529. Dairy chemistry, microbiology, sanitation, product development and processing from cow to consumer. Prereq: MMBB 250 and 300.

FST [ID&WS462](#) **Food Analysis** (4 cr). WSU FSHN 462. Introductory food analysis; methods common to many food commodities. Prereq: Chem 275, 276, and MMBB 250.

FST [ID&WS-J464/ID&WS-J564](#) **Food Toxicology** (3 cr). WSU FSHN 464/565. General principles of toxicologic evaluation of chemicals, which intentionally or unintentionally enter the food chain. Toxicology of food additives, colors, preservatives, drugs, pesticides and natural toxins in foods and risk characterization. Additional projects/assignments reqd for grad cr. Prereq: MMBB 300 or 380.

FST [ID&WS-J465/ID&WS-J565](#) **Wine Microbiology and Processing** (3 cr). WSU FSHN 465/565. Technical principles related to the processing and fermentation of wines with an emphasis on microbiology. Prereq: MMBB 250 and MMBB 300.

FST [ID&WS489](#) **Food Product Development** (3 cr). Course serves as a capstone experience for food science seniors, and will require the application of food chemistry, food processing/engineering, and microbiology course knowledge in formulating a new food product. Prereq: FST 303, 416, and 460, or perm.

4. Change the cooperative statues and prerequisites of the following courses [**Effective:** Summer 2006]

FST [ID&WS-J422/ID&WS-J522](#) **Sensory Evaluation of Food and Wine** (4 cr). WSU FSHN 422/522. Theory, principles and application of sensory evaluation techniques to evaluate appearance, aroma, flavor and texture of foods and wine. Additional projects/assignments required for graduate credit. Prereq: [FST 220](#), Stat 251 or permission. (Alt/yr)

FST [ID&WS-J470/ID&WS-J570](#) **Advanced Food Technology** (3 cr). WSU FSHN 470/570. Cr not granted for both FST 470 and 570. Physical principles of food preservation and recent advances in food technology. Additional projects/assignments reqd for grad cr. Prereq: FST 416, [433-303](#) or perm.

5. Change the curricular requirements of **Food Science (B.S.F.S.)** [**Effective:** Summer 2006]

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

ASM 240 Computer Applications in Biological Systems (3 cr)

~~Biol 115 Cells and the Evolution of Life (4 cr)~~

Chem 111 Principles of Chemistry I (4 cr)

Chem 112 Principles of Chemistry II (5 cr)

Comm 101 Fundamentals of Public Speaking (2 cr)

Engl 317 Technical Writing (3 cr)

FCS 205 Concepts in Human Nutrition (3 cr)

~~FST 170 Food: Science and Practice (3 cr)~~

[FST 110 Food Science \(3 cr\)](#)

FST 220 Food Safety and Quality (3 cr)

FST 303 Food Processing (3 cr)

~~FST 400 Seminar (1 cr)~~

[FST 408 Seminar in Food Science \(1 cr\)](#)

FST 416, 417 Food Microbiology and Lab (4 cr)

~~FST 433, 434 Agricultural Processing Systems and Lab (4 cr)~~

[FST 432 Food Engineering or FST 433 Agricultural Processing Systems \(3 cr\)](#)

FST 460, 461 Food Chemistry and Lab (4 cr)

FST 462 Food Analysis (4 cr)

FST 470 Advanced Food Technology (3 cr)

FST 489 Food Product Development (3 cr)

[MMBB 154 Introductory Microbiology \(3 cr\)](#)

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

Phys 111, ~~111L~~ General Physics I ~~and Lab (4-3 cr)~~

Stat 251 Statistical Methods (3 cr)

[Two courses chosen from Math 160, 161, 170, and 175 \(7-8 cr\)](#)

[Math 160 Survey of Calculus or Math 170 Analytical Geometry and Calculus I \(4 cr\)](#)

And one of the following emphasis areas:

I. Processing Emphasis

Chem 275 Carbon Compounds (3 cr)

Chem 276 Carbon Compounds Lab (1 cr)

MMBB 300 Survey of Biochemistry (3 cr)

Select 12 credits from the following:

AVS 463 Advances in Meat Science (3 cr)

FST 230 Food Chemical Safety (3 cr)

FST 304 Cereal Products (2 cr)

FST 363 Animal Products for Human Consumption (3 cr)

FST 398 Internship (1-4 cr, max 4)

[FST 414 Evaluation of Dairy Products I \(1 cr\)](#)

[FST 422 Sensory Evaluation of Food and Wine \(4 cr\)](#)

FST 429 Dairy Products (4 cr)

FST 464 Food Toxicology (3 cr)

FST 465 Wine Microbiology and Processing (3 cr)

FST 499 Directed Study (1-4 cr, max 4)

[PISc 490 Potato Science \(3 cr\)](#)

II. Business Emphasis

Chem 275 Carbon Compounds (3 cr)

Chem 276 Carbon Compounds Lab (1 cr)

MMBB 300 Survey of Biochemistry (3 cr)

Select 12 credits from the following:

Acct 201 Intro to Financial Accounting (3 cr)

Acct 202 Intro to Managerial Accounting (3 cr)

Acct 205 Fundamentals of Accounting (4 cr)

Bus 301 Financial Management (3 cr)

Bus 311 Introduction to Management (3 cr)

Bus 321 Marketing (3 cr)

Bus 350 Management Information Systems (3 cr)

Bus 370 Production/Operations Management (3 cr)

Econ 202 Principles of Economics or Econ 272 Foundations of Economic Analysis (3-4 cr)

FST 398 Internship (1-4, max 4)

III. Science Emphasis

Chem 277 Organic Chemistry I (3 cr)

Chem 278 Organic Chemistry I: Lab (1 cr)

MMBB 380 Introductory Biochemistry (4 cr)

Select 11 credits from the following:

Chem 253 Quantitative Analysis (5 cr)

Chem 302, 303 Principles of Physical Chemistry & Lab (4 cr)

FST 398 Internship (1-4 cr, max 4)

[FST 422 Sensory Evaluation of Food and Wine \(4 cr\)](#)

FST 464 Food Toxicology (3 cr)

FST 465 Wine Microbiology and Processing (3 cr)

FST 499 Directed Study (1-4 cr, max 4)

Gene 314 General Genetics (3 cr)

MMBB 382 Introductory Biochemistry Laboratory (2 cr)

MMBB 412 Pathogenic Microbiology (3 cr)

MMBB 420 Epidemiology (3 cr)

MMBB 425 Microbial Ecology (3 cr)

MMBB 440 Advanced Laboratory Techniques (4 cr)

MMBB 460 Microbial Physiology (3 cr)

IV. Nutrition Emphasis

Chem 275 Carbon Compounds (3 cr)

Chem 276 Carbon Compounds Lab (1 cr)

MMBB 300 Survey of Biochemistry (3 cr)

Select 12 credits from the following:

FCS 270 Intermediate Foods (3 cr)

FCS 384 Quantity Food Production and Equipment (3 cr)

FCS 387 Food Systems Management (3 cr)

[FST 422 Sensory Evaluation of Food and Wine \(4 cr\)](#)

FCS 462 Eating Disorders (2 cr)

FCS 305 Nutrition Related to Fitness and Sport (3 cr)

FST 230 Food Chemical Safety (3 cr)

FST 398 Internship (1-4 cr, max 4)

FST 499 Directed Study (1-4 cr, max 4)

Electives to total 128 credits for the degree

6. Change the curricular requirements of **Food Science Minor** [Effective: Summer 2006]

A minor in food science will provide undergraduates with an introduction to the discipline of food science and technology. The minor is designed to supplement technical or business skills obtained in other majors. The minor will allow a student to broaden his or her educational background and enhance employment options in the food industry.

~~FST 170 Food: Science and Practice (3 cr)~~

~~FST 110 Food Science (3 cr)~~

FST 220 Food Safety and Quality (3 cr)

FST 303 Food Processing (3 cr)

~~FST 400 Seminar (1 cr)~~

~~FST 408 Seminar in Food Science (1 cr)~~

FST 416, 417 Food Microbiology and Lab (4 cr)

Additional courses in food science (FST) (4 cr)

Foreign Language and Literature

1. Change the cooperative status, title and description of the following course [**Effective:** Summer 2006]

Germ **ID&WS420** (s) **Topics in German Culture and Literature - Themes** (3 cr, max 6). [WSU Germ 450](#). For advanced students; ~~important themes in German cultural/literary studies. focus on literary/cultural period, theme, genre, or work by one or more authors.~~
Recommended Preparation: Germ 301 or 302, and Germ 306. (Alt/yrs, Spring Only)

2. Change the description of the following course [**Effective:** Summer 2006]

Arbc **ID101-ID102 Elementary Modern Standard Arabic I & II** (4 cr). WSU ~~ForL 100-200~~ [Arab 101-102](#). *May be used as core credit in J-3-d. A beginning course in Modern Standard Arabic. Alphabet and writing system, pronunciation, vocabulary, and functional grammar. Greater emphasis on oral and written expression in second semester. Course delivery combining interactive video distance learning and classroom instruction. An elementary level course designed to facilitate students' acquisition of basic proficiency in communication within culturally significant contexts. Students learn Modern Standard Arabic language skill in an environment integrating interactive video distance learning and classroom instruction. Alphabet and writing system, pronunciation, vocabulary, and functional grammar. Greater emphasis on oral and written expression in second semester.* (101: fall only; 102: spring only)

3. Add the following courses [**Effective:** Summer 2006]

Chin **WS306 Intermediate Reading and Translation** (3 cr). WSU Chin 306. Vocabulary building, contrastive English-Chinese expressions, development of skills to increase reading speed and fluency.

Chin **WS308 Intermediate Grammar and Writing** (3 cr). WSU Chin 308. Writing practice in the language and active review of grammar. Not open to native speakers except with permission.

Chin **WS363 Introduction to Literary Chinese** (3 cr). WSU Chin 363. Fundamentals of literary Chinese. Open to native speakers. Taught in Chinese.

Germ **WS310 German Film** (3 cr). WSU Germ 310. Study of important German films. Taught in German. Recommended preparation: Germ 202.

Germ **ID&WS421** (s) **Topics in German Culture and Literature - Authors** (3 cr). WSU Germ 452. For advanced students; focus on important authors in German cultural/literary studies. Recommended preparation: Germ 301 or 302 and Germ 306.

Germ **ID&WS422** (s) **Topics in German Culture and Literature - Genres** (3 cr). WSU Germ 422. For advanced students; focus on important genres in German studies. Recommended preparation: Germ 301 or 302 and Germ 306.

4. Change the title and cooperative status of the following course [**Effective:** Summer 2006]

Germ **ID&WS303 German for the Professions/Professional Life** (3 cr). [WSU Germ 361](#). *May be used as core credit in J-3-d.* Emphasis on practical language usage and skills appropriate to the professional workplace. Recommended Preparation: Germ 202, 301 or 302.

5. Change the cooperative status of the following courses [**Effective:** Summer 2006]

Germ **ID&WS305 Germany in the New Europe** (3 cr). [WSU Germ 320](#). *May be used as core credit in J-3-d.* Contemporary social and political institutions in German-speaking Europe; reading and discussion on topics of current interest in Germany and the European Union. Recommended Preparation: Germ 202.

Germ **ID&WS306 Introduction to German Literature** (3 cr). [WSU Germ 350](#). Introduction to the study of German literature; representative texts from various genres and periods. Recommended Preparation: Germ 202.

6. Change the course number and description of the following course [**Effective:** Summer 2006]

Russ **WS~~434~~130 Masterpieces of Russian Literature in Translation** (3 cr). WSU Rus-~~434~~130. [Taught in English.](#)

7. Change the recommended preparation of the following course [**Effective:** Summer 2006]

Span **301 Advanced Grammar** (3 cr). Recommended for prospective teachers of Spanish. Recommended preparation: Span 202 or equivalent experience.

8. Change the prerequisites of the following course [**Effective:** Summer 2006]

Span **302 Advanced Composition** (3 cr). Recommended for prospective teachers of Spanish. Prereq: Span 202-301 or perm.

9. Change the curricular requirements of the **Spanish Minor** [**Effective:** Summer 2006]

Span 101-102 Elementary Spanish I-II (8 cr)

Span 201-202 Intermediate Spanish I-II (8 cr)

Span 301 Advanced Grammar ~~or 302 Advanced Composition~~ (3 cr)

Span 302 Advanced Composition (3 cr)

One additional 300-level Upper div courses in Spanish (not including lab-based and lit in translation courses) (6-3 cr)

Forest Products

1. Drop the following course [**Effective:** Summer 2006]

ForP **J477/J577 Forest Products Business Management** (3 cr). Business plans for primary and secondary wood products processing businesses; preliminary technical and economic modeling of wood products manufacture; process systems analysis; commercial aspects, principles and terminology of the international timber trade. Graduate students in ForP 577 serve as group leaders on field projects. One field lab. Recommended Preparation: ForP 277, 444. (Spring, Alt/yr)

Recommended Substitution: Bus 426

2. Change the credit, description and title of the following course [**Effective:** Summer 2006]

ForP **100 Forest Products Issues and ~~Industries~~ Technology** (1-2 cr). Critical issues facing the forest products industry, forest operation, lumber manufacturing, wood-composite manufacturing~~manufacturing processes for wood products~~, and professional career opportunities. Technical writing assignments. One lec and one three-hour lab a wk. (Fall only). ~~or one half day lab trip a wk (4-6 lab trips to local forest products manufacturing sites).~~

3. Change the description and title of the following course [**Effective:** Summer 2006]

ForP **ID277 Wood ~~Structure~~ Anatomy and Identification** (3 cr). WSU NATRS 321. Physiology of woody plants, anatomy and nomenclature of wood, physical and chemical nature of wood, identification of commercial wood species. Two lec and 2-hr lab a wk. (Fall only)~~Anatomy and chemical composition of commercial wood species; gross and minute structural characteristics of wood leading to identification. (Fall only)~~

4. Change the credits, title, number and description of the following course [**Effective:** Summer 2006]

ForP **~~490-495 Product and Process Development and Commercialization~~ Biomaterial Product and Process Development** (2-3 cr). (ForP 490). May be used as core credit in J-3-d. Principles of product planning, development and commercialization; concept testing; product-life cycle management; portfolio analysis; targeting and positioning; team management; and implementing product decisions.~~Principles of product planning and development, concept testing, product life cycle management, portfolio analysis, targeting and positioning, team management, and implementing product decisions as they apply to wood-based materials.~~ Prereq: Econ 201 or 202, ~~and perm.~~ (Spring-Fall only)

5. Change credits, description and prerequisites of the following course [**Effective:** Summer 2006]

ForP **491 Biomaterial Product and Process Development Lab** (1-2 cr). May be used as core credit in J-3-d. Lab to accompany ForP 490/495. One 3-hr lab per week. Prereq: Econ 201 or Econ 202, and ForP 495 perm. ~~Coreq: ForP 490.~~ (Spring only)

6. Change the curricular requirements of **Forest Products** (B.S.For.Prod.) [**Effective:** Summer 2006]

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

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

A. Wood Construction and Design Option

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

Acct 202 Introduction to Managerial Accounting (3 cr)

Arch 154 Introduction to Architectural Graphics (2 cr)

Arch 253 Architectural Design I (3 cr)

Arch 254 Architectural Design II (3 cr)
 Arch 266 Materials and Methods (3 cr)
[Arch 353 Architectural Design III and Arch 354 Architectural Design IV; or Acct 381 Accounting for Managers and Investors and Bus 311 Introduction to Management \(6-10 cr\)](#)
 Arch 366 Building Technology I (3 cr)
 Arch 463-464 Environmental Control Systems (8 cr)
 Arch 575 Professional Practice (3 cr)
 BLaw 265 Legal Environmental of Business (3 cr)
 Comm 101 Fundamentals of Public Speaking (2 cr)
 Econ 202 Principles of Economics (3 cr)
 Engl 102 College Writing and Rhetoric (3 cr)
 Engl 313 Business Writing or Engl 317 Technical Writing (3 cr)
 For 235 Society and Natural Resources (3 cr)
 ForP 100 Forest Products Issues and ~~Industries Technology~~ (4-2 cr)
 ForP 277 Wood Structure and Identification (3 cr)
 ForP 337 Physical and Mechanical Properties of Wood (3 cr)
 ForP 365 Wood Building Technology (3 cr)
 ForP 436 Wood Composites (3 cr)
 ForP 437 Wood as a Structural Material (2 cr)
 ForP 444 Lumber Manufacturing (3 cr)
 ForP 450 Wood Deterioration and Preservation (2 cr)
~~ForP 490 Biomaterial Product and Process Development (2 cr)~~
 ForP 491 Biomaterial Product and Process Development Lab (4-2 cr)
[ForP 495 Product and Process Development and Commercialization \(3 cr\)](#)
 LArc 383 Architectural Site Design (3 cr)
 Math 160 Survey of Calculus (4 cr)
 NR 101 Exploring Natural Resources (1 cr)
 Phys 111 General Physics I (4 cr)
 Stat 251 Statistical Methods (3 cr)
 Vtd 344 Computer-Aided Design (2 cr)
 Electives to total 128 credits for the degree

B. Forest Operations Option

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

Chem 101 Introduction to Chemistry I (4 cr)
 Comm 101 Fundamentals of Public Speaking (2 cr)
~~CSS/Fish/ForP/For/Rnge/WLF 302 Wildland Field Ecology (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/WLF 221 Ecology (3 cr)
 For/CSS 235 Society and Natural Resources (3 cr)
 For 274 Forest Measurement ~~Techniques and Inventory~~ (4-3 cr)
~~For 394 Quantitative Resource Analysis (3 cr)~~
[For 383 Economics for Natural Resource Managers \(3 cr\)](#)
 For 474 Forest Inventory (3 cr)
[For 484 Forest Policy and Administration \(2 cr\)](#)
 ForP 100 Forest Products Issues and ~~Industries Technology~~ (4-2 cr)
 ForP 230 Forest Harvesting Field Measurements (2 cr)
 ForP 277 Wood Structure and Identification (3 cr)
~~ForP 336 Introduction to the Pulp and Paper Industry (1 cr)~~
 ForP 337 Physical and Mechanical Properties of Wood (3 cr)
 ForP 430 Forest Engineering and Harvesting (3 cr)
 ForP 431 Production and Cost Control in Forest Industry (3 cr)
 ForP 432 Low Volume Forest Roads (3 cr)
 ForP 433 Forest Tractor System Analysis (3 cr)
 ForP 434 Cable Systems Analysis (3 cr)
 ForP 444 Lumber Manufacturing (3 cr)
 ForP 450 Wood Deterioration and Preservation (2 cr)
 NR 101 Exploring Natural Resources (1 cr)
 Phys 211 Engineering Physics I (4 cr)
 Soil 205 The Soil Ecosystem (3 cr)
 Stat 251 Statistical Methods (3 cr)
 And one of the following emphasis areas:

Technical Emphasis

BAE 351 Hydrology (3 cr)
 For 375 Airphoto Interpretation and Mapping (3 cr)
 Engr 210 Engineering Statics (3 cr)
 Engr 220 Engineering Dynamics (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 310 Ordinary Differential Equations (3 cr)

Resource Emphasis

Biol 115 Cells and the Evolution of Life (4 cr)
 For 320 Dendrology (3 cr)
 For 375 Airphoto Interpretation and Mapping (3 cr)
 For 424 Forest Dynamics and Management (4 cr)
 For 462 Watershed **Science and** Management (~~2-3~~ cr)
 For 466 Diseases and Insects of Woody Plants (3 cr)
 Math 160 Survey of Calculus or Math 170 Analytic Geom and Calculus I (4 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 Production/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 102 College Writing and Rhetoric (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 ~~Industries Technology~~ (~~4-2~~ cr)
 ForP 277 Wood Structure 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 431 Production and Cost Control in Forest Industry (3 cr)~~
 ForP 436 Wood Composites (3 cr)
 ForP 438 Wood Chemistry and Adhesives (3 cr)
 ForP 444 Lumber Manufacturing (3 cr)
 ForP 450 Wood Deterioration and Preservation (2 cr)
~~ForP 477 Forest Products Business Management (3 cr)~~
~~ForP 490 Biomaterial Product and Process Development (2 cr)~~
 ForP 491 Biomaterial Product and Process Development Lab (~~4-2~~ 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. Add the following courses [**Effective:** Summer 2006]

For **414 Plant Pathology** (3 cr). See PISc 415.

For **433 Science-Based Fuels Management Planning** (2 cr). Potential, limitations, and application of recently developed tools for assessing fuels and ecological consequences of alternative approaches to fuels management. Critically review and synthesize relevant scientific literature. Students must develop a fuels management plan using the tools and insights from the course. Hands-on field exercises to enhance learning. This is an intensive short course following pre-work online. Students accomplish substantial parts of their learning online. 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.

For **434 Assessing Fire Effects and Burn Severity** (2 cr). Terminology and methods for assessing fire effects and burn severity in the field and from airborne and satellite remote sensing. 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 **435 Remote Sensing of Active Fire and Post-fire Effects** (2 cr). 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.

For **437 LANDFIRE: Concepts, Data, and Methods** (1 cr). Basic concepts of landscape ecology, scale and fire ecology relevant to the use of US-wide LANDFIRE databases for vegetation, fuels and environmental conditions. Basic use of LANDFIRE data with GIS software, and for describing and communicating local and regional conditions for fire and other natural resource management applications. Course is taught online.

For **438 Fuel Assessment Techniques Using LANDFIRE Data** (2 cr). Intermediate-level concepts of landscape ecology, scale and fire ecology relevant to assessments for fire and natural resource management. Strategic fuels and resource assessment using US-wide LANDFIRE databases for vegetation, fuels and environmental conditions to address common fire, fuels and land management issues at appropriate temporal and spatial scales. Common fire and natural resource assessment and planning applications are addressed in this intensive short-course. Prereq: For 437.

For **451 Fuels Inventory and Mapping** (2 cr). 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 **452 Quantification of Wildland Fire and Fuels Analysis** (1 cr). Methods for inventorying woody fuels and for characterizing tree stands for assessing potential fire behavior and fire effects. Sampling design, field methods, computer programs, and statistical analysis for describing and quantifying the amount and type of fuels. Intensive 5-day short course offered off-campus. Recommended preparation: Requires introductory knowledge of fire behavior, fuels, and fire weather, as well as basic computer skills including file management.

For **453 Fuels Analysis Techniques** (1 cr). Students learn the fire and fuels modeling necessary to conduct project level analysis for fire management on federal lands. Intensive 3-day, off-campus, short course follows reading and testing pre-work. Includes reading and discussion of scientific literature, critical assessment of methods, and problem-solving requiring synthesis, application, and interpretation of course material to a case study project. Prereq: For 452. (Spring only).

For **530 Fire Regime Condition Class** (1 cr). Value, challenges and limitations of the concepts, methods, and applications of methods used to evaluate ecological conditions related to departure from historical fire and vegetation conditions for managed landscapes. Students must complete some course content, quizzes and readings online in preparation for discussion and critique of science literature, applied quantitative and spatial analysis, and two all-day field trips. Prereq: For 426 or Rnge 459; and Geog 385. (Fall only)

For **531 Invasion Biology** (3 cr). An introduction to the biology of invasive species, covering plants, animals, and microbial invasives. The course will review relevant readings from the primary literature, especially those dealing with the current state of our knowledge of invasives, their ecology, control, and implications for public policy. Prereq: Basic introductory genetics class and ecology. (Spring only)

2. Change the prerequisites of the following course [**Effective:** Summer 2006]

For **320 Dendrology** (3 cr). Identification, classification, distribution, and associations of the important tree species of the U.S.; important regional shrubs. Two lec and two 2-hr labs a wk; one 1-day field trip. Prereq: [Biol 116](#) or PISc 205 ~~or perm~~.

3. Change the curricular requirements of **Forest Resources** (B.S.For.Res.) [**Effective:** Summer 2006]

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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 Management and Ecology (3 cr)
 - For 427 Prescribed Burning Lab (2 cr)
 - For 429 Landscape Ecology (2 cr)
 - For 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 Production and Cost Control in Forest Industry (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 (1 cr)
 - PolS 364 Politics of the Environment (3 cr)
 - Rnge 440 Wildland Restoration Ecology (3 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 from the following:
- Fish/Rnge 430 Riparian Ecology and Management (2 cr)
 - For 423 Forest Community Ecology (1 cr)
 - [For 427 Prescribed Burning Lab \(2 cr\)](#)
 - For 463 Hydrologic Measurement Techniques (1 cr)
 - Rnge 357 Rangeland and Riparian Habitat Assessment (3 cr)
 - Rnge 459 Rangeland Ecology (3 cr)

Electives to total 128 credits for the degree

4. Change the curricular requirements of **Fire Ecology and Management Minor** [Effective: Summer 2006]

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

~~For 274 Forest Measurement and Inventory or Rnge 357 Rangeland and Riparian Habitat Assessment (3 cr)~~

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

~~For 427 Prescribed Burning Laboratory (2 cr)~~

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

- ~~CSS 490 Wilderness and Protected Area Management (3 cr)~~
- ~~For 330 Forest Ecosystem Processes (3 cr)~~
- ~~For 424 Forest Dynamics and Management (4 cr)~~
- ~~For 429 Landscape Ecology (2 cr)~~
- ~~For 476 Forestry Project Evaluation (3 cr)~~
- ~~For 484 Forest Policy and Administration (2 cr)~~
- ~~ForP 430 Forest Engineering and Harvesting (3 cr)~~
- ~~Rnge 354 Wildland Vegetation Management and Restoration (3 cr)~~
- ~~Rnge 459 Rangeland Ecology (3 cr)~~
- ~~WLF 445 Nongame Management (2 cr)~~
- ~~WLF 492 Wildlife Management (4 cr)~~

~~One of the following courses (3 cr):~~

- ~~Geog 301 Meteorology (3 cr)~~
- ~~Geog 401 Climatology (3 cr)~~

~~One of the following courses (1-3 cr):~~

- ~~Geog 385 GIS Primer (3 cr)~~
- ~~Geog 475 Geographic Information Systems (3 cr)~~
- ~~NR 402 GIS Applications in Natural Resources (1 cr)~~

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

~~**Fire Ecology (3 cr):**~~

- ~~For 426 Fire Management and Ecology (3 cr)~~
- ~~For 434 Assessing Fire Effects and Burn Severity (2 cr)~~
- ~~For 530 Fire Regime Condition Class (1 cr)~~

~~**Ecology (3 cr):**~~

- ~~For 330 Forest Ecosystem Processes (3 cr)~~
- ~~For 429 Landscape Ecology (2 cr)~~
- ~~Rnge 459 Rangeland Ecology (3 cr)~~

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

- ~~For 427 Prescribed Burning Laboratory (2 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 472 Remote Sensing of the Environment \(3 cr\)](#)
- [Geog 385 GIS Primer \(3 cr\)](#)
- [Geog 475 Geographic Information Systems \(1 cr\)](#)
- [Geog 301 Meteorology \(3 cr\)](#)
- [Geog 401 Climatology \(3 cr\)](#)
- [NR 402 GIS Applications in Natural Resources \(1 cr\)](#)

Management, Planning, & Policy (6 cr):

- [CSS 490 Wilderness and Protected Area Management \(3 cr\)](#)
- [For 424 Forest Dynamics and Management \(4 cr\)](#)
- [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.

History

1. Add the following course [**Effective:** Summer 2006]

Hist **J448/J548 The Reformation** (3 cr). This course examines the social and economic as well as the theological dynamic of the Reformation. The course begins by examining the thought of Erasmus and More, continuing through that of Luther, Calvin, and Loyola, to the Anabaptists. Religious upheaval lead not only to the political and military upheaval of the Religious Wars, but also to religious debate, the echoes of which resound through to the present. Additional projects/assignments reqd for grad cr.

Hist **548 The Reformation** (3 cr). See Hist J448/J548.

2. Change the description and title of the following course [**Effective:** Summer 2005]

Hist **J447/J547 The ~~Age of the Renaissance and the Reformation~~** (3 cr). Hist 447 same as ReIS 447. *May be used as core credit in J-3-d.* Explores the transformative movement known as the European Renaissance. Examines how humanism not only shaped and formed art, music, literature and philosophy but also informed one's relationship to the state. Additional projects/assignments reqd for grad cr. ~~Survey of European history and society through changes wrought by the Renaissance, the Explorations, and the Reformation.~~

Interdisciplinary Studies

1. Change the curricular requirements of **Interdisciplinary Studies** (B.A. or B.S.) [**Effective:** Summer 2006]

A student may present a curriculum not included among the ones listed elsewhere in this catalog provided the program is focused toward meeting the student's particular educational goal by combining the offerings of two or more major departments. The program normally is developed and presented during the sophomore year. It must be presented before the end of the second semester of the junior year or at the time when at least 30 credits of the proposed program remain to be taken. It must be approved by: (a) at least one faculty member from each of the participating departments of the university, one of which must be in CLASS, (b) the chair of one of the CLASS departments involved, and (c) ~~the CLASS Committee on Interdisciplinary Studies~~ the Dean of CLASS. University requirements (see regulation J-3) and CLASS requirements for either the B.A. or B.S. degree apply. This program requires a minimum of 128 credits, of which at least 50 credits must be in courses numbered 200 or above, including a minimum of 36 credits in courses numbered 300 or above. It is recommended, however, that majors in interdisciplinary studies complete at least 50 credits in upper-division courses.

Interested students should consult the CLASS dean's office ~~for referral to the Interdisciplinary Studies Committee~~ for further information about this program.

2. Change the curricular requirements of **Interdisciplinary Studies Minor** [**Effective:** Summer 2006]

A student may present a minor curriculum not included among the ones listed elsewhere in this catalog. The program must include at least 24 credits and be approved by: (a) at least one faculty member from each of the participating departments of the university, (b) the chair of one of the departments involved, and (c) in the case of minors that involve a department in the College of Letters, Arts, and Social Sciences, the Dean of CLASS ~~Committee on Interdisciplinary Studies~~.

Journalism and Mass Media

1. Change the prerequisites of the following courses [**Effective:** Summer 2006]

Jamm **275 Introduction to Video/Television & Digital Media Production** (3 cr). Introduction to art and craft of various broadcast media-related production environments. Emphasis on aesthetics of story telling through visual imagery, sound, and associated processes of production covering scripting, directing, and editing. Work with both analog and digital equipment for field and studio assignments. Prereq: Jamm 270.

Jamm 280 **Lighting** (3 cr). Practical experience in studio and field lighting techniques for video/television and digital media production. [Prereq: Jamm 270 and Jamm 275.](#)

Jamm 350 **Public Relations Writing and Production** (3 cr). Public relations writing, publication and design processes for print, broadcast and online media. Prereq: Jamm ~~424~~[225](#) and [Jamm 252](#).

Jamm 370 **Digital Audio Production** (3 cr). Audio production principles and techniques, with an emphasis on sound design, writing and announcing skills; digital technologies for radio, television, Internet, and music recording. [Prereq: Jamm 270 or perm.](#)

Jamm 371 **Broadcast Announcing** (3 cr). Principles of effective and responsible on-air media, including voice analysis and improvement; pronunciation and articulation; audio and video performance. [Prereq: Jamm 270 or perm.](#)

Jamm 427 **Public Affairs Reporting** (3 cr). Problems and practice in reporting the courts, government, politics, other public issues. Prereq: Jamm ~~424~~and-225, or perm.

Jamm 452 **Public Relations Campaign Design** (3 cr). Examination of public relations programs; practice in developing and executing campaigns with emphasis on problem/issue identification, design of campaign elements, presentations skills and equipment. Prereq: Jamm ~~252~~[350](#).

Jamm 466 **Advertising Campaign Strategy** (3 cr). Advanced advertising strategies in creative approaches and media usage; current ad campaigns and development of a complete advertising campaign for a client. Recommended Preparation: Jamm 364, and Art 121. Prereq: Jamm 361 [and Jamm 364](#).

Jamm 478 **Broadcast/Cable/Web Programming** (3 cr). Program development, theory, and scheduling, with emphasis on the regulations and strategies involved in radio, television, cable, and web programming at both the national and local levels. Prereq: Jamm ~~424~~[270](#).

2. Change the recommended preparation of the following course [**Effective:** Summer 2006]

Jamm 361 **Advertising Creativity** (3 cr). Advertising creative process in print, broadcast and online media, including copywriting and production processes and techniques. [Recommended preparation: Art 110.](#) Prereq: Jamm 265.

3. Change the prerequisites and recommended preparation of the following courses [**Effective:** Summer 2006]

Jamm 420 **Public Radio Journalism** (3 cr). History and development of news in public radio style; writing and production of news documentaries, features, and enterprise stories; use of advanced audio production techniques in story telling. Recommended Preparation: Jamm 322 [and Jamm 370](#). [Prereq: Jamm 225 or Jamm 270](#).

Jamm 442 **Media Law and Ethics** (3 cr). Examination of First Amendment law and the ethical responsibilities of media professionals. [Recommended preparation: PoS 101.](#) [Prereq: senior standing.](#)

4. Change the curricular requirements of **Radio/TV/Digital Media Production** (B.A. or B.S.) [**Effective:** Summer 2006]

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

Jamm 270 Principles of Radio and Television (3 cr)
 Jamm 275 Introduction to Video/Television & Digital Media Production (3 cr)
[Jamm 370 Digital Audio Production \(3 cr\)](#)
[Jamm 375 Broadcast Television and Studio Program Production \(3 cr\)](#)
[Jamm 478 Broadcast/Cable/Web Programming \(3 cr\)](#)

[Courses selected from the following \(9 cr\):](#)

[Jamm 280 Lighting \(3 cr\)](#)
[Jamm 322 Broadcast News \(3 cr\)](#)
[Jamm 370 Digital Audio Production \(3 cr\)](#)
[Jamm 375 Broadcast Television and Studio Program Production \(3 cr\)](#)
[Jamm 376 Digital Animation in Mass Media \(3 cr\)](#)
[Jamm 377 Documentary \(3 cr\)](#)
[Jamm 378 American Television Genres \(3 cr\)](#)
[Jamm 420 Public Radio Journalism \(3 cr\)](#)
[Jamm 422 Advanced Broadcast News \(3 cr\)](#)
[Jamm 475 Digital Media Thesis Production \(3 cr\)](#)
[Jamm 478 Broadcast/Cable/Web Programming \(3 cr\)](#)

5. Change the curricular requirements of the **Radio/TV/Digital Media Minor** [**Effective:** Summer 2006]

Jamm 100 Media and Society (3 cr)
 Jamm 121 Media Writing (3 cr)
 Jamm 270 Principles of Radio and Television (3 cr)
 Jamm 275 Introduction to Video/Television & Digital Media Production (3 cr)
[Jamm 370 Digital Audio Production \(3 cr\)](#)
[Jamm 478 Broadcast/Cable/Web Programming \(3 cr\)](#)
[Two radio-television or digital media courses to meet specific career goals \(6 cr\)](#)

6. Change the curricular requirements of the **Public Relations Minor** [**Effective:** Summer 2006]

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 350 Public Relations Writing and Production (3 cr)~~
~~Jamm 452 Public Relations Campaign Design (3 cr)~~
~~Jamm 444 Mass Media and Public Opinion (3 cr)~~
~~Two public relations-related courses to meet specific career goals (6 cr)~~

7. Change the prerequisite of all Jamm courses [**Effective:** Summer 2006]

- *ADD at the top of JAMM course listing in Part 6: Courses*

Prerequisite: The successful completion of JAMM 100 and JAMM 121 with a grade of C or better is required for enrollment in upper-division Journalism and Mass Media courses; exceptions by permission.

Landscape Architecture

1. Change the curricular requirements of **Landscape Architecture** (B.L.Arch.) [**Effective:** Summer 2006]

Students are typically accepted into the landscape architecture major as freshman or as transfer students. However accreditation standards defining acceptable student/faculty ratios, and the availability of overall studio space, limit the number of students in the sophomore, junior and senior design studios. In order to meet these standards and constraints all ~~freshmen-transfer students must have a minimum GPA of 2.5 to be considered for admission to the B.L.Arch. program. All new students whether freshman or transfer will be required to~~ submit a portfolio of ~~their creative~~ work at the end of their ~~first year in the program. Transfer students must also provide a portfolio. Any visual creative activity may be submitted if the student has not taken any design courses. (Students are encouraged to include work from landscape architecture courses and any art or architecture courses they may have taken.)~~ A committee of faculty will review this portfolio along with each student's cumulative GPA to determine their eligibility to ~~enter the first landscape architecture design studio, LArc 259~~continue in the program. Portfolios are due no later than the Monday of No Examination Week. All students will be notified of their eligibility for the coming fall semester no later than three weeks after the last day of classes of spring semester.

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

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Microbiology, Molecular Biology and Biochemistry

1. Change the prerequisites of the following course [**Effective:** Summer 2006]

MABB J476/J576 Biophysical Chemistry (3 cr). Basic principles and applications of physical chemistry as applied to biological processes. An emphasis will be placed on using thermodynamics to describe protein folding and stability and quantum mechanics to describe the principle spectroscopic methods used to study biological macromolecules. Additional oral and/or written assignments reqd for grad cr. Prereq for 476: Chem 372, Phys 112, MABB 380, and MABB 382. Coreq for 476: Math ~~460 or~~ 170. Prereq for 576: MABB 541.

2. Add the following courses [**Effective:** Summer 2006]

MABB J463/J563 Molecular Parasitology (3 cr). Survey course exploring the cellular and molecular mechanisms utilized by human and animal parasites to develop, interact with their hosts and cause disease. Graduate students will have to produce a final written report or presentation on a research article. Recommended preparation: Biol 210 or Gene 314, and MABB 475/575 or MABB 422/522. Prereq: MABB 154 or 250, and MABB 300 or 380, or perm. (Spring only)

MABB 563 Molecular Parasitology (3 cr). See MABB J463/J563.

3. Change the curricular requirements of **Microbiology** (B.S.Microbiol.) [**Effective:** Summer 2006]

The undergraduate curriculum in microbiology prepares students for ~~interesting and exciting~~ challenging careers in biotechnology, public health, medical technology, and a broad spectrum of industry, government, and agricultural research laboratories. ~~Microbiology is also an excellent curriculum for those intending to apply to graduate schools for further training in any biological/life science, for pre-medical or pre-veterinary programs and for students interested in other health-related professions including dentistry, public health, pharmacy, physician assistant, or physical therapy. graduate schools for further training in any biological/life science. In addition, this is an excellent pre-medical or pre-veterinary school degree and is an appropriate avenue for students interested in other health-related professions including dentistry, public health, pharmacy, physician assistant, or physical therapy.~~

Required course work includes the university requirements (see regulation J-3), the general requirements for the B.S. degree if applicable, 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)
 Engl 317 Technical Writing or Engl 207 Persuasive Writing or Engl 208 Personal and Exploratory Writing or Engl 209 Inquiry-Based Writing (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 400 Seminar (1 cr)
 MMBB 440 Advanced Laboratory Techniques or MMBB 401 Undergraduate Research (4 cr in one semester)
 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)

At least two of the following microbiology electives (5-6 cr):

MMBB 409 Immunology (3 cr)
 MMBB 412 Pathogenic Microbiology (3 cr)
~~MMBB 416 Food Microbiology (2 cr)~~
~~MMBB 425 Microbial Ecology (3 cr)~~
 MMBB 432 Virology (3 cr)
 MMBB 460 Microbial Physiology (3 cr)
~~MMBB 463 Molecular Parasitology (3 cr)~~
~~MMBB 471 Advanced Pathogenesis: Host Pathogen Interactions (3 cr)~~
~~MMBB 468 Microbial Transformations (3 cr)~~

At least ~~one~~ two of the following molecular biology electives (2-3-5-6cr):

MMBB 422 Cellular and Molecular Basis of Disease (3 cr)
 MMBB 450 Molecular Mechanisms in Microbiology (2 cr)
~~MMBB 471 Advanced Pathogenesis: Host Pathogen Interactions (3 cr)~~
 MMBB 475 Molecular Biology of Cells (3 cr)
~~MMBB 482 Protein Structure and Function (3 cr)~~
 MMBB 485 Prokaryotic Molecular Biology (3 cr)
~~MMBB 486 Plant Biochemistry (3 cr)~~
 MMBB 487 Eukaryotic Molecular Genetics (3 cr)
 MMBB 488 Genetic Engineering (3 cr)

Science Electives (6 cr)

Total 128 cr for the degree

Note for double majors in Molecular Biology and Microbiology: Elective courses that count toward ~~used as required courses for~~ one degree cannot be ~~counted~~ used as a science elective in the second degree.

4. Change the curricular requirements for **Molecular Biology and Biochemistry** (B.S.M.B.B.) [Effective: Summer 2006]

~~The major in molecular biology and biochemistry is offered through the College of Agricultural and Life Sciences.~~ Molecular biology and biochemistry are two of the fastest growing research areas in modern biological sciences. A B.S. degree in molecular biology and biochemistry is excellent preparation for further graduate and professional training in the biological and medical sciences. Students training in this area will be prepared for a number of technical professions in various aspects of biotechnology including laboratory positions in health, medicine, agriculture, and food processing industries. ~~In addition, a B.S. degree in molecular biology and biochemistry is excellent preparation for further graduate and professional training in the biological and medical sciences.~~

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

Biol 115 Cells and the Evolution of Life (4 cr)
 Biol 210 Genetics (4 cr) or Gene 314 General Genetics (3 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)
 Chem 376 Organic Chemistry II: Lab for Chemistry Majors (2 cr)
 Engl 317 Technical Writing or Engl 207 Persuasive Writing or Engl 208 Personal and Exploratory Writing or Engl 209 Inquiry-Based Writing (3 cr)
~~Math 160 Survey of Calculus or~~ Math 170 Analytic Geometry and Calculus I (4 cr)
 MMBB 250 General Microbiology (3 cr)
 MMBB 255 General Microbiology Laboratory (2 cr)
 MMBB 380 Introductory Biochemistry (4 cr)
 MMBB 382 Introductory Biochemistry Laboratory (2 cr)
 MMBB 400 Seminar (1 cr)
 MMBB 440 Advanced Laboratory Techniques or MMBB 401 Undergraduate Research (4 cr in one semester)
 MMBB 442 Advanced Biochemistry II (3 cr)
 MMBB 476 Biophysical Chemistry ~~(3 cr)~~ or Chem 305-306 Physical Chemistry (3 cr)
 MMBB 488 Genetic Engineering (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)

~~Two~~ ~~Four~~ of the following ~~physiology~~ electives (~~5-6~~ cr):

- ~~Biol 311 Plant Physiology (4 cr)~~
- ~~MMBB 460 Microbial Physiology (3 cr)~~
- ~~MMBB 475 Molecular Biology of Cells (3 cr)~~

One of the following molecular biology and biochemistry electives (2-3 cr):

- MMBB 409 Immunology (3 cr)
- MMBB 412 Pathogenic Microbiology (3 cr)
- MMBB 422 Cellular and Molecular Basis of Disease (3 cr)
- MMBB 432 Virology (3 cr)
- MMBB 450 Molecular Mechanisms in Microbiology (2 cr)
- MMBB 463 Molecular Parasitology (3 cr)
- MMBB 470 Advanced Pathogenesis: Host-Pathogen Interactions (3 cr)
- MMBB 475 Molecular Biology of Cells (3 cr)
- MMBB 482 Protein Structure and Function (3 cr)
- MMBB 485 Prokaryotic Molecular Biology (3 cr)
- MMBB 486 Plant Biochemistry (3 cr)
- MMBB 487 Eukaryotic Molecular Genetics (3 cr)

Science electives (123 cr)

Total 128 cr for the degree

5. Change the curricular requirements of **Molecular Biology and Biochemistry Minor** [Effective: Summer 2006]

- MMBB 380 Introductory Biochemistry (4 cr)
- MMBB 480 Biochemistry and Molecular Biology (3 cr)
- MMBB 442 Advanced Biochemistry II (3 cr)
- MMBB 476 Biophysical Chemistry, Chem 302 Principles of Physical Chemistry, or Chem 305-306 Physical Chemistry (3 cr)

Three courses from the following:

Courses selected from the following (12 cr):

- ~~Chem 302 Principles of Physical Chem or Chem 305, 306 Physical-Chem (3 cr)~~
- ~~MMBB 382 Introductory Biochemistry Lab (2 cr)~~
- ~~MMBB 486 Plant Biochemistry (3 cr)~~
- ~~MMBB 488 Genetic Engineering (3 cr)~~

Up to two of the following physiology courses (3-6 cr):

- ~~Biol 311 Plant Physiology (4 cr)~~
- ~~MMBB 460 Microbial Physiology (3 cr)~~
- ~~MMBB 475 Molecular Biology of Cells (3 cr)~~
- Biol 311 Plant Physiology (4 cr)
- MMBB 382 Introductory Biochemistry Lab (2 cr)
- MMBB 460 Microbial Physiology (3 cr)
- MMBB 475 Molecular Biology of Cells (3 cr)
- MMBB 482 Protein Structure and Function (3 cr)
- MMBB 486 Plant Biochemistry (3 cr)
- MMBB 487 Eukaryotic Molecular Genetics (3 cr)
- MMBB 488 Genetic Engineering (3 cr)

6. Change the curricular requirements of **Microbiology Minor** [Effective: Summer 2006]

MMBB 250, ~~255~~ General Microbiology ~~and Lab~~ (53 cr)

MMBB 255 General Microbiology Lab (2 cr)

MMBB 380 Introductory Biochemistry (4 cr)

Three courses selected from the following (10 cr):

- MMBB 409 Immunology (3 cr)
- MMBB 412 Pathogenic Microbiology (3 cr)
- MMBB 416 Food Microbiology (2 cr)
- MMBB 425 Microbial Ecology (3 cr)
- MMBB 440 Advanced Laboratory Techniques (4 cr)
- MMBB 450 Molecular Mechanisms in Microbiology (2 cr)
- MMBB 460 Microbial Physiology (3 cr)
- MMBB 485 Prokaryotic Molecular Biology (3 cr)
- MMBB 487 Eukaryotic Molecular Genetics (3 cr)
- MMBB 488 Genetic Engineering (3 cr)

Music

1. Add the following courses [Effective: Summer 2006]

MusC 541 **Graduate Theory Review** (1 cr). Review of melodic, harmonic and rhythmic materials, part-writing skills and analysis. This course will not count towards the graduate music curriculum.

MusH 207 **Women and Popular Music** (2 cr). A survey of the contributions women have made to popular music since the 1920s. Open to all students. (Fall only)

MusX 298 (s) **Internship** (1-3 cr). Prereq: Perm.

2. Change the prerequisites of the following course [**Effective:** Summer 2006]

MusA 147-148 **Voice Class** (1 cr). May not be taken for audit. Two-semester sequence for beginning singers. Two lec-labs a wk. ~~Prereq for 148: MusA 147 or perm of dept.~~

3. Change the description of the following course [**Effective:** Summer 2006]

MusX 498 (s) **Internship** (1-3 cr). Open ~~only to majors in the School of Music~~ to all students. Graded P/F. Prereq: perm of School of Music Director.

4. Change the title of the following courses [**Effective:** Summer 2006]

MusA **J380/J580** (s) ~~Opera/Musical Theatre Studio-Workshop~~ (1-3 cr, max arr). Analysis, rehearsal, and performance of operatic literature. Prereq: audition and perm.

MusA **580** (s) ~~Opera/Musical Theatre Studio-Workshop~~ (1-3 cr, max arr). See MusA J380/J580

5. Change the curricular requirements of **General Music Undergraduate Requirements** [**Effective:** Summer 2006]

General Requirements for all B.A., B.F.A., B.S., and B.Mus. Degrees

Minimum Grade Requirement. A music student, either major or minor, must achieve a minimum grade of C in each music course, either resident or transfer, which is applicable to a degree program in music before the student will be eligible for graduation. BFA musical theatre majors must achieve a minimum grade of C in each music, theatre and dance course which is applicable to the musical theatre major before the student will be eligible for graduation.

MusH 101 and 111. Music majors may NOT use MusH 111 to satisfy UI core curriculum requirements. MusH 111 is part of the professional course work--12 credits in music history--required for the major.

If a music major takes MusH 101, he or she must have 14 credits of courses other than MusH 101 in order to satisfy the humanities/social sciences core requirement.

If a transfer student has taken a 100-level survey of music course prior to enrollment as a music major in the School of Music, the student may use this course in lieu of MusH 111. If world music was not addressed in the transfer course, students will have to meet a level of competency in world music.

Ensemble Participation. An undergraduate music major must: (1) earn a minimum of eight credits in ensemble participation to be eligible for graduation and (2) enroll in an ensemble during each semester of full-time study. Various requirements are contained in the specific curricula. For curricular purposes, "major ensemble" is defined to mean MusA 116/316 Concert Choir - Vandaleers, 117/317 University Chorus, 119/319 Marching Band, 121/321 Concert Band, 122/322 Orchestra, or 320 Wind Ensemble. Other ensembles (listed in some curricula under "Chamber Music") consist of MusA 118/318 Jazz Choir, 315 Accompanying, 323 Jazz Ensemble, 365 Chamber Ensemble, and 380 Opera Workshop. For students in the B.A. or B.S. in Applied Music or the B.Mus. in Music: Business, the following minimum requirements apply depending on the primary applied area of the student:

Orchestral Instrument: six credits in instrumental major ensemble and two additional credits in any instrumental ensemble.

Voice: six credits in vocal major ensemble and two additional credits in any vocal ensemble.

Keyboard: two credits in any major ensemble, four credits in MusA 315 Accompanying, and two credits in MusA 365 Chamber Ensemble.

Guitar: four credits in any major ensemble and four credits in MusA 365-02 Chamber Ensemble: Guitar Ensemble.

Transfer students must have a minimum of four semesters of ensemble participation at UI, at least two of which must be in a major ensemble.

Keyboard Proficiency. Minimum keyboard proficiency for all music majors, including transfer students but excluding BFA musical theatre majors, is met by passing a-the LHSOM keyboard proficiency examination. Transfer students who have either completed all required piano classes or have passed a proficiency exam at another accredited institution, must take the LHSOM keyboard proficiency exam within their first two semesters, or they will be required to take the two-year class piano sequence. The keyboard proficiency exam must be completed by music majors (other than piano majors) prior to enrollment in MusA 114, Individual Instruction: Piano.

Convocation-Recital Attendance. Because listening experiences constitute an area of major importance in the study of music, all music majors (excluding BFA musical theatre majors) and music minors are required to register for MusX 140, Convocation; music majors must attend 10 recitals per semester for seven semesters and music minors must attend 10 recitals per semester for two semesters. Students must attend a full concert or program in order for it to be counted toward convocation-recital requirements. Recital credit will not be granted for those performances in which a student participates. In addition, music majors must attend the weekly convocation series (studio class, area recital, and convocation). Transfer students are expected to enroll in MusX 140 during their first registration, and to receive a passing grade in a specific number of semesters (to be determined when the student's program is set up). Transfer students must have a minimum of two semesters of convocation at UI.

Upper-Division Standing (UDS). For a B.Mus., B.A. and B.S. music major to enroll in MusA 324 or 334, or for a composition major to enroll in MusC 325, the student must have been granted upper-division standing (UDS). Except for double majors where one major is not

in music, students applying for UDS must: (1) have completed three semesters of music theory (MusC141/142/241), Aural Skills (MusC 139/140/239), one semester of music history (MusH 111), and three semesters of Piano Class (MusA 145/146/245), all with a grade of "C" or better; (2) have passed with a grade of "C" or better or be currently enrolled in Theory IV (MusC 242), Aural Skills IV (MusC 240), and Piano Class IV (MusA 246); and (3) have passed a special jury examination demonstrating the mastery of the fundamentals of the student's major area of performance/composition and the potential to continue improving in a manner that will lead to the successful completion of performance/composition requirements of the degree and major emphasis (the jury examination requirement must be met, regardless of double majors, before a student can enroll in MusA 324, 334, or MusC 325). Students who fail to pass the UDS requirements within three tries will be asked to leave the program.

For a B.F.A. musical theatre major to enroll in MusA 324, the student must have been granted upper-division standing (UDS). B.F.A. musical theatre students applying for UDS must: (1) have completed two semesters of music theory, two semesters of aural skills, one semester of music history (MusH 101 or 111), and two semesters of class piano all with a grade of "C" or better; and (2) have passed a special jury examination demonstrating the mastery of the fundamentals of the student's major area of performance and the potential to continue improving in a manner that will lead to the successful completion of performance requirements of the degree. Students who fail to pass the UDS requirements within three tries will be asked to leave the program.

In order to register for upper-division music education courses (not including instrumental techniques courses), an undergraduate music education major must: (1) make application to upper-division music education courses by completing and submitting an application form (available in the music office) to the chair of the Music Education Committee--this should be done in the semester in which the student applies for upper division standing (UDS). If the student does not pass UDS, he/she must resubmit a music education application form is enrolled in ED 201; (2) successfully complete ED 201 and the necessary core courses to meet the requirements of the application to Teacher Education in the College of Education; (3) obtain a "C" or better in music courses and at least a 2.5 overall GPA; and (4) pass the individual instruction upper-division standing jury.

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6. Change the curricular requirements of **Music: Business** (B.Mus.).

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

Acct 201 Introduction to Financial Accounting and Acct 202 Introduction to Managerial Accounting, or Acct 205 Fundamentals of Accounting (4-6 cr)

Bus 301 Financial Management (3 cr)

Bus 311 Introduction to Management (3 cr)

Bus 321 Marketing (3 cr)

Comm 101 Fundamentals of Public Speaking (2 cr)

Econ 201-202 Principles of Economics (6 cr)

MusA 124 Individual Instruction (8 cr)

MusA 145-146, 245-246 Piano Class (4 cr)

MusA 324 Individual Instruction (8 cr)

MusA 387 Conducting I (2 cr)

MusA 490 Half Recital (0 cr)

MusA ensemble (in eight different semesters) (see "Ensemble Participation" above for requirements) (8 cr)

MusC 139-140, 239-240 Aural Skills (6 cr)

MusC 141-142, 241-242 Theory of Music (10 cr)

MusC elective at the 300 or 400 level (2-3 cr)

MusH 111 Introduction to Music Literature (3 cr)

MusH 321, 322, 323 Music in Western Civilization (9 cr)

MusH elective at the 400 level (2-3 cr)

MusX 101 Orientation for Music Majors (0 cr)

MusX 140 Convocation (seven semesters) (0 cr)

Music electives (to total 64 credits in music) (0-2 cr)

Stat 251 Statistical Methods (3 cr)

Two of the following courses (6 cr):

BLaw 265 Legal Environment of Business (3 cr)

Bus 324 Buyer Behavior (3 cr)

Bus 412 Human Resource Management (3 cr)

Bus 413 Leadership and Organizational Behavior (3cr)

Bus 425 Retail Distribution Management (3 cr)

Bus 427 Services Marketing (3 cr)

Note: Students who wish to emphasize composition must: (1) substitute four credits of MusC 325, Composition, for four credits of MusA 324; (2) take four credits of MusC 425, Advanced Composition, as their upper-division theory elective, and (3) substitute MusC 490, Recital, for MusA 490, Half Recital.

Students whose primary instrument is voice must substitute MusX 283-284 Diction for Singers for either the MusC or MusH elective.

7. Change the curricular requirements of **Music Education: Instrumental** (B.Mus.) [Effective: Summer 2006]

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Psyc 101 Introduction to Psychology (3 cr)

Major ensembles (six different semesters) (6 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

Students may also complete an optional Emphasis in Jazz Education by completing the following course work (15 cr):

- MusA 210 Jazz Improvisation (2 cr)
- MusC 204 Special Topics: Jazz Arranging (2 cr)
- MusC 329 Theoretical Basis of Jazz (2 cr)
- MusH 410 Studies in Jazz History (3 cr)
- MusT 465 Jazz Band Rehearsal Techniques (1 cr)
- Electives in ensembles, combos, or applied study (5 cr)

* 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, 125/325 Symphonic 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, keyboard, and string majors** must have a total of four semesters of major ensemble participation (as defined above) at UI.

8. Change the curricular requirements of **Music Education: Vocal-Instrumental** (B.Mus.) [Effective: Summer 2006]

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Electives to total 128 cr for the degree

* 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.

9. Change the curricular requirements of **Musical Theatre** (B.F.A.) [Effective: Summer 2006]

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

- MusA 124 Individual Instruction (8 cr)
 - MusA 145 Piano Class (1 cr)
 - MusA 146 Piano Class (1 cr)
 - MusA 324 Individual Instruction (8 cr)
 - MusA 380 Opera Workshop (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 \(in eight different semesters\) \(8 cr\)](#)
 - [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, ~~119/319 Marching Band, 121/321 Concert Band, 122/322 Orchestra, 125/325 Symphonic Band, or 320 Wind Ensemble~~) (4 cr)

10. Change the curricular requirements of **Music: Applied Music** (B.A. or B.S.) [Effective: Summer 2006]

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

- MusA 124 Individual Instruction (major instrument or voice) (8 cr)
- MusA 145-146, 245-246 Piano Class (4 cr)
- MusA 324 Individual Instruction (major instrument or voice) (8 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)
 MusH 111 Introduction to Music Literature (3 cr)
 MusH 321, 322, 323 Music in Western Civilization (9 cr)
 MusX 101 Orientation for Music Majors (0 cr)
 MusX 140 Convocation (seven semesters) (0 cr)
 MusA ensembles (in eight different semesters) (see "Ensemble Participation" above for requirements) (8 cr)
 Electives to total 128 cr for the degree (including at least 72 cr in non-music courses)

Students may also complete an optional Emphasis in Jazz Performance by completing the following course work (12 cr):

MusA 210 Jazz Improvisation (2 cr)
 MusC 329 Theoretical Basis of Jazz (2 cr)
 MusH 410 Studies in Jazz History (3 cr)
 Electives in ensembles, combos, or applied study (5 cr)

Note: Students whose primary instrument is voice must substitute MusX 283-284 Diction for Singers for four credits of non-music electives, thus reducing the non-music credits from 72 to 68.

Natural Resources

1. Add the following course [**Effective:** Summer 2006]

NR 497 **Senior Thesis** (1-3 cr, max 3). Independently plan and conduct a thesis project; write and defend the thesis under supervision of a supervisor. Prereq: Senior standing and perm.

2. Change the curricular requirements of **Ecology and Conservation Biology** (B.S.Ecol.-Cons.Biol.) [**Effective:** Summer 2006]

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 [Natural Resources](#) Ecology and Conservation Biology Senior Project (3 cr)
 Econ 202 Principles of Economics (3 cr)
 Engl 317 Technical Writing (3 cr)
 For/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 200, For 330, For 429, Soil 205/206, and WLF 316 or Fish 316.

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 Ecology Restricted Electives (at least 2 credits from Fish 314, [Fish 415](#), Fish 430, Fish 435, For 423, [For 463](#), Rnge 459, 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 415 Limnology (4 cr)
 Fish/Rnge 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 Management and Ecology (3 cr)
[For 463 Hydrologic Measurement Techniques \(1 cr\)](#)
 For 466 Diseases and Insects of Woody Plants (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 (3 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 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)
 For 484 Forest Policy and Administration (2 cr)
 Geog 420 Land, Resources, and Environment (3 cr)
 Geog 444 Environmental Assessment (3 cr)
 Hist 424 American Environmental History (3 cr)
 Phil 452 Environmental Philosophy (3 cr)
 PolS 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 200, For 429, Phil 452, CSS 493, Fish or WLF 316, and WLF 440.

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Ecology Restricted Electives (at least 2 credits from Fish 314, [Fish 415](#), Fish/Rnge 430, Fish/Rnge 435, For 423, [For 463](#), Rnge 459, 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 415 Limnology (4 cr)
 Fish/Rnge 430 Riparian Ecology and Management (3 cr)
 Fish/Rnge 435 Wetland Ecology and Management (3 cr)
 For 330 Forest Ecosystem Processes (3 cr)
 For 423 Forest Community Ecology (1 cr)
 For 426 Wildland Fire Management and Ecology (3 cr)
[For 463 Hydrologic Measurement Techniques \(1 cr\)](#)
 For 466 Diseases and Insects of Woody Plants (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 (3 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)
 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 486 Public Involvement in Natural Resource Management (3 cr)
 CSS 489 Personalities and Philosophies in Conservation (2 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)
 PolS 364 Politics of the Environment (3 cr)

Electives to total 128 credits for the degree

Philosophy

1. Add the following courses [**Effective:** Summer 2006]

Phil 325 (s) **Historical Figures in Philosophy** (3 cr, max arr). Study of a major philosophical figure from the history of philosophy. May be repeated for credit. Recommended preparation: one philosophy course.

Phil 361 (s) **Professional Ethics** (3 cr, max 6). Study of ethical issues and problems arising in professions. Each section focuses on a specific area of professional ethics: bioethics; business ethics; engineering ethics; environmental and natural resource ethics; human service provider ethics; media ethics; ethics in public affairs. Prereq: Phil 103.

Phil 381 **American Indian Environmental Philosophy** (3 cr). Exploration of traditional and contemporary American Indian thought about people in relationship to the more than human world. Recommended preparation: Any courses in philosophy, religious studies, American Indian studies, or environmental studies.

Phil 382 **Philosophy of Ecology** (3 cr). Exploration of conceptual issues in ecology with special consideration of the connection between ecology and environmental philosophy. Recommended preparation: Any courses in philosophy, natural resources, or environmental studies.

Phil 457 **Natural Resource Ethics** (3 cr). Examination of key ethical concepts and arguments underlying all fields of natural resources. Recommended preparation: Any course in philosophy, environmental studies, or natural resources. (Spring, alt/yr)

Plant, Soil and Entomological Sciences

1. Change the description of the following course [**Effective:** Summer 2005]

PISc 415 **Plant Pathology** (3 cr). [Same as For 414.](#) Biology of diseases and disorders of crop, forest, and ornamental plants, with emphasis on plant-microbe interactions and on disease cause, development, diagnosis, and control. Three 1-hr lectures. Prereq: PISc 102, and MMBB 154, 155 or MMBB 250 (or perm). (Fall only)

2. Drop the following courses [**Effective:** Summer 2006]

PISc ~~WS-J430/WS-J530~~ **Ornamental Plant Production I** (3 cr). WSU Hort 438/538. Fall and winter production practices of greenhouse and nursery crops. Field trip.

Ent ~~ID445~~ **Insect-Plant Interactions** (3 cr). WSU Entom 445. Ecology, evolution, and mechanisms of the interactions between insects and plants. Requirements for graduate credit include formal report of field study, term paper. Prereq: Ent 211. (Alt/yr)

3. Change the description of the following course [**Effective:** Summer 2006]

Ent ~~ID549~~ **Insect-Plant Interactions** (3 cr). [See Ent J445/J549-WSU Entom 545. Ecology, evolution, and mechanisms of the interactions between insects and plants. Requirements for graduate credit include formal report of field study, term paper. Prereq: Ent 211. \(Alt/yr\)](#)

Ent ~~ID-J472/ID-J572~~ **Aquatic Entomology** (3 cr). WSU Entom 472. Identification and biology of insects associated with aquatic and subaquatic environments. Additional projects/assignments required for graduate credit. One lec and two 3-hr labs a wk; two 1-day field trips. (Spring, Alt/yr)

4. Change the credit, number and title of the following course [**Effective:** Summer 2006]

PISc ~~WS-J434/J439/WS-J531~~ **Ornamental Plant Production-II** (~~3-4~~ cr). WSU Hort 439/539. Production requirements for spring greenhouse and nursery crop; garden center management considerations. Field trip.

Political Science

1. Add the following courses [**Effective:** Summer 2006]

PolS ~~J410/J510~~ **Game Theory** (3 cr). The study of strategic interaction in which an outcome depends upon an individual's own decision and the choices made by others; introduction to the basic tools of game theory used to conceptualize and model political problems as games, including situations involving conflict, cooperation, contracts between agents and principals, coordination, and bargaining. Additional projects/assignments reqd for grad cr.

PolS ~~J421/J521~~ **Political Leadership** (3 cr). Theories of political and social leadership; presidential leadership; international leadership; moral and ethical leadership; case studies of leadership success and failure. Additional projects/assignments required for graduate cr.

PolS ~~J450/J550~~ **Nonprofit Organization and Management** (3 cr). Study of the role of nonprofits as contributors to public service delivery and as private service providers, including organization structures, management practices, financing, legal conditions and challenges they face. Additional projects/assignments required for graduate cr. (Spring, alt/yr)

PolS ~~510~~ **Game Theory** (3 cr). See PolS J410/J510.

PolS ~~521~~ **Political Leadership** (3 cr). See PolS J421/J521.

PolS ~~550~~ **Nonprofit Organization and Management** (3 cr). See PolS J450/J550.

2. Change the description, prerequisites and title of the following courses [**Effective:** Summer 2006]

PolS ~~495~~ **Applied Political Research Senior Seminar in Political Science** (3 cr). ~~Capstone course focused on applying and developing conceptual skills, emphasizing original research, including issues of research design, hypothesis formation, operationalization of variables, testing of models and interpretation of results. Capstone seminar required of all political science majors in their senior year. Focuses on developing and applying research and conceptual skills, oral and written presentation of research prospectus and final research paper.~~ Prereq: PolS 235 and ~~junior or~~ senior standing.

3. Change the curricular requirements of **Political Science (B.A.)** [Effective: Summer 2006]

The B.A. degree emphasizes a traditional liberal arts education including a 16-credit foreign language requirement. The course work also includes the university requirements (see regulation J-3), the general requirements for the B.A. degree, and:

PolS 101 Intro to Political Science and American Government (3 cr)

PolS 235 Political Research Methods and Approaches (3 cr)

PolS 425 or 426 History of Political Philosophy I or II (3 cr)

~~PolS 495 Senior Seminar in Political Science (requires senior standing) (3 cr)~~

Stat 251 Statistical Methods (3 cr)

Other courses in political science (including a minimum of ~~17-20~~ credits in upper-division courses and at least 6 credits in each of the following areas: (1) American government/public law/public administration and (2) comparative/international politics) (~~23-26~~ cr)

Courses in upper-division related fields (20 cr)

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

4. Change the curricular requirements of **Political Science (B.S.)** [Effective: Summer 2006]

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

PolS 101 Intro to Political Science and American Government (3 cr)

PolS 235 Political Research Methods and Approaches (3 cr)

PolS 425 or 426 History of Political Philosophy I or II (3 cr)

~~PolS 495 Senior Seminar in Political Science (requires senior standing) (3 cr)~~

Stat 251 Statistical Methods (3 cr)

Other courses in political science (including a minimum of ~~17-20~~ credits in upper-division courses and at least 6 credits in each of the following areas: (1) American government/public law/public administration and (2) comparative/international politics) (~~23-26~~ cr)

Research methods (may be counted as related field cr if upper-division) (6 cr)

Courses in upper-division related fields (20 cr)

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

Psychology and Communication Studies

1. Add the following courses [Effective: Summer 2006]

Comm **421 Nonverbal Communication** (3 cr). Current theories, research and applied principles of nonverbal communication; in-depth examination of human social and biological development of nonverbal codes, and the role of nonverbal expression in intercultural, interspecies, mediated and organizational contexts. Prereq: Comm 111.

Comm **436 Conflict Mediation** (3 cr). Basic theories, research and practical application of mediation in business, government, education, community and interpersonal disputes. Readings, discussion, simulations and field observations. Credit may be applied toward certification through the Idaho Mediation Association. Coreq: Comm 331.

Psyc **315 Psychology of Women** (3 cr). This course will cover the empirical research regarding gender differences in domains that are of particular interest to women. These topics will include but not be limited to women in the workplace, cognitive and socialization differences, work-family issues, sexuality, childhood, adolescence, motherhood, identity, and intimate relationships. Prereq: Psyc 101. (Spring, alt/yrs)

Psyc **J345/J545 Group Dynamics** (3 cr). This course will cover the empirical research regarding group dynamics, including topics of leadership, cohesion, team building, statistical analyses of group level data, problem solving, group mood, group creativity, transactive memory, information processing, and other small group processes. Additional projects/assignments reqd for grad cr. Prereq: Psyc 101 and Psyc 218. (Spring, alt/yrs)

Psyc **545 Group Dynamics** (3 cr). See PolSJ345/J545.

2. Change the curricular requirements of the **Communication Studies Minor** [Effective: Summer 2006]

Comm 111 Introduction to Communication Studies (3 cr)

Comm 233 Interpersonal Communication (3 cr)

~~Comm 332 Communication and the Small Group (3 cr)~~

~~Comm 235 Organizational Communication (3 cr)~~

At least three of the following (9 cr):

~~Comm 235 Organizational Communication (3 cr)~~

Comm 331 Conflict Management (3 cr)
[Comm 332 Communication and the Small Group \(3 cr\)](#)
 Comm 335 Intercultural Communication (3 cr)
[Comm 347 Persuasion \(3 cr\)](#)
 Comm 431 Professional Presentation Techniques (3 cr)
[Comm 432 Gender and Communication \(3 cr\)](#)
[Comm 433 Organizational Communication Theory and Research \(3 cr\)](#)
[Comm 446 History of Communication Studies \(3 cr\)](#)
[Comm 449 Theory in Communication \(3 cr\)](#)
[Comm 491 Communication and Aging \(3 cr\)](#)

Rangeland Ecology and Management

1. Add the following courses [**Effective:** Summer 2006]

Rnge 351 **Wildland Plant Identification Field Studies** (3 cr). Develop skills to identify, classify, and collect rangeland plants in the field. Focus on identification of grasses, forbs, and shrubs. Discussions will also encompass the ecological roles of wildland plants and the ecosystem classification. This course includes a 7- to 9-day field trip. Required for REM majors. (Spring only)

Rnge 460 **Rangeland Ecology Current Topics and Field Studies** (1 cr). Discussion of topics related to changing knowledge and technology relevant to ecology of grasslands, shrublands and woodlands. Min. five discussion classes; one five-day field trip. Required for REM majors. Coreq: Rnge 459. (Fall only)

2. Drop the following courses [**Effective:** Summer 2006]

Rnge 430 **Riparian Ecology and Management** (2 cr). See Fish 430.

Rnge 435 **Wetland Ecology and Management** (3 cr). See Fish 435.

3. Change the credit, description and prerequisites of the following course [**Effective:** Summer 2006]

Rnge ~~ID459~~ **Rangeland Ecology** (~~3-2~~ cr). WSU NATRS 459. [Application of ecological principles in rangeland management; stressing response and behavior of range ecosystems to various kinds and intensity of disturbance and management practice. Web only \[http://www.uidaho.edu/range459/\].](#) ~~Application of ecological principles in rangeland management; stressing response and behavior of range ecosystems to various kinds and intensity of disturbance and management practice. One 5-day field trip.~~ Recommended Preparation: a course in general ecology ~~or perm.~~ (Fall only).

4. Change the cooperative status of the following course [**Effective:** Summer 2006]

Rnge ~~ID&WS357~~ **Rangeland and Riparian Habitat Assessment** (3 cr). ~~WSU NATRS 357~~—Methods for inventory and monitoring of upland and riparian rangeland communities; basic sampling techniques used for measuring vegetation attributes and assessing production and utilization of vegetation for management purposes; evaluation of plant communities will be interpreted with respect to ecological health, watershed protection, and value as livestock and wildlife habitat. Two lec and one field trip/lab a wk. Recommended Preparation: basic statistics course. (Fall only).

Sociology, Anthropology and Justice Studies

1. Add the following course [**Effective:** Summer 2006]

Soc 422 **Religion, Culture & Society** (3 cr). This course provides students with an opportunity to explore religious experience, meanings and organizations as part of a larger socio-cultural context. The primary focus of this course is on a sociological approach to the theory of religion, the historical development and effects of religion in the United States, and contemporary religious conditions and experience. The course will integrate theoretical readings, historical analyses, empirical studies, ethnographic description, and student projects. Throughout the course, a sociological imagination will be cultivated and exercised toward understanding the nature of religious practice and the social significance of its organization and change.

2. Change the curricular requirements of **Sociology** (B.S.) [**Effective:** Summer 2006]

Required course work includes the university requirements (see regulation J-3), the general requirements for the B.S. degree, and the following courses (electives must be approved by the student's advisor):

Anth 100 Introduction to Anthropology (3 cr)
 Soc 101 Introduction to Sociology (3 cr)
 Soc 230 Social Problems (3 cr)
 Soc 310 Methods of Social Research (3 cr)
 Soc 414 Development of Social Theory (3 cr)
 Soc 427 Racial and Ethnic Relations or Soc 424 Soc of Gender or Soc 423 Social Stratification (3 cr)
 Stat 251 Statistical Methods (3 cr)
 Sociology electives (upper-division, max 3 cr each for Soc 315 or 498) (21 cr)
 Related fields (more common areas including anthro, econ, geog, hist, political sc, and psych) (18 cr)

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

~~Anth 251 Introduction to Physical Anthropology (3 cr)
 Anth 411 Human Evolution (3 cr)~~

~~Anth 412 Human Races (3 cr)~~
~~Biol 102 Biology and Society (4 cr)~~
~~Biol 115 Cells and the Evolution of Life (4 cr)~~
~~Biol 120 Human Anatomy (4 cr)~~
~~Biol 210 Genetics (4 cr)~~
~~EnvS 101 Introduction to Environmental Science (3 cr)~~
~~Math 130 Finite Mathematics (3 cr)~~
~~MMBB 154 Introductory Microbiology (3 cr)~~
~~Phil 250 Introduction to Philosophy of Science (3 cr)~~
~~Stat 401 Statistical Analysis (or advanced statistics course) (3 cr)~~

Students who wish to emphasize human services add the following requirements:

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Theatre and Film

1. Change the credits for the following course [**Effective:** Summer 2006]

TheF **J484/J584 Advanced Stage Lighting** (3 cr, max 12). Advanced lighting design theories and practice through design of assorted productions in realistic drama, dance, arena, thrust, and mystical theatre. Additional projects/assignments reqd for grad cr. Recommended Preparation: TheF 205.

FOR THE FACULTY'S INFORMATION

Correction to General Curriculum Report 236:

Changes to Cooperative Courses Approved Since Last General Curriculum Report:

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

1. Drop the following courses [**Effective:** Summer 2006]

Biol **WS-J406/WS-J506 Microtechnique** (4 cr). WSU Bot 406/506.

Biol **WS-J413/WS-J513 Stress Physiology of Plants** (3 cr). WSU Bot 417/517.

Biol **WS440 Introduction to Cell Biology** (3 cr). WSU GenCB 450.

Biol **WS511 Plant Cell Biology** (3 cr). WSU Zool 506.

Biol **WS520 Domestic and Exotic Animal Behavior** (2 cr). WSU V M 510 / Neuro 526.

Biol **WS528 Behavioral Mechanisms in Physiology** (3 cr). WSU Neuro/V Ph 528.

Biol **WS530 General and Comparative Neurophysiology** (4 cr). WSU Neuro 530.

Biol **WS534 Advanced Neurophysiology** (3 cr). WSU Neuro/V Ph 534.

Biol **WS537 Field Ecology** (2 cr). WSU Biol 537.

Biol **WS538 Physiology and Biochemistry of Neuropeptides** (3 cr). WSU Neuro/V Ph 537.

Biol **WS546 Plant Environmental Biophysics Lab** (1 cr). See Biol J436/J546.

Biol **WS564 Brain-Endocrine Interactions** (3 cr). WSU Neuro/V Ph 564.

Biol **WS575 Basidiomycetes** (3 cr). WSU PI P 522.

Biol **WS576 Ascomycetes and Fungi Imperfecti** (3 cr). WSU PI P 523.

Biol **WS580 Protein Targeting in Plant Cells** (3 cr). WSU PI Ph 580.

Geol **WS588 Isotope Geology** (3 cr). WSU Geol 588.

Other Informational Changes:

1. Editorial change to the following title [**Effective:** Summer 2006]

AVS 210 Animal Husbandry Laboratory (1 cr). Laboratory to support teaching in AVS 209; introductory applications of fundamentals of animal science to domestic animal management and production. Graded P/F. One 2-hr lab a wk. Coreq: AVS 209.