

General Curriculum Report #267

UNIVERSITY OF IDAHO - REGISTRAR'S OFFICE

November 09, 2012

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 Senate 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 Senate 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.

Accounting

1. Change the following course [**Effective:** Summer 2013]

Acct 497-595(s) Practicum in Tutoring (1 cr, max-2)

Tutorial services performed by advanced students under faculty supervision. [A paper discussing the tutoring experience is required.](#) Graded P/F.

Prereq: Permission

Art and Architecture

1. Add the following courses [**Effective:** Summer 2013]

Arch J421/J521 China Program Preparation Seminar (2 cr)

Seminar course preparing students for summer study abroad program in China. This course will introduce travelling, money management, safety, visa application, and some basic cultural introductions. Also, this class will introduce the academic courses to be undertaken in China and prepare research data collection. Required for all students enrolled in the China program. (Spring only)

Prereq: Arch 353 or LArc 353

Short Course Title: China Program Preparation

Arch J422/J522 China's Urbanization Seminar (2 cr)

Seminar course conducted in China, focusing on understanding the complicated challenges of China's urbanization and design strategies for urban development.

Prereq: Arch 354 or LArc 365

Arch J423/J523 Cultural & Ethical Issues in Global Architectural Practice (2 cr)

Study of the phenomenon of architectural practice under the impact of globalization using the market of China as an example. Focus on the development of model architectural practice in China as well as the associated social and cultural issues of global architectural practice.

Prereq: Arch 354 or LArc 365

Short Course Title: International Practice

LArc 510 Landscape Architecture Representation and Media 3 (2 cr)

See LArc J310/J510.

LArc 550 Landscape Architecture Studio 1 (3 cr)

See LArc J353/J550.

LArc 551 Landscape Architecture Studio 6 (3 cr)

See LArc J455/J551.

LArc 552 Landscape Architecture Studio 3 (3 cr)

See LArc J363/J552

LArc 553 Landscape Architecture Studio 8 (3 cr)

See LArc J465/J553.

2. Change the following courses [**Effective:** Summer 2013]

Arch 573 Daylight Design and Simulation (3 cr)

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

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

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

Art 216 Digital Tools (3 cr)

Introduction to professional design/development, and production workflows for web and print delivery. Introduction to industry standard applications and various Open Source tools. Exploring design sustainability by designing once and delivering via various technologies. Two 2-hr studios a wk and assigned work.

Prereq: [Art 110 and Art 121 and Art 122](#); or *Permission*

Art 380 Digital Imaging (3 cr)

Computer imaging with emphasis on visual problem solving and design; development of professional techniques with industry standard software.

Prereq: [Art 216](#)

Art 508 (s) Critical Theory and Continental Aesthetics Readings in Art and Design (3 cr)

~~Same as Phil 508.—Exploration and analysis of issues surrounding contemporary and historical practices of artistic production. Open to all graduate students. Seniors with a sufficient GPA or higher may enroll per UI catalog and College of Graduate Studies requirements with instructor permission.~~ Introduction, examination, and analysis of principal texts and strategies of critical theory and continental aesthetics from Kant to Zizek. ~~Topics to be studied include German aesthetics, phenomenology and hermeneutics, psychoanalysis, feminism, the Frankfurt School, structuralism, poststructuralism, deconstruction, postcolonialism, science studies, and media aesthetics.—Open to all graduate students, and to undergraduates with instructor's approval.~~

Editor's Note: Phil 508 will be dropped from the catalog with the approval of this change.

LArc 288 Plant Materials and Planting Design Studio 1 (3 cr)

Plant identification and selection; the sustainable use of plant materials in relation to soils, topography, and climate; introduction to the principles in relation to planting design. Selected field trips at student expense. (Fall only)

LArc 289 Plant Materials and Planting Design Studio 2 (3 cr)

Continuation of plant material identification with emphasis on planting design at different scales of the landscape. Exploration of sustainable principles and practices of planting design. Two lec and 4 hrs of lab a wk; selected field trips at student expense. (Spring only)

Prereq: [LArc 288](#)

LArc J310/J510 Landscape Architecture Representation and Media 3 (2 cr)

Advanced digital technology tools used by landscape architects throughout the design process; emphasis on digital modeling tools that assist with the conceptualization and development of site design and design detail. Further exploration of digital media to assist with the communication and presentation of design process and concepts. Open to landscape architecture majors only. [Additional project required for graduate credit.](#) (Fall only)

Prereq: [LArc 154](#), [LArc 210](#), and *major in Landscape Architecture; non-majors by permission as space permits*

LArc J353/J550 Landscape Architecture Studio 1 (3 cr)

Studies and applications in landscape architecture site design process at the small-site scale with an emphasis on critical thinking within the bioregional context; includes readings, lectures and field trips. Course offered in the first half of fall semester. [Additional project required for graduate credit.](#) Recommended Preparation: [Art 100](#), [Art 121](#), [LArc 151](#), and [LArc 154](#). (Fall only)

Prereq: [Engl 102](#), [LArc 251](#), [LArc 254](#), [LArc 288](#), and [LArc 289](#)

LArc J363/J552 Landscape Architecture Studio 3 (3 cr)

Exploration of design principles, process, conceptualization, spatial understanding, and craft via narrative; within a cultural, social, and environmental context; and application to creative thinking and decision-making required of site-specific projects. Required field trips and attendance at outside events (lectures, symposiums, films). Course offered first half of semester. [Additional project required for graduate credit.](#) Recommended Preparation: [LArc 154](#), [LArc 210](#), and [LArc 288](#) (Spring only)

Prereq: [LArc 355](#) or *Permission*

Coreq: [LArc 365](#) or *Permission*

LArc J455/J551 Landscape Architecture Studio 6 (3 cr)

Continued emphasis on community design with a focus on master planning and design development that explores different models of human settlement and patterns of cultural, environmental and social elements. Selected field trips at student expense. Course offered second half of fall semester. [Additional project required for graduate credit.](#) Recommended Preparation: [LArc 288](#), [LArc 289](#), and [LArc 389](#). (Fall only)

Coreq: [LArc 453](#) or *Permission*

LArc J465/J553 Landscape Architecture Studio 8 (3 cr)

Intermediate scale land planning and design that emphasizes sustainable development with a focus on landscape restoration and regeneration, visual analysis of the landscape matrix using GIS digital technologies and the use of indigenous plant materials for restoration and rehabilitation. Required Field Trip at student expense. Course offered second half of spring semester. [Additional project required for graduate credit.](#) Recommended Preparation: [LArc 288](#) and [LArc 289](#). (Spring only)

Prereq or Coreq: [LArc 463](#), or *Permission*

VTD 244 Introduction to 3D Modeling (3 cr)

~~Introduction to 3D digital modeling focused on high and low poly polygon hard surface assets and digital sets (including basic lighting and materials). Two 1-1/2hr lecture/lab a wk and associated work.~~ Introduction to the application of current 3D digital modeling techniques in virtual design. Two 1-1/2hr lecture/lab a wk and associated work.

Prereq: Major in Virtual Technology and Design; non-majors by permission as space permits

VTD 245 Advanced Modeling (3 cr)

~~Exploration of methods used for modeling and sculpting organic surfaces focused on the creation of character and avatar for high and low polygon 3D digital models.~~ Exploration of methods for creating virtual objects and environments including visualization techniques and geometry optimization. Study of mesh, patch and NURBS modeling. Three 1 hr lecture/lab a wk and associated work. (Fall only)

Prereq: VTD 244 or Permission

VTD 253 Virtual Design I (3 cr)

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

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

VTD 266 Animation (3 cr)

~~Introduction to 3D computer-generated animation addressing interface, character rigging, and linear animation.~~ Introduction to computer-generated animation from concept to postproduction; focus includes 3D methods, time/motion scripting, scene development and rendering processes; examines methods for wide range of applications. Two 1-1/2hr lecture/lab a wk and associated work. (Spring only)

Prereq: VTD 244 or Permission

VTD 367 Advanced Animation (3 cr)

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

Prereq: VTD 266 or Permission

3. Change the curricular requirements of **Studio Art, Art, and Art Education** (B.F.A.; B.A; B.S.Art.Ed.) [**Effective:** Summer 2013]

Add the following to all three majors:

Computer Equipment: beginning with the first year of the program, all art and design students are required to have their own laptop computer and appropriate software for use in their courses. Please refer to the College of Art and Architecture's website for specifics.

4. Change the curricular requirements of **Studio Art** (B.F.A.) [**Effective:** Summer 2013]

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

Art 205	Visual Culture (3 cr)
Art 303	Contemporary Art and Theory (3 cr)
Art 407	New Media (3 cr)
Art 410	Professional Practices (2 cr)
Art 490	BFA Art/Design Studio (12 cr)
Art 495	BFA Senior Thesis (4 cr)

Art History Electives selected with advisor approval (6 cr):

Art 205	Visual Culture (3 cr)
Art 208	Italian Renaissance Art and Culture (3 cr)
Art 213	History and Theory of Modern Design I (3 cr)
Art 302	Modern Art and Theory (3 cr)
Art 313	History and Theory of Modern Design II (3 cr)
Art 323	History of Typography (3 cr)
Art 382	History of Photography (3 cr)
Art 409	Visual Studies (3 cr)

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5. Change the curricular requirements of **Art** (B.A.) [**Effective:** Summer 2013]

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

Art 205	Visual Culture (3 cr)
Art 303	Contemporary Art and Theory (3 cr)
Art 407	New Media (3 cr)

Art 410	Professional Practices (2 cr)
Art History Electives selected with advisor approval (6 cr):	
Art 205	Visual Culture (3 cr)
Art 208	Italian Renaissance Art and Culture (3 cr)
Art 213	History and Theory of Modern Design I (3 cr)
Art 302	Modern Art and Theory (3 cr)
Art 313	History and Theory of Modern Design II (3 cr)
Art 323	History of Typography (3 cr)
Art 382	History of Photography (3 cr)
Art 409	Visual Studies (3 cr)
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6. Change the curricular requirements of **Landscape Architecture (B.S.L.A.)** [Effective: Summer 2013]

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

Arch 483	Urban Theory and Issues (3 cr)
Art 110	Integrated Art and Design Communication (2 cr)
Art 112	Drawing as Integrated Design Thinking (2 cr)
Art 121	Integrated Design Process (2 cr)
Biol 102, Biol 102L	Biology and Society and Lab (4 cr)
Geol 101, Geol 101L	Physical Geology and Lab (4 cr)
LArc 151	Introduction to the Built Environment (2 cr)
LArc 154	Landscape Architecture Representation and Media 1 (3 cr)
LArc 210	Landscape Architecture Representation and Media 2 (2 cr)
LArc 251	Introduction to Principles of Site Design (3 cr)
LArc 254	Origins of Landscape Form (2 cr)
LArc 268	Landscape Construction 1 (2 cr)
LArc 269	Landscape Construction 2 (2 cr)
LArc 288	Plant Materials and Design 1 (3 cr)
LArc 289	Plant Materials and Design 2 (3 cr)
LArc 310	Landscape Architecture Representation and Media 3 (2 cr)
LArc 353	Landscape Architecture Studio 1 (3 cr)
LArc 355	Landscape Architecture Studio 2 (3 cr)
LArc 358	Professional Office Practice, LA (2 cr)
LArc 363	Landscape Architecture Studio 3 (3 cr)
LArc 365	Landscape Architecture Studio 4 (3 cr)
LArc 368	Landscape Architecture Construction 3 (2 cr)
LArc 369	Landscape Architecture Construction 4 (2 cr)
LArc 380	Water Conservation Technologies (2 cr)
LArc 389	History of Landscape Architecture (3 cr)
LArc 395	GIS Applications in Land Planning 1 (3 cr)
LArc 453	Landscape Architecture Studio 5 (3 cr)
LArc 455	Landscape Architecture Studio 6 (3 cr)
LArc 463	Landscape Architecture Studio 7 (3 cr)
LArc 465	Landscape Architecture Studio 8 (3 cr)
LArc 480	The Emerging Landscape (3 cr)
Math 143	Pre-calculus Algebra and Analytic Geom (3 cr)
REM 429	Landscape Ecology (3 cr)
Soil 205	The Soil Ecosystem (3 cr)
WLF 440	Conservation Biology (3 cr) or other related course approved by faculty committee

One of the following (3-4 cr):

Biol 314	Ecology and Population Biology (4 cr)
For 221	Ecology (3 cr)
REM 221	Ecology (3 cr)

Courses to total 128 credits for this degree

Recommended electives:

Art 380	Digital Imaging (3 cr)
CSS 486	Public Involvement in Natural Resource Management (3 cr)
Fish 430	Riparian Ecology and Management (3 cr)
For 235	Society and Natural Resources (3 cr)
Geol 335	Geomorphology (3 cr)
LArc 364	Summer Study Abroad Design Studio (6 cr)
LArc 382	Landscape, Language and Culture (2 cr)
LArc 390	Italian Hill Towns and Urban Centers (3 cr)

LArc 495	GIS Applications in Land Planning 2 (3 cr)
Phil 452	Environmental Philosophy (3 cr)
VTD 245	Advanced Modeling (3 cr)
VTD 266	Animation (3 cr)
VTD 271	Interactive Technologies (3 cr)

Biological Sciences

7. Add the following courses [**Effective:** Summer 2013]

Biol 155 Introductory Microbiology Laboratory (1 cr)

Same as MMBB 155. May be taken by microbiology majors but carries no credit after Biol 255. Introductory laboratory training in basic microbiology; includes sterile technique, bacterial enumeration methods, culturing techniques, yogurt preparation and analysis, recombinant DNA techniques. Three hrs lab a wk. (Spring only)

Coreq: MMBB 154

Short Course Title: Introductory Microbiology Lab

Biol 255 General Microbiology Lab (2 cr)

Same as FS 255 and MMBB 255. Training in the handling of microscopes, basic lab equipment, and manipulation of microbes. Two 2-hr labs per week.

Prereq or Coreq: MMBB 250

Biol 300 Survey of Biochemistry (3 cr)

Same as MMBB 300. Carries no credit after MMBB 380/Biol 380. Survey of structure, function, and metabolism of major constituents of living systems. (Fall and Summer only)

Prereq: Chem 101 or Chem 111

Coreq: Chem 275 or Chem 277

Biol 313 Molecular and Cellular Laboratory (1 cr)

Laboratory experiments and techniques related to molecular and cellular biology. One 3-hr lab per week.

Coreq: Biol 312

Short Course Title: Molecular and Cellular Lab

Biol 380 Introductory Biochemistry (4 cr)

Same as MMBB 380. Carries one credit after MMBB 300/Biol 300. Introduction to the structure, function, and metabolism of major constituents of living systems. Three hrs lec and one hr with interactive problem solving. Recommended preparation: Chem 253, Chem 254 and Chem 372. (Fall and Summer only)

Prereq: Chem 101 or Chem 111; and Chem 277

Biol 382 Introductory Biochemistry Laboratory (2 cr)

Same as MMBB 382. Lab training in modern methods. One 3-hr lab and one 1-hr recitation a wk. (Fall only)

Prereq: Chem 101 or Chem 111; and Chem 278

Coreq: Biol 380 or equivalent

Short Course Title: Introductory Biochemistry Lab

Biol 401 Undergraduate Research (1-4 cr, max 8)

Same as MMBB 401. Individual Study.

Prereq: Permission of Instructor

Biol J432/J532 Immunology (3 cr)

Same as MMBB J409/J509. Theory and mechanisms of the cellular basis of immune response; antibody structure, function, and synthesis; cell-mediated immunity; complement; hypersensitivity; immunologic diseases; transplantation; tumor immunity. Extra oral and/or written assignments required for graduate credit. (Fall only)

Prereq: Biol 300 or Biol 380

Biol J433/J533 Pathogenic Microbiology (3 cr)

Same as MMBB J412/J513. Epidemiology, host-parasite relationships, pathology, host response; treatment, prevention, and control of pathogenic microorganisms. Extra oral and/or written assignments required for graduate credit. (Fall only)

Prereq: MMBB 250

Biol J441/J541 Cellular and Molecular Basis of Disease (3 cr)

Same as MMBB J422/J522. Basic principles of cell biology explored in the context of human diseases. Emphasis on molecular mechanisms of cancer, Alzheimer's disease and prion diseases. Extra oral assignment required for grad cr. Recommended Preparation for 422: MMBB 475. Recommended Preparation for 522: MMBB 575. (Fall only)

Prereq: Biol 210 or Gene 314; and MMBB 380

Short Course Title: Cellular/Molecul Basis/Disease

Biol J447/J547 Virology (3 cr)

Same as MMBB J432/J532. A survey of virology, with special emphasis on the molecular basis of replication, host-pathogen interactions and diseases associated with animal viruses. Extra oral and/or written assignments required for grad credit. Recommended preparation: MMBB 250. (Fall, alt/yrs)

Prereq: *Biol 380; and Biol 310 or Gene 314; or Permission*

Biol J462/J562 Molecular Parasitology (3 cr)

Same as MMBB J463/J563. 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 310 or Gene 314, and MMBB J475/J575 or Biol J422/J522. (Spring only)

Prereq: *MMBB 154 or MMBB 250; and Biol 300 or Biol 380; or Permission*

Biol J482/J582 Protein Structure and Function (3 cr)

Same as MMBB J482/J582. Detailed analysis of protein structure and function including enzyme activity, binding, folding and stability, and techniques for structure determination. Additional projects/assignments required for graduate credit. (Fall, alt/yrs)

Prereq for 482: *Biol 380*

Prereq for 582: *MMBB 541*

Biol J485/J585 Prokaryotic Molecular Biology (3 cr)

Same as MMBB J485/J585. Current theory and experimental basis for prokaryotic DNA, RNA, and protein synthesis, gene regulation and cell wall metabolism. Extra oral and/or written assignments required for graduate credit. (Spring only)

Prereq: *MMBB 280 and Biol 380*

Biol J487/J587 Eukaryotic Molecular Genetics (3 cr)

Same as MMBB J487/J587. Molecular basis of genetics in eukaryotes. Extra oral and/or written assignments required for graduate credit. Recommended preparation: Biol J485/J585 and MMBB J488/J588

Prereq: *Biol 380; and Biol 310 or Gene 314*

Biol 491 Practicum in Teaching (2 cr)

Same as MMBB 497. Teaching by advanced students under faculty supervision.

Prereq: *Permission*

Biol 524 Research and Curriculum Progress

Same as MMBB 511. Required of all graduate students one semester per year. The grade is based on preparation of an oral and written presentation of research goals and coursework for the completion of the degree. A letter grade is assigned by committee members at the time of the student's graduate committee meeting. Recommended preparation: Undergraduate degree in Microbiology, Biochemistry, or related topic.

Prereq: *Permission*

Short Course Title: Research & Curriculum Progress

Biol 590 Teaching Practicum (2 cr)

Same as MMBB 590. Teaching by master's students under faculty supervision.

Prereq: *Permission*

Biol 591 Teaching Practicum (2 cr, max 4)

Same as MMBB 591. Teaching by Ph.D. students under faculty supervision.

Prereq: *Permission*

8. Change the following courses [**Effective:** Summer 2013]

Biol ~~212-312~~ Molecular and Cellular Biology (4-3 cr)

Current theory and experimental basis of the structure/function of eukaryotic cells. Topics include plasma membrane, organelles, cytoskeleton and cell mobility, the nature of genes, gene expression, DNA replication and cellular reproduction, and signal transduction. Three lec and one 1-hr recitation 3-hr lab a wk. (Fall only)

Prereq: *Biol 115.*

Biol 400 (s) Seminar (1 cr, max arr)

Same as MMBB 400. May be used as a science elective after 1 required credit, up to a maximum of 4 credits. Graded P/F.

MMBB 155 Introductory Microbiology Laboratory (1 cr)

May be used with MMBB 154 as core credit in J-3-b or J-3-d when taken with MMBB 154. See Biol 155. May be taken by microbiology majors but carries no credit after MMBB 255. Introductory laboratory training in basic microbiology; includes sterile technique, bacterial enumeration methods, culturing techniques, yogurt preparation and analysis, recombinant DNA techniques. Three hrs of lab a wk. (Spring only)

Coreq: MMBB 154

MMBB 255 General Microbiology Lab (2 cr)

May be used with MMBB 250 as core credit in J-3-b. See Biol 255 Same as FS 255. Training in the handling of microscopes, basic lab equipment, and manipulation of microbes. Two 2-hr labs per week.

Prereq or Coreq: MMBB 250

MMBB 300 Survey of Biochemistry (3 cr)

See [Biol 300](#) Carries no credit after MMBB 380. Survey of structure, function, and metabolism of major constituents of living systems. (Fall and Summer only)

Prereq: Chem 101 or 111

Coreq: Chem 275 or 277

MMBB 380 Introductory Biochemistry (4 cr)

See [Biol 380](#) Carries one credit after MMBB 300. Introduction to the structure, function, and metabolism of major constituents of living systems. Three hrs lec and one hr with interactive problem solving. Recommended preparation: Chem 253, Chem 254 and Chem 372. (Fall and Summer only)

Prereq: Chem 101 or 111, and 277

MMBB 382 Introductory Biochemistry Laboratory (2 cr)

See [Biol 382](#) Lab training in modern methods. One 3-hr lab and one 1-hr recitation a wk. (Fall only)

Prereq: Chem 101 or 111, and 278

Prereq or Coreq: MMBB 380 or Equivalent

MMBB 400 (s) Seminar (1cr, max arr)

See [Biol 400](#) May be used as a science elective after 1 required credit, up to a maximum of 4 credits. Graded P/F.

Prereq: Permission

MMBB 401 Undergraduate Research (1-4 cr, max 8)

See [Biol 401](#) Individual study.

Prereq: Permission of instructor

MMBB J409/J509 Immunology (3 cr)

See [Biol J432/J532](#) Carries no credit after MMBB-WS426. Theory and mechanisms of the cellular basis of immune response; antibody structure, function, and synthesis; cell-mediated immunity; complement; hypersensitivity; immunologic diseases; transplantation; tumor immunity. Extra oral and/or written assignments required for graduate credit. (Fall only)

Coreq: MMBB 300 or 380

MMBB J412/J513 Pathogenic Microbiology (3 cr)

See [Biol J433/J533](#) Epidemiology, host-parasite relationships, pathology, host response; treatment, prevention, and control of pathogenic microorganisms. Extra oral and/or written assignments required for graduate credit. (Spring, alt/yrs)

Prereq: MMBB 250

MMBB J422/J522 Cellular and Molecular Basis of Disease (3 cr)

See [Biol J441/J541](#) Basic principles of cell biology explored in the context of human diseases. Emphasis on molecular mechanisms of cancer, Alzheimer's disease and prion diseases. Extra oral assignment required for grad cr. Recommended Preparation for 422: MMBB 475. Recommended Preparation for 522: MMBB 575. (Fall only)

Prereq for 422: Biol 210 or Gene 314, and MMBB 380

Prereq for 522: MMBB 541

MMBB J432/J532 Virology (3 cr)

See [Biol J447/J547](#) A survey of virology, with special emphasis on the molecular basis of replication, host-pathogen interactions and diseases associated with animal viruses. Extra oral and/or written assignments reqd for grad credit. Recommended preparation: MMBB 250. (Fall, alt/yrs)

Prereq: MMBB 380, Biol 210 or Gene 314 or permission

MMBB J463/J563 Molecular Parasitology (3 cr)

See [Biol J462/J562](#) 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 MMBB 475/575 or MMBB 422/522. (Spring only)

Prereq: MMBB 154 or 250, and MMBB 300 or 380, or Permission

MMBB J482/J582 Protein Structure and Function (3 cr)

See [Biol J462/J582](#) Detailed analysis of protein structure and function including enzyme activity, binding, folding and stability, and techniques for structure determination. Additional projects/assignments required for graduate credit. (Fall, alt/yrs)

Prereq for 482: MMBB 380

Prereq for 582: MMBB 541

MMBB J485/J585 Prokaryotic Molecular Biology (3 cr)

See [Biol J485/J585](#) Current theory and experimental basis for prokaryotic DNA, RNA, and protein synthesis, gene regulation and cell wall metabolism. Extra oral and/or written assignments required for graduate credit. (Spring only)

Prereq: MMBB 250 and MMBB 380

MMBB J487/J587 Eukaryotic Molecular Genetics (3 cr)

See [Biol J487/J587](#) Molecular basis of genetics of eukaryotes. Extra oral and/or written assignments required for graduate credit. Recommended preparation: MMBB J485/J587 and MMBB J488/J588. (Fall only)

~~Prereq: MMBB 380 and Biol 210 or Gene 314~~

MMBB 497 (s) Practicum in Teaching (2 cr)

~~See Biol 491. Teaching by advanced students under faculty supervision.~~

~~Prereq: Permission~~

MMBB 511 Research and Curriculum Progress (1 cr, max arr)

~~See Biol 524. Required of all graduate students one semester per year. The grade is based on preparation of an oral and written presentation of research goals and coursework for the completion of the degree. A letter grade is assigned by committee members at the time of the student's graduate committee meeting. Recommended preparation: Undergraduate degree in Microbiology, Biochemistry or related topic.~~

MMBB 590 Teaching Practicum (2 cr)

~~See Biol 590. Teaching by master's students under faculty supervision.~~

~~Prereq: Permission~~

MMBB 591 Teaching Practicum (2 cr, max 4)

~~See Biol 591. Teaching by Ph.D. students under faculty supervision.~~

~~Prereq: Permission~~

9. Change the curricular requirements of **Reproductive Biology** (GR Academic Certificate) [**Effective:** Summer 2013]

Note: A grade of 'B' or higher is required in all coursework for this academic certificate. This Academic Certificate is intended for Graduate students currently enrolled at the University of Idaho. Please contact the Department of Biological Sciences if you are interested in pursuing this program.

~~AVS 452 Physiology of Reproduction (4 cr)
Biol 551 Seminar on Reproductive Biology (1 cr)
Biol 553 Ethical Issues in Biological Research (1 cr)~~

~~One of the following required courses (3-4 cr):~~

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

~~Electives (6-7 cr):~~

~~AVS 218 Artificial Insemination and Pregnancy Detection (2 cr)
AVS 222 Animal Reproduction and Breeding (3 cr)
AVS 451 Endocrine Physiology (3 cr)
AVS 452 Physiology of Reproduction (4 cr)
Biol 450 Comparative Vertebrate Reproduction (3 cr)
Biol 474 Principles of Developmental Biology (3 cr)
Biol 558 Reproductive Biology of Fishes (2 cr)~~

~~Courses to total 12 credits for this certificate~~

Business

1. Drop the following course [**Effective:** Summer 2013]

Bus 364 Insurance (3 cr)

Major branches of insurance; principles and practices.

Recommended Equivalent Course: Bus 469

2. Add the following course [**Effective:** Summer 2013]

Bus 469 Risk and Insurance (3 cr)

Examines risk and insurance, covering risk identification and measurement, risk reduction and hedging, and insurance pricing.

Prereq: Acct 310, Bus 302, Bus 340, Bus 341, Bus 342, Bus 343, Bus 344, Bus 345, and Econ 340; or instructor permission

Recommended Equivalent Course: Bus 364

3. Change the following courses [**Effective:** Summer 2013]

Bus 324 ~~Buyer~~ Consumer Behavior (3 cr)

Behavioral science theories, concepts, and methods applied to the understanding and prediction of consumer behavior, including industrial buyer behavior; emphasis on structuring marketing policy to fulfill consumer requirements. May involve evening exams.

Prereq: Bus 321; OR Prereq or Coreq: Bus 343

Bus 407 Financial Institutions (3 cr)

Examines management and regulation of financial institutions, including structure of global financial markets and the measurement and management of risk for these institutions. Management and regulation of commercial and nonmonetary financial institutions including savings and loan institutions. May involve evening exams.

Prereq: Acct 310, Bus 302, Bus 340-345, and Econ 340

Bus 465 Introduction to Market Trading (1 or 3 cr, max 6)

Provides students practical experiences in the analysis of financial conditions and markets with the objective of developing trading and risk management strategies. Professional trading analysis software is used. The major topics covered include financial instruments, fundamental and technical analysis of markets, inter-market analysis, and risk management. First time students will take 3 cr, subsequent enrollment of 1 cr. First time: The course provides students practical experiences in the analysis of financial conditions and markets with the objective of developing trading and risk management strategies. Professional trading analysis software is used. The major topics covered include financial instruments, fundamental and technical analysis of markets, inter market analysis, and risk management. Subsequent enrollment: An applied version of the course with a funded account through the Barker Trading and Risk Management program. Recommended Preparation: Econ 201 and Econ 202 or Econ 272; and Stat 251. (Fall only)

Prereq: *Permission*

Bus 466 Market Trading Strategies (1 or 3 cr, max 6)

Provides students practical experiences in the analysis of financial conditions and markets with the objective of developing trading and risk management strategies. Professional trading analysis software is used. Students in this class will develop strategies that can be submitted for funding by the Barker Trading Program. First time students will take 3 cr, subsequent enrollment of 1 cr. First time: The course provides students practical experiences in the analysis of financial conditions and markets with the objective of developing trading and risk management strategies. Professional trading analysis software is used. Students in this class will develop strategies that can be submitted for funding by the Barker Trading Program. Subsequent enrollment: An applied version of the course with a funded account through the Barker Trading and Risk Management program. (Spring only)

Prereq: *Bus 465 and Permission*

Bus 467 Barker Capital Management Group (1 cr, max 46)

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

Prereq: *Permission*

Econ 201 Principles of Economics Macroeconomics (3 cr)

May be used as core credit in J-3-d. Econ 201 and 202 may be taken in either order. Organization and operation of American economy; supply and demand, money and banking, macroeconomic analysis of employment, aggregate output and inflation, public finance, and economic growth. Econ 201 or 202 carry only two cr after 272. May involve some evening exams.

Econ 202 Principles of Economics Microeconomics (3 cr)

May be used as core credit in J-3-d. Econ 201 and 202 may be taken in either order. Microeconomic principles governing production, price relationships, and income distribution. Econ 201 or 202 carry only two cr after 272. May involve some evening exams.

4. Change the college curricular requirements for **All CBE Majors (B.S.Bus.) [Effective: Summer 2013]**

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Select one Environmental Related Course from the following (3 cr):

CORS 207	Integrated Science: Sustainable Forestry (3 cr)
Econ 385	Environmental Economics (3 cr)***
EnvS 101	Introduction to Environmental Science (3 cr)
EnvS 225	(s) International Environmental Issues Seminar (3 cr)
EnvS 428	Pollution Prevention (3 cr)
EnvS 479	Introduction to Environmental Regulations (3 cr)
EnvS 482	Natural Resource Policy and Law (3 cr)
For 221	Ecology (3 cr)
For 235	Society and Natural Resources (3 cr)
For 383	Economics for Natural Resource Managers (3 cr)
For 462	Watershed Science and Management (3 cr)
Geol 361	Geology and the Environment (3 cr)
Hist 424	American Environmental History (3 cr)
Phil 552	Environmental Philosophy (3 cr)
PolS 364	Politics of the Environment (3 cr)

Nonbusiness electives (5-10 cr)

* *Students selecting Econ 272 must take one additional UI core course in humanities or social science.*

** *To be chosen from courses that will satisfy regulation J-3.*

****Note: Econ 385 Environmental Economics does not satisfy the Upper Division Economics requirement. If Econ 385 is used to fulfill the environmental requirement, it cannot double count as the upper-division economics requirement.*

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5. Change the curricular requirements **Finance (B.S.Bus.) [Effective: Summer 2013]**

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

Acct 315 Corporate Accounting and Reporting I (3 cr)
 Bus 302 Intermediate Financial Management (3 cr)
 Bus 407 Financial Institutions (3 cr)
 Bus 409 ~~Problems in Financial Management (3 cr)~~
 Upper-Division economics courses (3 cr)

Tier 1 Finance electives, select one of the following (3 cr):

Bus 409 ~~Problems in Financial Management (3 cr)~~
 Bus 469 ~~Risk and Insurance (3 cr)~~

Tier 2 Finance electives, select two of the following (6 cr):

Bus 408 Security Analysis (3 cr)
 Bus 463 Portfolio Management (3 cr)
 Bus 464 Derivatives and Risk Management (3 cr)
 Bus 465 Introduction to Market Trading (3 cr)

Supporting electives, select two of the following (6 cr):

Acct 385 Cost and Management Accounting (3 cr)
 Acct 414 Corporate Accounting and Reporting II (3 cr)
 Acct 415 Advanced Financial Accounting and Reporting (3 cr)
 Acct 483 Fundamentals of Federal Taxation (3 cr)
 Bus 362 Real Property Appraisal **or**
 Bus 364 Insurance (3 cr)
 Bus 378 Project Management (3 cr)
 Bus 381 International Finance (3 cr)
 Bus 414 Entrepreneurship (3 cr)
 Bus 415 New Venture Creation (3 cr)
 Bus 421 Marketing Research and Analysis (3 cr)
 Bus 427 Services Marketing (3 cr)
 Bus 439 Systems and Simulation (3 cr)
 Bus 456 Quality Management (3 cr)
 Econ 343 Money and Banking (3 cr)
 Econ 352 Intermediate Microeconomic Analysis (3 cr)
 Econ 353 Quantitative Economics and Forecasting (3 cr)
 Econ 407 Public Finance (3 cr)
 Econ 453 Econometrics (3 cr)
 Stat 431 Statistical Analysis (3 cr)

Two of the following may be used if not used to satisfy the ~~above~~ **Tier 2** Finance elective:

Bus 381 International Finance (3 cr)
 Bus 408 Security Analysis (3 cr)
 Bus 463 Portfolio Management (3 cr)
 Bus 464 Derivatives and Risk Management (3 cr)
 Bus 465 Introduction to Market Trading (3 cr)

Courses to total 128 credits for this degree

**Note: These courses may be taken as supporting electives if they are not being used to satisfy the upper-division economics course required above.*

6. Change the curricular requirements Marketing (B.S.Bus.) [Effective: Summer 2013]

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

Bus 324 Buyer Behavior (3 cr)
 Bus 421 Marketing Research and Analysis (3 cr)
 Bus 428 Marketing Management (3 cr)

One of the following communication courses (3 cr):

Comm 233 Interpersonal Communication (3 cr)
 Comm 235 Organizational Communication (3 cr)
 Comm 332 Communication and the Small Group (3 cr)
 Comm 410 Conflict Management (3 cr)

Tier 1 Marketing Electives: Three credits of the following courses (3 cr):

Bus 420 ~~Promotional Strategy (3 cr)~~
 Bus 422 ~~Personal Selling and Sales Force Management (3 cr)~~
 Bus 424 ~~Pricing Strategy and Tactics (3 cr)~~
 Bus 425 ~~Retail Distribution Management (3 cr)~~
 Bus 426 ~~Marketing Channels Management (3 cr)~~
 Bus 427 ~~Services Marketing (3 cr)~~
 Bus 429 ~~Vandal Solutions (1-6 cr, max 6)~~
 Bus 482 ~~International Marketing (3 cr)~~
 Bus 495 ~~Product Development and Brand Management (3 cr)~~

Tier 2 Business Elective: ~~o~~One upper division (300-400 level) CBE, statistics, or mathematics courses, (excluding Bus 301, Bus 311, Bus 321, Bus 350, Bus 370.) (3 cr)

And one of the following emphases/options:

A. General Marketing Emphasis

Tier 1 Marketing Electives: Six credits of the following courses (6 cr):

- Bus 420 Promotional Strategy (3 cr)
- Bus 422 Personal Selling and Sales Force Management (3 cr)
- Bus 424 Pricing Strategy and Tactics (3 cr)
- Bus 425 Retail Distribution Management (3 cr)
- Bus 426 Marketing Channels Management (3 cr)
- Bus 427 Services Marketing (3 cr)
- Bus 429 Vandal Solutions (1-6 cr, max 6)
- Bus 482 International Marketing (3 cr)
- Bus 495 Product Development and Brand Management (3 cr)

One the following courses (3 cr):

- Bus 427 Services Marketing (3 cr)
- Bus 495 Product Development and Brand Management (3 cr)

One the following courses (3 cr):

- AgEc 333 Introduction to Sales (3 cr)
- Bus 420 Promotional Strategy (3 cr)
- Bus 422 Personal Selling and Sales Force Management (3 cr)

One the following courses (3 cr):

- Bus 425 Retail Distribution Management (3 cr)
- Bus 426 Marketing Channels Management (3 cr)

One the following courses (3 cr):

- Bus 424 Pricing Strategy and Tactics (3 cr)
- Econ 352 Intermediate Microeconomic Analysis (3 cr)*

Research Elective: select a total of three credits from the following courses (3 cr)*:

- Math 160 Survey of Calculus or
- Math 170 Analytic Geometry and Calculus I (4 cr)
- Math 330 Linear Algebra (3 cr)
- Math 451 Probability Theory (3 cr)
- Stat 431 Statistical Analysis (3 cr)
- Stat 422 Sample Survey Methods (3 cr)
- Stat 433 Econometrics (3 cr)**
- Stat 514 Nonparametric Statistics (3 cr)

Other research methods class as approved by your advisor and the marketing area

Courses to total 128 credits for this degree

**Note: Econ 352 cannot be used to also satisfy the upper-division economics requirement.*

**Note: Courses that are used to satisfy the CBE General Core Mathematics requirement may not be used to fulfill the Research Elective.*

***Note: Stat 433/Econ 453 Econometrics does not satisfy the Upper-Division Economics requirement if used to satisfy the Research Elective.*

B. Entrepreneurship Emphasis

- Acct 482 or Enterprise Accounting (3 cr)
- Acct 582
- Bus 414 Entrepreneurship (3 cr)
- Bus 415 New Venture Creation (3 cr)

Tier 1 Marketing Electives: Three credits of the following courses (3 cr):

- Bus 420 Promotional Strategy (3 cr)
- Bus 422 Personal Selling and Sales Force Management (3 cr)
- Bus 424 Pricing Strategy and Tactics (3 cr)
- Bus 425 Retail Distribution Management (3 cr)
- Bus 426 Marketing Channels Management (3 cr)
- Bus 427 Services Marketing (3 cr)
- Bus 429 Vandal Solutions (1-6 cr, max 6)
- Bus 482 International Marketing (3 cr)
- Bus 495 Product Development and Brand Management (3 cr)

Entrepreneurship Practicum/Internship/Vandal Solutions (3 cr)

Courses to total 128 credits for this degree

C. PGA Golf Management Option

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7. Change the curricular requirements **Operations Management (B.S.Bus.) [Effective: Summer 2013]**

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

- Bus 378 Project Management (3 cr)
- Bus 439 Systems and Simulation (3 cr)
- Bus 456 Quality Management (3 cr)
- Bus 470 Supply Chain Management (3 cr)
- Bus 472 Operations Planning and Scheduling (3 cr)

Three courses selected from the following (9 cr):

Acct 305	Accounting Information Systems (3 cr)
Acct 315	Corporate Accounting and Reporting I (3 cr)
Acct 385	Cost and Management Accounting (3 cr)
Acct 492	Auditing and Controls (3 cr)
Bus 302	Intermediate Financial Management (3 cr)
Bus 353	Data and Information Management (3 cr)
Bus 355	Systems Analysis and Design (3 cr)
Bus 398	Internship (must be taken for 3 cr to satisfy this requirement)
Bus 409	Problems in Financial Management (3 cr)
Bus 412	Human Resource Management (3 cr)
Bus 413	Leadership and Organizational Behavior (3 cr)
Bus 418	Organization Design and Changes (3 cr)
Bus 425	Retail Distribution Management (3 cr)
Bus 426	Marketing Channels Management (3 cr)
Bus 427	Services Marketing (3 cr)
Bus 428	Marketing Management (3 cr)
Bus 441	Labor Relations (3 cr)
Bus 453	Database Design (3 cr)
Bus 463	Portfolio Management (3 cr)
Bus 495	Product Development and Brand Management (3 cr)
Econ 385	Environmental Economics (3 cr)
Econ 441	Labor Economics (3 cr)
Econ 447	International Development Economics (3 cr)
EnvS 428	Pollution Prevention (3 cr)
ME 410	Principles of Lean Manufacturing (3 cr)
Stat 431	Statistical Analysis (3 cr)
Stat 446	Six Sigma Innovation (3 cr)

Any upper-division (300-400-level) College of Business and Economics courses (excluding Bus 301, Bus 311, Bus 321, Bus 350, Bus 370)

Any one business, culture, economics or language class that includes a significant international experience component (3 cr)

Courses to total 128 credits for this degree

8. Change the curricular requirements **Business (Minor)** [Effective: Summer 2013]

This minor is not open to students pursuing other college business options (e.g., foreign language/business option, music/business option, forest products/business option) or to students pursuing a major in the College of Business and Economics.

Students in the business minor must achieve at least a 2.35 GPA in statistics, economics, and accounting courses before enrolling in upper-division CBE courses.

Acct 201	Introduction to Financial Accounting (3 cr) <u>and</u>
Acct 202	Introduction to Managerial Accounting (6 cr)
Econ 202	Prin of Economics <u>or</u>
Econ 272	Foundations of Econ Analysis (3-4 cr)
Stat 251	Prin of Statistics <u>or</u>
Stat 301	Probability and Statistics (3-4 cr)

One of the following (3-4 cr):

<u>Econ 202</u>	<u>Principles of Microeconomics (3 cr)</u>
<u>Econ 272</u>	<u>Foundations of Econ Analysis (4 cr)</u>

Five of the following courses (or Bus 340-345) (15 cr)

Bus 101	Introduction to Business Enterprises (3 cr)
Bus 301	Financial Management (3 cr)
Bus 311	Introduction to Management (3 cr)
Bus 321	Marketing (3 cr)
Bus 350	Management Information Systems <u>or</u>
Bus 351	Introduction to Electronic Commerce (3 cr)
Bus 370	Introduction to Operations Management (3 cr)

One of the following groups of courses (15-17 cr):

Group A:

<u>Bus 301</u>	<u>Financial Management (3 cr)</u>
<u>Bus 311</u>	<u>Introduction to Management (3 cr)</u>
<u>Bus 321</u>	<u>Marketing (3 cr)</u>

Six credits taken from Bus 101 or any other 300- or 400-level BUS prefix course

or

Group B:

<u>Bus 340</u>	<u>Team Building and Group Dynamics (2 cr)</u>
<u>Bus 341</u>	<u>Business Systems (4 cr)</u>
<u>Bus 342</u>	<u>Product and Process Planning (3 cr)</u>
<u>Bus 343</u>	<u>Planning and Decision-Making in Organizations (2 cr)</u>
<u>Bus 344</u>	<u>Managing the Firm's Resources (3 cr)</u>
<u>Bus 345</u>	<u>Business Operating Decisions (3 cr)</u>

Courses to total ~~20-21~~ credits for this minor

Chemistry

1. Change the following courses [**Effective:** Summer 2013]

Chem 455 Survey of Analytical Chemistry (3 cr)

Fundamentals of modern analytical chemistry. Open only to chemistry M.S. and Ph.D. students. ~~Cr is not allowed in both Chem 454 and 455.~~

~~Prereq: Chem 306 and Permission~~

Chem 476 Survey of Organic Chemistry (3 cr)

Fundamentals of modern organic chemistry. Open only to chemistry M.S. and Ph.D. students. ~~Cr is not allowed in both Chem 473 and 476.~~

~~Prereq: Chem 306 and Permission~~

Chem 495 ~~Statistical Thermodynamics and Kinetics~~ (3 cr)

~~See Phys 433.(Fall only)~~

~~Prereq: Chem 306 or Equivalent~~

Chem 496 Survey of Physical Chemistry (3 cr)

Fundamentals of modern physical chemistry. Open only to chemistry M.S. and Ph.D. students. ~~Cr is not allowed in both Chem 495 and 496.~~

~~Prereq: Chem 306 and Permission~~

Civil Engineering

1. Add the following courses [**Effective:** Summer 2013]

CE 507 River Restoration (3 cr)

This course focuses on the principles and practices used in river restoration. The potential assumptions and errors with common restoration methodologies and possible ways to improve such channel designs are discussed. A number of case studies are used to evaluate the success of various restoration techniques. The course includes homework sets and individual projects and has a mandatory field trip to a local restored site. Recommended classes to take prior to this include at least one of the following: CE 535, CE 322, CE 428, or CE 520.

Prereq: Engr 335 or Instructor Permission

CE 550 Experimental Methods in Fluid Dynamics(3 cr)

See ME J451/J551.

Short Course Title: Exp Methods Fluid Dynamics

Computer Science

1. Add the following courses [**Effective:** Summer 2013]

CS J460/J560 Database Management Systems Design (3 cr)

Theory, analysis and implementation of database architecture, security, performance, query optimization, recovery and concurrency control, reliability, integrity, commit protocols, distributed processing, deadlock detection and management. Additional projects/assignments required for graduate credits.

Prereq: CS 360

Short Course Title: Database Mgmt System Design

2. Change the curricular requirements of **Computer Science (B.S.C.S.)** [**Effective:** Summer 2013]

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

General Education ~~and Broadening~~ Electives (~~9-5~~ cr):

Comm 101 Fundamentals of Public Speaking (2 cr)

Engl 317 Technical Writing (3 cr)

~~Broadening Electives (4 cr)~~

Computer Science (43 cr):

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Conservation Social Sciences

1. Change the following course and change from dormant to active [**Effective:** Summer 2013]

CSS 566 Adv. Field Ecology Course Design (5 cr)

Address designing field ecology courses that include research, outdoor leadership, and natural history components. Students will design the following: a program to teach students about ecological information and engage them in the scientific process; [an adventure-based curriculum for backcountry experience for high school and middle school students](#); [a program on basic bird, mammal, insect, and plant identification and explore ecological concepts in the process, and; naturalist skills an investigation of a local ecological issue and the scientific and social components of that issue.](#) (Summer only)

2. Change the following course [**Effective:** Summer 2013]

CSS 386/475 Conservation Management and Planning II (4 cr)

Advanced theory, processes, and techniques for the management and planning of conservation systems including conservation organizations, natural areas, and their uses; focuses on resource and user management programs and techniques such as programming, budgeting, financing, contracting, and personnel management processes, as well as conservation planning processes including operational, strategic, and long-range planning for natural sites and larger landscapes. A required 2-day field trip, collaborative group projects and a Service-Learning project are required. (Spring only)

Prereq: CSS 385 and Junior or Senior standing; or Permission

Short Course Title: Conservation Mgmt & Planning 2

Electrical and Computer Engineering

1. Change the following course [**Effective:** Summer 2013]

ECE 240 Digital Logic (3 cr)

Number systems, truth tables, logic gates, flip-flops, combinational and synchronous sequential circuits [using SSI, MSI, and programmable devices](#); intro to digital systems and basic microprocessor architecture; certification exam not reqd.

Prereq: Phys 212/212L

Coreq: ECE 241

English

1. Add the following courses [**Effective:** Summer 2013]

Engl J435/J535 Foundations of Screenwriting (3 cr)

See The J441/J541.

Engl 444 Sociolinguistics (3 cr)

Introduces the study of the relationship among language, society and culture. Specific topics include (1) native and nonnative variation of English, (2) language attitudes and ideology, (3) multilingualism, and (4) social class and gender. Provides practice in the methods for collecting and analyzing linguistic data. Examines educational and political implications.

Prereq: Engl 441 or Permission

2. Change the following courses [**Effective:** Summer 2013]

Engl 440 (s) Reading, Writing, and Rhetoric (3 cr)

[A capstone course in which students work with clients to practice writing in professional genres. Required of students in the professional emphasis and writing minor.](#) ~~Selected Topics in rhetoric related to literary practices.~~ (Spring)

Prereq: [Engl 102 Senior standing or 24 credits of English courses](#)

Editor's Note: Engl 102 is a prereq to all UPDV English courses.

Engl 490 Senior Seminar (3 cr)

[A capstone course in which students use the skills learned in the major to explore a common topic, produce a substantial writing project and situate themselves and their work within literary, interdisciplinary and non-academic contexts. Required of English majors in literature and creative writing emphases.](#) ~~A capstone course in which students pursue individual projects that situate their areas of concentration within an interdisciplinary and practical/professional context. Required of English majors in literature, creative writing, and professional emphasis.~~

Prereq: Senior standing or 24 credits of English courses

Environmental Science

1. Add the following courses [**Effective:** Summer 2013]

EnvS J415/J515 Environmental Lifecycle Assessment (3 cr)

Environmental life cycle assessment is the study of the environmental impacts resulting from the human production of goods and services from raw material acquisition through ultimate disposition. The class covers the basic concepts of life cycle assessment including definition of system boundaries, inventory of energy and material inputs and resultant emissions, assessment of impacts on human health and the

environment, and interpretation of results. Recommended preparation: basic physical and biological sciences and familiarity with spreadsheet programs such as Excel. Additional assignment/projects required for graduate credit.

Short Course Title: Env. Lifecycle Assessment

2. Change the following courses [Effective: Summer 2013]

EnvS 497 (s) Senior Research (3-2-4 cr, max 4)

May be used as core credit in J-3-d. Open only to majors in environmental science. Preparation of proposal, poster, formal presentation and written thesis or report based on research or project conducted with a faculty member. Research addresses an environmental problem using laboratory, field, or library techniques. (Spring-only)

Prereq: Senior standing

Prereq or Coreq: [Engl 316](#) or [Engl 317](#) or Equivalent

3. Change the curricular requirements of **Environmental Science (B.S.Env.S.)** [Effective: Summer 2013]

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

Biol 115 Cells and the Evolution of Life (4 cr)
 Chem 111 Principles of Chemistry I (students in social science option may substitute Chem 101) (4 cr)
 Comm 101 Fundamentals of Public Speaking or 3-4 cr in foreign language courses (2-4 cr)
 EnvS 101 Introduction to Environmental Science (3 cr)
 EnvS 102 Field Activities in Environmental Sciences (1 cr)
 EnvS 225 International Environmental Issues Seminar (3 cr)
 EnvS 400 Seminar (1 cr)
[EnvS 497](#) [Senior Research \(3 cr\)](#)
 Phil 452 Environmental Philosophy (3 cr)
[Stat 251](#) [Statistical Methods \(students in physical science 2 option may substitute Stat 301\) \(3 cr\)](#)

One of the following (3 cr):

[Stat 251](#) [Statistical Methods \(3 cr\)](#)
[Stat 301](#) [Probability and Statistics \(3 cr\)](#)

And one of the following options:

A. Biological Science Option

This option is suitable for students wishing to pursue technically oriented careers in environmental professions such as natural resource management, bioremediation, and environmental impact analysis.

Chem 112 Principles of Chemistry II (5 cr)
 Engl 317 Technical Writing (3 cr)
[EnvS 497](#) [Senior Research \(4 cr\)](#)
[Geog 100, 100L](#) [Physical Geography and Lab or](#)
[Geol 101, 101L](#) [Physical Geology and Lab \(4 cr\)](#)
[Math 170](#) [Analytic Geometry and Calculus I or](#)
[Math 160](#) [Survey of Calculus \(4 cr\)](#)
 MMBB 250 General Microbiology (3 cr)

One of the following (4 cr):

[Geog 100, 100L](#) [Physical Geography and Lab \(4 cr\)](#)
[Geol 101, 101L](#) [Physical Geology and Lab \(4 cr\)](#)

One of the following (3 cr):

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

Advisor-directed breadth electives, incl at least one course from the first four areas [and 9 credits from the technical area](#) (24 cr):

Ecology
 Biol 314 Ecology and Population Biology (4 cr)
 For 221 Ecology (3 cr)
 Geog 410 Biogeography (3 cr)
[MMBB 425](#) [Microbial Ecology \(3 cr\)](#)
 REM 221 Ecology (3 cr)
 Natural Resource Economics and Sociology
 AgEc 451 Applied Environmental and Natural Resource

[Anth 220](#)
[CSS 383](#)

Econ 385
 For 235

Management
[Bus 378](#)
[ChE 470](#)
 CSS 486
 For 484
 Geog 411
[Geog 420](#)

History, Philosophy, and Political Science

AgEc 477
 CSS 489
[EnvS 484](#)
 Hist 424
 Phil 351
[Phil 417](#)
 PoLS 364

Technical
[Biol 116](#)
 Biol 213

CE 326
 Chem 253,
 Chem 254
 Chem 275
 Chem 277 and
[Chem 372](#)

[Chem 302](#)
[Chem 305-
 Chem 306](#)
[Chem 303](#)
[Chem 418](#)

EnvS 428
 EnvS 429
 EnvS 479
 EnvS 498
 For 472 or
 REM 472

Geog 202
 Geog 301
 Geog 401
 Geog 385
[Geog 450](#)
[Geog 483](#)

Geol 309
 Geol 361
 Math 175
[Math 275](#)
[MMBB 380](#)
 Phys 111,
 111L
 Phys 211,
 211L

Economics (3 cr)

[Peoples of the World \(3 cr\)](#)
[Natural Resource and Ecosystem Service Economics \(3 cr\)](#)

Environmental Economics (3 cr)
 Society and Natural Resources (3 cr)

[Project Management \(3 cr\)](#)

[Hazardous Waste Management \(3 cr\)](#)
 Public Involvement in Natural Resource Mgt (3 cr)
 Forest Policy and Administration (2 cr)
 Natural Hazards and Society (3 cr)
[Land, Resources, and Environment \(3 cr\)](#)

Law, Ethics, and the Environment (3 cr)
 Personalities and Philosophies in Conservation (2 cr)

[History of Energy \(3 cr\)](#)

American Environmental History (3 cr)
 Philosophy of Science (3 cr)
[Philosophy of Biology \(3 cr\)](#)
 Politics of the Environment (3 cr)

[Organisms and Environments \(4 cr\)](#)

Principles of Biological Structure and Function (4 cr)
 Hydrologic Measurement Techniques (1 cr)
 Quantitative Analysis and Lab (5 cr)

Carbon Compounds [\(3 cr\)*](#)
 Organic Chemistry (3 cr)*

[Principles of Physical Chem or
 Physical Chem \(3 cr\)](#)

[Principles of Physical Chem Lab \(1 cr\)](#)
[Environmental Chemistry \(3 cr\)](#)

Pollution Prevention (3 cr)
 Environmental Audit (3 cr)
 Introduction to Environmental Regulation (3 cr)
 Internship (1-3 cr)
 Remote Sensing of Environment (4 cr)

Global Climate Change (3 cr)

Meteorology [\(3 cr\) or](#)
 Climatology (3 cr)
 GIS Primer (3 cr)
[Global Environmental Change \(3 cr\)](#)
[Remote Sensing/GIS Integration \(3 cr\)](#)
 Ground Water Hydrology (3 cr)
 Geology and the Environment (3 cr)
 Analytic Geometry and Calculus II (4 cr)
[Analytic Geometry and Calculus III \(3 cr\)](#)
[Introductory Biochemistry \(4 cr\)](#)
 General Physics I and Lab [\(4 cr\)** or](#)

Engineering Physics I and Lab (4 cr)**

Phys 112, General Physics II and Lab (4 cr)***-or
 112L
 Phys 212, Engineering Physics II and Lab (4cr)***
 212L
 Soil 205 The Soil Ecosystem (3 cr)
**Note: Either Chem 275 or Chem 277 may be used as a technical breath elective.
**Note: Either Phys 111/111L or Phys 211/211L may be used as a technical breath elective.
***Note: Either Phys 112/112L or Phys 212/212L may be used as a technical breath elective.

Advisor-approved depth electives – take 4 courses in any depth area unless otherwise noted include all the courses from at least two of the following areas (20 cr):

Plant Protection
 Ent 322 General and Applied Entomology (3 cr)
 PISc 338 Weed Control (3 cr)
 PISc 410 Invasive Plant Biology (3 cr)
 PISc 415 Plant Pathology (3 cr)
 Soil 446 Soil Fertility (1-3 cr, max 3)

Animal Ecology
 WLF 314 Wildlife Ecology I (3 cr)
 WLF 315 Wildlife Ecology I Laboratory (1 cr)
 WLF 316 Wildlife Ecology II (4 cr)
 WLF 448 Fish and Wildlife Population Ecol or
 WLF 440 Conservation Biol (3-4 cr)

Aquatic Ecology
 Take 3 of the 4 courses listed below:
 Ent 472 Aquatic Entomology (3 cr)
 Fish 314 Fish Ecology (3 cr)
 Fish 415 Limnology (4 cr)
 Fish 430 Riparian Ecology and Management (3 cr)

Forest and Range Systems
Take 4 of the 7 courses listed below:
 For 330 Forest Ecosystem Processes (2 cr)
 For 423 Forest Community Ecology (1 cr)
 For 426 Wildland Fire Ecology and Management (3 cr)
 REM 357 Ecological Monitoring and Analysis (4 cr)
 REM 429 Landscape Ecology (3 cr)
 REM 440 Wildland Restoration Ecology (3 cr)
 REM 459 Rangeland Ecology (2 cr)

Soils
FS 409 Principles of Environmental Toxicology (3 cr)
Soil 425 Microbial Ecology (3 cr)
Soil 437 Soil Biology (3 cr)
 Soil 438 Pesticides in the Environment (3 cr)
Soil 446 Soil Fertility (1-3 cr, max 3)
Soil 454 Pedology (3 cr)

Water
Take at least 4 of the 7 courses listed below:
 BAE 450 Environmental Hydrology (3 cr)
 EnvS 446 Drinking Water and Human Health (3 cr)
 For 462 Watershed Management (3 cr)
 Geol 309 Ground Water Hydrology (3 cr)
 Geol 410 Techniques of Ground Water Study (3 cr)
Geol 464 The Geochemistry of Natural Waters (3 cr)
 Hydr 412 Environmental Hydrogeology (3 cr)

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

Geospatial Tools
 Take at least 3 of the 6 courses listed below:
 For 472 or Remote Sensing of Environment (4 cr)
 REM 472
 Geog 385 GIS Primer (3 cr)
 Geog 424 Hydrogeologic Applications in GIS and Remote Sensing (3 cr)
 Geog 475 Intermediate GIS (3 cr)
 Geog 483 Remote Sensing/GIS Integration (3 cr)
 LArc 495 Computer-Aided Regional Landscape Planning (3 cr)

Environmental Chemistry

Chem 418 Environmental Chemistry (3 cr)
Ent 438 Pesticides in the Environment (3 cr)
FS 409 Principles of Environmental Toxicology (3 cr)

Climate Change and Ecosystems (take all **43**):
 CSS 383 Natural Resource and Ecosystem Service Economics (3 cr)

Geog 202 Global Climate Change (3 cr)
 Geog 410 Biogeography (3 cr)
Geog 450 or Global Environmental Change (3 cr)
REM 450

Courses to total 120 credits for this degree

B. Physical Science Option

This option is suitable for students wishing to pursue technical careers in environmental professions such as air, soil, and water pollution abatement, hazardous waste management, waste minimization, and ecological restoration.

Chem 112 Principles of Chemistry II (5 cr)
 Engl 317 Technical Writing (3 cr)
EnvS 497 Senior Research (4 cr)
Geog 100, Physical Geography and Lab or 100L
Geol 101, Physical Geology and Lab (4 cr) 101L
 Math 170 Analytic Geometry and Calculus I (4 cr)-or
Math 160 Survey of Calculus (4 cr)
 Phys 111, General Physics I and Lab (4 cr)
 111L

One of the following (4 cr):
Geog 100, Physical Geography and Lab (4 cr)
100L
Geol 101, Physical Geology and Lab (4 cr)
101L

Advisor-directed breadth electives, including at least one course from the first four areas and 9 credits from the technical area (24 cr):

Ecology
 Biol 314 Ecology and Population Biology (4 cr)
 For 221 Ecology (3 cr)
 Geog 410 Biogeography (3 cr)
MMBB 425 Microbial Ecology (3 cr)
 REM 221 Ecology (3 cr)
 Natural Resource Economics and Sociology
 AgEc 451 Applied Environmental and Natural Resource Economics (3 cr)
Anth 220 Peoples of the World (3 cr)
CSS 383 Natural Resource and Ecosystem Service Economics (3 cr)
 Econ 385 Environmental Economics (3 cr)
 For 235 Society and Natural Resources (3 cr)

Management
Bus 378 Project Management (3 cr)
ChE 470 Hazardous Waste Management (3 cr)
 CSS 486 Public Involvement in Natural Resource Mgt (3 cr)
 For 484 Forest Policy and Administration (2 cr)
 Geog 411 Natural Hazards and Society (3 cr)
Geog 420 Land, Resources, and Environment (3 cr)
 REM 456 Integrated Rangeland Management

History, Philosophy, and Political Science
 AgEc 477 Law, Ethics, and the Environment (3 cr)
 CSS 489 Personalities and Philosophies in Conservation (2 cr)
 Hist 424 American Environmental History (3 cr)
 Phil 351 Philosophy of Science (3 cr)
Phil 417 Philosophy of Biology (3 cr)
 PolS 364 Politics of the Environment (3 cr)

Technical
Biol 116 Organisms and Environments (4 cr)
 Biol 213 Principles of Biological Structure and Function (4 cr)
 CE 326 Hydrologic Measurement Techniques (1 cr)
 Chem 253, Quantitative Analysis and Lab (5 cr)

Chem 254
 Chem 275 Carbon Compounds (3 cr)*~~or~~
 Chem 277 and Organic Chemistry (3 cr)*
 Chem 372
 Chem 302 Principles of Physical Chem ~~or~~
 Chem 305- Physical Chem (3 cr)
 Chem 306
 Chem 303 Principles of Physical Chem Lab (1 cr)
 Chem 418 Environmental Chemistry (3 cr)
 EnvS 428 Pollution Prevention (3 cr)
 EnvS 429 Environmental Audit (3 cr)
 EnvS 479 Introduction to Environmental Regulation (3 cr)
 EnvS 498 Internship (1-3 cr)
 For 472 or Remote Sensing of Environment (4 cr)
 REM 472
 Geog 202 Global Climate Change (3 cr)
 Geog 301 Meteorology (3 cr) ~~or~~
 Geog 401 Climatology (3 cr)
 Geog 385 GIS Primer (3 cr)
 Geog 450 Global Environmental Change (3 cr)
 Geog 483 Remote Sensing/GIS Integration (3 cr)
 Geol 309 Ground Water Hydrology (3 cr)
 Geol 361 Geology and the Environment (3 cr)
 Math 175 Analytic Geometry and Calculus II (4 cr)
 Math 275 Analytic Geometry and Calculus III (3 cr)
 MMBB 380 Introductory Biochemistry (4 cr)
 Phys 111, General Physics I and Lab ~~or~~
 111L
 Phys 211, Engineering Physics I and Lab (4 cr)
 211L
 Phys 112, General Physics II and Lab (4 cr)**~~or~~
 112L
 Phys 212, Engineering Physics II and Lab (4 cr)**
 212L
 Soil 205 The Soil Ecosystem (3 cr)
 *Note: Either Chem 275 or Chem 277 may be used as a technical breath elective.
 **Note: Either Phys 112/112L or Phys 212/212L may be used as a technical breath elective.

Advisor-approved depth electives – take 4 courses in any depth area unless otherwise noted from meet requirements of at least two of the following areas (20 cr):

Water
 Take at least 4 of the 7 courses listed below:
 BAE 450 Environmental Hydrology (3 cr)
 EnvS 446 Drinking Water and Human Health (3 cr)
 For 462 Watershed Management (3 cr)
 Geol 309 Ground Water Hydrology (3 cr)
 Geol 410 Techniques of Ground Water Study (3 cr)
 Geol 464 The Geochemistry of Natural Waters (3 cr)
 Hydr 412 Environmental Hydrogeology (3 cr)

Chemistry
 Chem 418 Environmental Chemistry (3 cr)
 Chem 454 Instrumental Analysis (4 cr)
 FS 409 Principles of Environmental Toxicology (3 cr)
 MMBB 380 Introductory Biochemistry (4 cr)

Hazardous Waste
 ChE 470 Hazardous Waste Management ~~or~~
 BAE 433 Bioremediation (3 cr) ~~or~~
 BAE 452 Environmental Water Quality (3 cr)
 Chem 418 Environmental Chemistry (3 cr)
 ChE 480 Engineering Risk Assessment for Hazardous Waste Evaluations (3 cr)
 EnvS 479 Introduction to Environmental Regulations (3 cr)
 FS 409 Principles of Environmental Toxicology (3 cr)
 MMBB 380 Introductory Biochemistry (4 cr)

Geology
 Geol 335 Geomorphology (3 cr)
 Geol 361 Geology and the Environment (3 cr)
 Geol 422 Principles of Geophysics (3 cr)
 Geol 423 Principles of Geochemistry (3 cr)
 Geol 464 The Geochemistry of Natural Waters (3 cr)

Statistics
 GeoE 428 Geostatistics (3 cr)
 Stat 422 Sample Survey Methods (3 cr)
 Stat 431 Statistical Analysis (3 cr)

Mathematics and Statistics
 Math 175 Analytic Geometry and Calculus II (4 cr)
 Math 275 Analytic Geometry and Calculus III (3 cr)
 Math 310 Ordinary Differential Equations (3 cr)
 Math 330 Linear Algebra (3 cr)
 Stat 431 Statistical Analysis (3 cr)

Soils
 Chem 418 Environmental Chemistry (3 cr)
 Soil 415 Soil Physics (3 cr)
 Soil 422 Environmental Soil Chemistry (3 cr)
 Soil 454 Soil Development and Classification-Pedology (3 cr)

Economics and Management
 Take all three courses listed below:
 Bus 378 Project Management (3 cr)
 Econ 385 Environmental Economics (3 cr)
 EnvS 428 Pollution Prevention (3 cr)

Geospatial Tools
 Take at least 3 of the 4 courses listed below:
 For 472 or Remote Sensing of Environment (4 cr)
 REM 472
 Geog 385 GIS Primer (3 cr)
 Geog 424 Hydrogeologic Applications in GIS and Remote Sensing (3 cr)
 Geog 483 Remote Sensing/GIS Integration (3 cr)

Climate Change and Emissions Reduction (take all 4):
 EnvS 485 Energy Efficiency and Conservation (3 cr)
 Geog 202 Global Climate Change (3 cr)
 Geog 401 Climatology (3 cr)
 Geog 435 Climate Change Mitigation (3 cr)

Courses to total 120 credits for this degree

C. Physical Science 2 Option

This option is only available to students in Coeur d'Alene and Idaho Falls

Chem 112 Principles of Chemistry II (5 cr)
 Engl 317 Technical Writing (3 cr)
 EnvS 497 Senior Research (4 cr)
 Geog 100, Physical Geography and Lab ~~or~~
 100L
 Geol 101, Physical Geology and Lab (4 cr)
 101L
 Math 170 Analytic Geometry and Calculus I ~~or~~
 Math 160 Survey of Calculus (4 cr)
 Phys 111, General Physics I and Lab (4 cr)
 111L

One of the following (4 cr):
 Geog 100, Physical Geography and Lab (4 cr)
 100L
 Geol 101, Physical Geology and Lab (4 cr)
 101L

One of the following (3 cr):
 Math 170 Analytic Geometry and Calculus I (4 cr)
 Math 160 Survey of Calculus (4 cr)

Advisor-directed breadth electives, incl at least one course from the first four areas and 9 credits from the technical area (24 cr):

Ecology
 Biol 314 Ecology and Population Biology (4 cr)
 For 221 Ecology (3 cr)

Natural Resource Economics and Sociology
 Anth 220 Peoples of the World (3 cr)
 CTE 410 Technology and Society (3 cr)
 Econ 201 Principles of Macroeconomics (3 cr)
 Econ 202 Principles of Microeconomics (3 cr)
 Econ 272 Foundations of Economic Analysis (4 cr)
 IndT 415 Impact of Technology on Society (3 cr)

Management			
ChE 470	Hazardous Waste Management (3 cr)	ChE 470 or	Hazardous Waste Management (3 cr)
EnvS 436	Principles of Sustainability (3 cr)	ChE 570	
EnvS 479	Introduction to Environmental Regulations (3 cr)	ChE 480 or	Engineering Risk Assessment for Hazardous Waste
For 426	Fire Ecology and Management (3 cr)	ChE 580	Evaluations (3 cr)
For 462	Watershed Science and Management (3 cr)	FS 409	Principles of Environmental Toxicology (3 cr)
Geog 424	Hydrologic Applications of GIS and Remote Sensing (3 cr)	IndT 364	Hazardous Materials (3 cr)
History, Philosophy, and Political Science		Mathematics and Statistics	
EnvS 484	History of Energy (3 cr)	Math 175	Analytic Geometry and Calculus II (4 cr)
Geog 364	Idaho and the Pacific Northwest (3 cr)	Math 275	Analytic Geometry and Calculus III (3 cr)
Hist 423	Idaho and the Pacific Northwest (3 cr)	Math 310	Ordinary Differential Equations (3 cr)
Hist 424	American Environmental History (3 cr)	Math 330	Linear Algebra (3 cr)
PolS 364	Politics of the Environment (3 cr)	Stat 431	Statistical Analysis (3 cr)
Technical		Economics and Management Tools	
Biol 116	Organisms and Environments (4 cr)	Take 3 courses:	
Chem 253,	Quantitative Analysis and Lab (5 cr)	Take at least 4 of the courses listed below:	
Chem 254		EnvS 428	Pollution Prevention (3 cr)
Chem 275	Carbon Compounds (3 cr)	Geog 385	GIS Primer (3 cr)
Chem 277	Organic Chemistry I (3 cr)	Geog 450	Global Environmental Change (3 cr)
Chem 305 or	Physical Chem (3 cr)	Geog 475	Intermediate GIS (3 cr)
Chem 306		Geog 424	Hydrologic Applications of GIS and Remote Sensing (3 cr)
Chem 372	Organic Chemistry II (3 cr)	IndT 364	Hazardous Materials (3 cr)
Chem 418	Environmental Chemistry (3 cr)	IndT 448	Project and Program Management (3 cr)
EnvS 428	Pollution Prevention (3 cr)	Environmental Policy & Regulations	
EnvS 429	Environmental Audit (3 cr)	Take 3 courses; at least 4 of the courses listed below:	
EnvS 479	Introduction to Environmental Regulation (3 cr)	CSS 572	Human Dimensions of Restoration Ecology (3 cr)
EnvS 498	Internship (1-3 cr)	CSS 573	Planning & Decision Making for Watershed Management (3 cr)
For 472	Remote Sensing of the Environment (4 cr)	EnvS 429	Environmental Audit (3 cr)
Geog 385	GIS Primer (3 cr)	EnvS 436	Principles of Sustainability (3 cr)
Geog 450	Global Environmental Change (3 cr)	EnvS 479	Introduction to Environmental Regulations (3 cr)
Geog 475	Intermediate GIS (3 cr)	EnvS 482	Natural Resource Policy and Law (3 cr)
Geol 102,	Historical Geology and Lab (4 cr)	EnvS 581	Applications of Environmental Regulations (3 cr)
102L		Energy Systems	
Geol 309	Ground Water Hydrology (3 cr)	EnvS 483	Water and Energy Systems (3 cr)
Geol 361	Geology and the Environment (3 cr)	EnvS 484	History of Energy (3 cr)
Geol 375	Geology of National Parks (3 cr)	EnvS 485	Energy Efficiency and Conservation (3 cr)
Math 175	Analytic Geometry and Calculus II (4 cr)	IndT 415	Impact of Technology on Society (3 cr)
Math 275	Analytic Geometry and Calculus III (3 cr)	IndT 434	Power Generation and Distribution (3 cr)
MMBB 380	Introductory Biochemistry (4 cr)	Sustainability Science	
Phys 112,	General Physics II and Lab (4 cr)* or	EnvS 415	Environmental Lifecycle Assessment (3 cr)
112L		EnvS 428	Pollution Prevention (3 cr)
Phys 212,	Engineering Physics II and Lab (4 cr)*	EnvS 436	Principles of Sustainability (3 cr)
212L		FS 409	Principles of Environmental Toxicology (3 cr)
REM 407	GIS Application in Fire Ecology and Management (2 cr)	IndT 457	Lean to Green Sustainable Technology (3 cr)
REM 440	Wildland Restoration Ecology (3 cr)	Courses to total 120 credits for this degree	
REM 459	Rangeland Ecology (2 cr)	D. Social Science Option	
REM 560	Plant Ecophysiology (3 cr)	This option is suitable for students wishing to pursue careers in environmental professions such as environmental regulation, land use planning, environmental administration, and as a pre-law program for environmental law.	
Soil 205	The Soil Ecosystem (3 cr)	Engl 309	Advanced Prose Writing or

**Note: Either Phys 112/112L or Phys 212/212L may be used as a technical breath elective.*

Advisor-approved depth electives – **take 4 courses in any depth area unless otherwise noted from meet requirements of** at least two of the following areas (20 cr):

Water

Take at least 4 of the courses listed below:

BAE 450	Environmental Hydrology (3 cr)
CE 433	Water Quality Management (3 cr)
CSS 573	Planning & Decision Making for Watershed Management (3 cr)
EnvS 483	Water and Energy Systems (3 cr)
Fish 540	Wetland Restoration (3 cr)
For 462	Watershed Management (3 cr)
Geol 309	Ground Water Hydrology (3 cr)
Geol 464	The Geochemistry of Natural Waters (3 cr)
Hydr 414	Ground Water-Surface Water Interaction (3 cr)

Chemistry

Chem 418	Environmental Chemistry (3 cr)
Chem 454	Instrumental Analysis (4 cr)
FS 409	Principles of Environmental Toxicology (3 cr)
MMBB 380	Introductory Biochemistry (4 cr)

Hazardous Waste

JAMM 428	Environmental Journalism (3 cr)
Engl 316	Environmental Writing or
Engl 317	Technical Writing (3 cr)
EnvS 497	Senior Research (4 cr)
Geog 100,	Physical Geography and Lab (4 cr)
100L	
Geol 101,	Physical Geology and Lab (4 cr)
101L	
Math 137	Algebra with Applications or
Math 143	Pre-calculus Algebra and Analytic Geom (3 cr)
PolS 235	Political Research Methods and Approaches or
Hist 290	The Historian's Craft or
Phil 201	Critical Thinking (3 cr)

One of the following (3 cr):

Engl 309	Advanced Prose Writing (3 cr)
JAMM 428	Environmental Journalism (3 cr)

One of the following (3 cr):

Engl 316	Environmental Writing (3 cr)
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[Engl 317](#) [Technical Writing \(3 cr\)](#)
[One of the following \(3 cr\):](#)
[Phil 201](#) [Critical Thinking \(3 cr\)](#)
[PoIS 235](#) [Political Research Methods and Approaches \(3 cr\)](#)

Advisor-directed breadth electives, including at least one course from the first four areas [and 9 credits from the technical area](#) (24 cr):

Ecology
 Biol 314 Ecology and Population Biology (4 cr)
 For 221 Ecology (3 cr)
 Geog 410 Biogeography (3 cr)
[MMBB-425](#) [Microbial Ecology \(3 cr\)](#)
 REM 221 Ecology (3 cr)

Natural Resource Economics and Sociology
 AgEc 451 Applied Environmental and Natural Resource Economics (3 cr)

[Anth 220](#) [Peoples of the World \(3 cr\)](#)
[CSS 383](#) [Natural Resource and Ecosystem Service Economics \(3 cr\)](#)

Econ 385 Environmental Economics (3 cr)
 For 235 Society and Natural Resources (3 cr)

Management

[Bus 378](#) [Project Management \(3 cr\)](#)
[ChE 470](#) [Hazardous Waste Management \(3 cr\)](#)
 CSS 486 Public Involvement in Natural Resource Mgt (3 cr)
 For 484 Forest Policy and Administration (2 cr)
 Geog 411 Natural Hazards and Society (3 cr)
[Geog 420](#) [Land, Resources, and Environment \(3 cr\)](#)
[Rem-REM 456](#) [Integrated Rangeland Management \(3 cr\)](#)

History, Philosophy, and Political Science

AgEc 477 Law, Ethics, and the Environment (3 cr)
 CSS 489 Personalities and Philosophies in Conservation (2 cr)
[EnvS 484](#) [History of Energy \(3 cr\)](#)
 Hist 424 American Environmental History (3 cr)
 Phil 351 Philosophy of Science (3 cr)
[Phil 417](#) [Philosophy of Biology \(3 cr\)](#)
 PoIS 364 Politics of the Environment (3 cr)

Technical

[Biol 116](#) [Organisms and Environments \(4 cr\)](#)
 Biol 213 Principles of Biological Structure and Function (4 cr)
 CE 326 Hydrologic Measurement Techniques (1 cr)
 Chem 253, Quantitative Analysis and Lab (5 cr)
 Chem 254
 Chem 275 Carbon Compounds (3 cr)*-or
 Chem 277 Organic Chemistry (3 cr)*
[and-Chem 372](#)
[Chem-302](#) [Principles of Physical Chem-or](#)
[Chem-305-](#) [Physical Chem \(3 cr\)](#)
[Chem-306](#)
[Chem-303](#) [Principles of Physical Chem-Lab \(1-cr\)](#)
[Chem-418](#) [Environmental Chemistry \(3 cr\)](#)
 EnvS 428 Pollution Prevention (3 cr)
 EnvS 429 Environmental Audit (3 cr)
 EnvS 479 Introduction to Environmental Regulation (3 cr)
 EnvS 498 Internship (1-3 cr)
 For 472 or Remote Sensing of Environment (4 cr)
 REM 472
 Geog 202 Global Climate Change (3 cr)
 Geog 301 Meteorology or
 Geog 401 Climatology (3 cr)
 Geog 385 GIS Primer (3 cr)
[Geog 450](#) [Global Environmental Change \(3 cr\)](#)
[Geog 483](#) [Remote Sensing/GIS Integration \(3 cr\)](#)
 Geol 309 Ground Water Hydrology (3 cr)
 Geol 361 Geology and the Environment (3 cr)
 Math 175 Analytic Geometry and Calculus II (4 cr)
[Math-275](#) [Analytic Geometry and Calculus III \(3 cr\)](#)
[MMBB-380](#) [Introductory Biochemistry \(4 cr\)](#)
 Phys 111, General Physics I and Lab (4 cr)*-or

111L
 Phys 211, Engineering Physics I and Lab (4 cr)**
 211L
 Phys 112, General Physics II and Lab (4 cr)**-or
 112L
 Phys 212, Engineering Physics II and Lab (4cr)***
 212L
 Soil 205 The Soil Ecosystem (3 cr)

*Note: [Either Chem 275 or Chem 277 may be used as a technical breath elective.](#)

**Note: [Either Phys 111/111L or Phys 211/211L may be used as a technical breath elective.](#)

***Note: [Either Phys 112/112L or Phys 212/212L may be used as a technical breath elective.](#)

Advisor-approved depth electives chosen from the following, including five courses from one of the following areas:

Conservation Heritage

[Anth 422](#) [Plateau Indians \(3 cr\)](#)
[CSS 489](#) [Personalities and Philosophies in Conservation \(2 cr\)](#)
[Engl 473](#) [American Regional Literature \(3 cr\)](#)
[Engl 484](#) [American Indian Literature \(3 cr\)](#)
[Geog 420](#) [Land, Resources, and Environment \(3 cr\)](#)
[Geog 450](#) [Global Environmental Change \(3 cr\)](#)
[Geog 455](#) [Societal Resilience and Adaptation to Climate Change \(3 cr\)](#)
[Hist 424](#) [American Environmental History \(3 cr\)](#)
[Hist 428](#) [History of the American West \(3 cr\)](#)
[LArc 480](#) [The Emerging Landscape \(3 cr\)](#)

Policy and Law

[EnvS 479](#) [Introduction to Environmental Regulations \(3 cr\)](#)
[Geog 420](#) [Land, Resources, and Environment \(3 cr\)](#)
[Law 937](#) [Wildlife Law and Policy \(3 cr\)](#)
[Law 947](#) [Environmental Law \(3 cr\)](#)
[Law 948](#) [Natural Resource Law and Policy \(3 cr\)](#)
 Phil 470 Philosophy of Law (3 cr)
[Phil 571](#) [Ecological Jurisprudence \(3 cr\)](#)
 PoIS 364 Politics of the Environment (3 cr)
 PoIS 467 Constitutional Law (3 cr)
 PoIS 468 Civil Liberties (3 cr)

Policy Administration and Planning

[Acct 482](#) [Enterprise Accounting \(3 cr\)](#)
 Comm 410 Conflict Management (3 cr)
 CSS 385 Conservation Management and Planning I (3 cr)
 CSS 387 Environmental Communication Skills (3 cr)
 Econ 385 Environmental Economics (3 cr)
 For 484 Forest Policy and Administration (2 cr)
 Geog 330 Urban Geography (3 cr)
 PoIS 364 Politics of the Environment (3 cr)
 PoIS 451 Public Administration (3 cr)
 PoIS 454 Public Organization Theory (3 cr)
 PoIS 462 Natural Resource Policy (3 cr)
 Psyc 416 Industrial/Organizational Psychology (3 cr)

Green Building and Community Design

[Arch 151](#) [Introduction to the Built Environment \(2 cr\)](#)
[Arch 266](#) [Materials and Methods \(3 cr\)](#)
[Arch 463](#) [Environmental Control Systems I \(4 cr\)](#)
[Arch 464](#) [Environmental Control Systems II \(4 cr\)](#)
[ForP 365](#) [Wood Building Technology \(3 cr\)](#)
[Geog 435](#) [Climate Change Mitigation \(3 cr\)](#)
[Geog 486](#) [Transportation, GIS and Planning \(3 cr\)](#)
[LArc 380](#) [Water in the Urban Context \(2 cr\)](#)
[LArc 480](#) [The Emerging Landscape \(3 cr\)](#)
 Climate Change - Human Dimensions:
[CSS 383](#) [Natural Resource and Ecosystem Service Economics \(3 cr\)](#)
[Econ 385](#) [Environmental Economics \(3 cr\)](#)
[EnvS 479](#) [Introduction to Environmental Regulations \(3 cr\)](#)
[EnvS 484](#) [History of Energy \(3 cr\)](#)
[EnvS 485](#) [Energy Efficiency and Conservation \(3 cr\)](#)
[Geog 202](#) [Global Climate Change \(3 cr\)](#)
[Geog 435](#) [Climate Change Mitigation \(3 cr\)](#)
[Geog 455](#) [Societal Resilience and Adaptation to Climate Change](#)

(3 cr)

Courses to total 120 credits for this degree

Fish and Wildlife Sciences

1. Add the following course [**Effective:** Summer 2013]

Fish 521 Community Ecology (3 cr)

Introduction to literature and contemporary research into processes structuring ecological communities. Topics will encompass community ecology in a range of ecological systems and across trophic levels, including community impacts on ecosystem processes. (Fall/Alt/yrs)

Prereq: For 221 or REM 221

2. Change the following course [**Effective:** Summer 2013]

Fish 525 Aquaculture in Relation to Wild Fish Populations (2 cr)

Historical and current relationships between wildness and domestication as it relates to fisheries management and aquaculture in mitigation and industry. Interactions between wild and hatchery-reared fishes, including salmon. [This is a cooperative course available to WSU degree-seeking students.](#) (Fall, alt/yrs)

Forest, Rangeland, and Fire Sciences

1. Drop the following courses [**Effective:** Summer 2013]

ForP 230 Field Measurement for Forest Operations (2 cr)

Evaluation and quantification of harvesting impacts on forest systems; public land surveying, land measurements, resource impact measurements and evaluation. Two lec and one 3-hr lab a wk for 10 wks. Recommended Preparation: Math 143 or Equivalent (Fall only)

Recommended Substitution: None

For 383 Economics for Natural Resource Managers (3 cr)

Same as AgEc 383. Role of economic forces in resource analysis and conservation; planning of forest resource use by the firm and society.

Prereq: Econ 201 or 202; and Math 143 or 160 or 170; and For 235; or Permission

Recommended Substitution: CSS 383

Editor's Note: Course description will migrate to AgEc 383.

For 408 Community and Urban Forestry (2 cr)

Community or urban environment as affected by its included forest; forest components, benefits, liabilities, values, ordinances, and issues; management by selection, design, planting, care, and maintenance.

Recommended Substitution: None

For 423 Forest Community Ecology (1 cr)

Graded P/F. Principles of synecology related to vegetation classification and interpretation of structural and compositional change in communities following disturbance; practice in plant association/habitat type delineation as applied in western U.S. Accelerated first nine wks; eight lec periods and four 8-hr field trips. Recommended Preparation: For 221.

Recommended Substitution: None

2. Add the following courses [**Effective:** Summer 2013]

For 326 Fire Ecology and Management (3 cr)

Credit may only be earned in For 326 or For 426, but not both. The study of wildfire as a biophysical and ecological process, including controls of wildfires, ecological effects of wildfires, fire history, and fire in the context of global environmental change. Current issues in fire management in the Western US and globally, including readings and discussions of recent scientific literature. One-day field trip with data collection and formal lab write up. (Fall only).

Prereq: For 221 or REM 221

For 444 Prescribed Fire For Ecologically-Based Management (2-3 cr)

Learn about prescribed burning in support of ecologically-based management through reading, discussion and participating in hands-on service learning, planning, conducting and monitoring prescribed burns, reading and discussing local ecology and management, working collaboratively, and developing skills in fire management. Course requires travel as well as pre, during and post-travel writing, discussion and presentations.

Prereq: REM 244 and Junior Standing; or Instructor Permission.

Short Course Title: Prescribed Fire For Ecol. Mgmt

3. Change the status of the following courses from Active to Dormant [**Effective:** Summer 2013]

For 463 Hydrologic Measurement Techniques (1 cr)

Same as BAE 356 and CE 326. The objective of this course is for students to gain practical experience in field and laboratory measurement of various hydrologic processes including basic climatology, precipitation, infiltration, soil moisture, evaporation, and stream flow. Data analysis methods also covered. Laboratory reports required.

Coreq: CE 325/BAE 355, BAE 450, For 462 or Geog 320

Editor's Note: BAE 356, CE 326, and For 463 will all move to Dormant status and be removed from the catalog.

4. Create the following subject prefix [**Effective:** Summer 2013]

RMat – Renewable Materials

5. Change the prefix of the following courses from ForP to RMat [**Effective:** Summer 2013]

ForP 100, 203, 204, 299, 365, 400, 403, 404, 405, 410, 436, 438, 450, 491, 495, 498, 499, 500, 501, 502, 503, 504, 505, 510, 536, 538, 552, 597, 598, 599, 600

6. Change the following courses [**Effective:** Summer 2013]

ForP 432 For 431 Designing Forest Access Low Volume Forest Roads (3-2 cr)

Design and field layout of access roads for forest management, through a combination of field labs and use of modern, GIS-based forest road engineering software. Field study includes design of at least one current industry or agency forest road design project. There are 2-3 early morning trips and one Saturday field lab. (Fall, Alt/yr) Classification of forest roads and trails; forest road and trail design; design for drainage that meets standards; construction techniques; costing, environmental considerations, design project. Three days of field trips. Recommended

Preparation: ForP 430. (Spring, Alt/yr)

Prereq or Coreq: ForP 430 or Permission

Prereq: Math 144

Coreq: For 430 or Permission

ForP 434 For 436 Forest Tractor and Cable Systems (4-2 cr)

Overview of the major cable logging systems. Trigonometry and physical mechanics of cable systems, including analysis of forces, tensions, and payload capacity. Field layout and analysis of cable corridors using small yarders on the UI Experimental Forest using integrated field planning and GIS-based cable system design software. There are 2-3 early morning trips and one Saturday field lab. (Fall, Alt/yr) Planning, layout and design for forest tractor and cable timber harvesting systems; analysis of mechanics and forces involved in equipment and movement of logs; determination of machine capabilities; production and cost estimation; layout and design project. Three 1-day field trips. (Spring, Alt/yr)

Prereq: Phys 111/111L or Phys 211/211L, and ForP 430 or Permission **Math 144**

Coreq: ForP For 430 or Permission

For 274 Forest Measurement and Inventory (3 cr)

Practical techniques for the design and execution of the vegetation measurements for and the inventory of forests, shrublands, and fire-fuels, resources. Four Three one-hour lectures and one three-hour lab per week. Meets first 9 weeks of the semester. Modular with For 373. (Fall only)

Prereq: Math 143; or SAT math score of 610 or above, or ACT math score of 27 or above.

Prereq or Coreq: Math 144

Coreq: Stat 251

Short Course Title: Forest Measurement & Inventory

For 320 Dendrology (4 cr)

Phylogenetic approach to understanding the systematics, morphology, geography, and ecology of the major species of North American woody plants. Includes identification and classification of important tree species of North American and other important woody plants of the Pacific Northwest and northern Rocky Mountains. Three lectures and two 1.5-hour labs a week; two 1-day field trips.

Prereq or Coreq: Biol 116 or PISc 205

For 330 Forest Soil and Canopy Processes Ecosystem Processes (3-4 cr)

Above- and below-ground biophysical processes that determine how forest ecosystems function. Emphasis is on interactions affecting forest productivity including soil nutrient cycles, light energy, water and nutrient acquisition. Process modeling is used to illustrate effects of complex interactions on carbon budgets. Applications include effects of environmental stress and disturbance such as forest management, fire, pests and global climate change. Builds from general ecology (For 221/REM 221) by exploring processes controlling forest production, and establishes a foundation to address forest management questions in For 324 and For 424. Two lec and one 4-hr lab a week, including several field trips. Chemical, physical, and physiological processes that determine how trees and forests function; emphasis on carbon budgets, productivity, process modeling of consequences of forest management, and global climate change. Average, two lec and one 2-hr lab a week, several field trips.

Prereq: Soil 205; and Math 143 or Math 160; and Phys 100/100L or Phys 111/111L; and For 221 or REM 221

Short Course Title: For Soil and Canopy Processes

For 373 Forestry Sampling Methods (2 cr)

Principles and practice of natural resource inventory, forest sampling and data analysis techniques, LIDAR, forest growth, and quantitative decision support. Lab analysis examples and use of Excel and statistical packages are integrated into lectures. Meets last 6 weeks of the semester. (Fall only)

Coreq: For 274 and Stat 251

For 426 Global Fire Ecology and Management (3 cr)

Credit may only be earned in For 326 or For 426, but not both. Integrated fire-related ecological effects of fire on vegetation, soils, and air quality; natural and changing role of fire in forests, woodlands, shrublands and rangelands; influence of global change including climate and invasive species; fire as a management tool; application to current issues. One-day field trip. (Fall only)

Prereq: For 221 or REM 221

Short Course Title: Global Fire Ecology & Mgmt

For 433 Science-Based Fuels Management Planning Fire and Fuel Modeling (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. Learn to use and critically evaluate spatial fire behavior prediction systems, with attention to assumptions, uncertainty, sensitivity, and probability analysis. Topics include fuels classification systems, scale considerations, thematic mapping, and GIS overlay analysis, and how to access on-line geospatial data and decision-support tools. Read and discuss primarily literature on quantitative spatial analysis in fire science, engage in hands-on laboratory exercises, and prepare written reports comparing management alternatives with regards to fire behavior, fire effects, and ecological departure.

Prereq: For 375, Geog 385, or Permission

Coreq: For 450

For J435/J535 Remote Sensing for of Fire Management (3 cr)

Application, potential and limitations of methods for assessing active fire behavior and post-fire effects in the field and from remote sensing. Clarification of definitions of fire descriptors (fire intensity, fire severity, and burn severity) and relative merits of field and remote sensing tools for address them. Understanding of the ecological/physical impacts of fires on plants and soils and relation to field and remote measures. This course assumes that you understand and can use maps and GIS data layers. For graduate credit, additional literature review and a class project including evaluation of new, advanced technologies is required. (Spring, alt/yr)

The course describes the state of the art algorithms and methods used for mapping and characterizing fire from satellite observations. The course will link the physical aspects of fire on the ground with the quantities that can be observed from remote sensing, and present an overview of the different aspects of environmental fire monitoring. The course will be accompanied by weekly lab sessions focused on the processing of satellite data from sensors used operationally for fire monitoring. This course assumes that you are familiar with the fundamental concepts of mathematics and physics, understand basic remote sensing techniques, and can use maps and GIS data layers. For graduate credit, additional literature review and a class project including evaluation of new, advanced technologies is required. (Spring)

Prereq: REM 402 For 375 or Permission

For 450 Fire Behavior (3 cr)

Understand the mechanisms controlling wildland fire behavior across a range of spatial and temporal scales. Critically review and discuss scientific literature, current topics, and case studies. Lab sessions include designing and undertaking small-scale fire behavior experiments, quantitative modeling, and a field trip. (Spring only)

Understand the physical and chemical processes controlling combustion and fire behavior. Gain in-depth knowledge of commonly-used, point-scale fire behavior models and tools, including key assumptions and limitations. Critically review and discuss scientific literature, current topics, and case studies. Lab sessions include designing and undertaking small-scale fire behavior experiments, developing simple quantitative models, and a field trip.

Prereq: For 426; and Phys 100/100L or Phys 111/111L

Coreq: For 433

For 462 Watershed Science and Management (3 cr)

Influence of land management practices on hydrologic processes, water quality, and riparian habitat w/emphasis on wildland watersheds. One day Two days of field trips. Recommended Preparation: Math 143 or 160, high school physics or Phys 100 or 111. (Fall only)

Prereq: Math 143; and Phys 100 or Phys 111, or high school equivalent.

Short Course Title: Watershed Science & Management

For 535 Remote Sensing for of Fire Management (3 cr)

See For J435/J535.

ForPRMat 321 Properties of Renewable Materials Anatomy and Properties (3 cr)

Physiology, structure and physical and mechanical properties and anatomy of woody and other renewable plant materials, physical and mechanical properties of renewable materials. (Fall only)

Short Course Title: Renewable Materials Science

ForP For 430 Forest Operations Engineering and Harvesting (3 cr)

Overview of the primary equipment and harvesting systems used in modern forest operations, including field design, layout, and administration of timber sales, logging production and cost estimation, laws, and certification. A brief introduction to quantitative forest planning methods is also provided. There are 2-3 early morning trips and one Saturday field lab Survey of logging equipment capabilities; intro to cable logging systems, road layout, and design; cost analysis of logging systems; development of road and logging plans. Three days of field trips. Recommended Preparation: ForP 230. (Fall only)

Prereq: Math 144; and Phys 100/100L or Phys 111/111L

ForPRMat 444 Primary Wood Products Manufacturing (3 cr)

Raw materials, procurement, production methods, drying product specifications, and grading for primary wood-products made from renewable materials including lumber, plywood, poles, and cedar energy products; plant layout, machines, and systems analysis; plant tours. Two lec and one 5-hr lab a wk. Recommended Preparation: ForP 277. (Spring only)

Prereq: RMat 321

REM 341 Systematic Botany (3 cr)

Phylogenetic approach to understanding plant systematics and evolution with a primary focus on the flora of the Pacific Northwest. Includes identification of important plant families and the use of dichotomous keys for species identification. (Spring only)

Prereq: Biol 115; and Biol 116/213; or PISc 205

REM 357-411 Ecological Monitoring and Analysis (4-2 cr)

Field and data analysis course where students collect, analyze, and report ecological data related to scientific research, wildlife habitat, fire, grazing, and land management practices. Class field trips required. Recommended preparation: Ability to use excel. Examines 1) principles to sample vegetation, soils and hydrologic function of upland and riparian areas in grasslands, shrublands and savannahs, and 2) monitoring design. Students collect, analyze and report ecological data related to scientific research, wildlife habitat, fire, grazing and land management practices. Three hours of lecture; one two-hour lab per week. Out-of-class field trips required. (Fall only).

Prereq: Stat 251 or Permission

Prereq or Coreq: REM 410

REM 440 Wildland Restoration Ecology (3 cr)

Ecological principles and management practices involved in restoring and rehabilitating wildland ecosystems after disturbance or alteration to return damaged ecosystems to a productive and stable state. Recommended Preparation: a course in general ecology. (Spring only).

Prereq: For 221, or REM 221, or equivalent general ecology course

REM 456 Integrated Rangeland Management (3 cr)

Management strategies for integrating grazing with other natural resource values such as wildlife, water, timber, recreation, and aesthetics; emphasis on herbivore ecology including ecological impacts of grazing, ways to manage grazing, and nutritional relationships between plants and free-ranging ungulates on rangeland, pastureland, and forest ecosystems. One 1-week/4 to 5 day field trip. Recommended Preparation: REM 151. (Spring only)

Prereq: Engl 313 or Engl 317

Short Course Title: Integrated Rangeland Mgmt.

REM 459 Rangeland Ecology (2 cr)

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 [www.uidaho.edu/range459/ http://www.cnr.uidaho.edu/range459bunting/]. Recommended Preparation: a course in general ecology (e.g., REM 221), technical writing (e.g., Engl 317), and vegetation assessment (e.g., REM 411 or For 274) or Permission (Fall only).

REM 560 Plant Ecophysiology (3 cr)

Functional responses and adaptations of individual plant species to their environment, emphasizing the morphological and physiological mechanisms that influence the interactions between organisms and the major environmental factors (e.g., solar radiation, energy balance, temperature, water and nutrients, climate), and how this affects the interactions among species and their growth and survival (e.g., plant establishment, the physical environment, below and above ground productivity, and plant interactions such as competition, herbivory, and allelopathy). This is a cooperative course available to WSU degree-seeking students. The interactive learning materials are compatible only with computers that are 100% compatible with the Windows operating system and the browser, Internet Explorer. (Fall only)

Prereq: A course in general ecology (i.e. REM 221) and general botany, or Permission [www.EcologyOnline.net]

REM 556 Foraging Ecology of Herbivores (3-2 cr)

Synthesis of foraging behavior concepts including nutritive quality of forages, digestive and metabolic constraints, and diet and habitat selection. Behavioral processes of rangeland herbivore foraging, including domestic livestock and wild ungulates; techniques for researching rangeland herbivore foraging behavior; application of theoretical concepts to grazing management. This is a cooperative course available to WSU degree-seeking students. (Fall, alt odd/yrs)

7. Change the curricular requirements of **Fire Ecology and Management (B.S.Fire.Ecol.Mgmt.) [Effective: Summer 2013]**

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

Biol 115	Cells and the Evolution of Life (4 cr)
Biol 116	Organisms and Environments or
PISc 205	General Botany (4 cr)
Chem 101	Introduction to Chemistry I or
Chem 111	Principles of Chemistry I (4 cr)
CSS 383	Natural Resource and Ecosystem Service Economics (3 cr)
Econ 202	Principles of Economics (3 cr)
Engl 313	Business Writing or
Engl 317	Technical Writing (3 cr)
For 221	Ecology or
REM 221	Ecology (3 cr)
For 235	Society and Natural Resources (3 cr)
For 274	Forest Measurement and Inventory (3 cr)
For 326	Fire Ecology and Management (3 cr)

For 330 Forest Ecosystem Processes (3-4 cr)
 For 375 Introduction to Spatial Analysis for Natural Resource Management (3 cr)
~~For 426 Fire Ecology and Management (3 cr)~~
 For 427 Prescribed Burning Lab (3 cr)
~~For 433 Fire and Fuel Modeling (2 cr)~~
~~For 435 or Remote Sensing of Fire (3 cr)~~
~~For 535~~
 For 450 Fire Behavior (3 cr)
 For 484 Forest Policy and Administration (2 cr)
 Geog 301 ~~Meteorology~~ Meteorology (3 cr)
~~Math 143 Pre-calculus Algebra and Analytic Geometry or~~
~~Math 160 Survey of Calculus (3-4 cr)~~
 NR 101 Exploring Natural Resources (1 cr)
 Phys 100, Fundamentals of Physics and Lab (4 cr)
 Phys 100L
 REM 244 Wildland Fire Management (2 cr)
 REM 459 Rangeland Ecology (2 cr)
 Soil 205 The Soil Ecosystem (3 cr)
 Soil 206 The Soil Ecosystem Lab (1 cr)
 Stat 251 Statistical Methods (3 cr)

One of the following (4 cr):

~~Chem 101~~ Introduction to Chemistry I and Lab (4 cr)

~~Chem 111~~ Principles of Chemistry I and Lab (4 cr)

One of the following (3 cr):

~~Engl 313~~ Business Writing (3 cr)

~~Engl 317~~ Technical Writing (3 cr)

One of the following (3 cr):

~~For 221~~ Ecology (3 cr)

~~REM 221~~ Ecology (3 cr)

One of the following groups (4 cr):

Group A

~~Math 143~~ Pre-calculus Algebra and Analytic Geometry (3 cr)

~~Math 144~~ Analytic Trigonometry (1 cr)

Group B

~~Math 160~~ Survey of Calculus (4 cr)

One of the following courses (3 cr):

Comm 332 Communication and the Small Group (3 cr)
 CSS 287 Foundations of Conservation Leadership and Management (3 cr)

CSS 387 Environmental Communication Skills (3 cr)

CSS 481 Conservation Leadership (3 cr)

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

One of the following courses (3-4 cr):

For 320 Dendrology (4 cr)

REM 252 Wildland Plant Identification Field Studies (3 cr)

REM 341 Systematic Botany (3 cr)

Ecology (5-6 cr):

Ent 469 Introduction to Forest Insects (2 cr)

Geog 450 or Global Environmental Change (3 cr)

REM 450

REM 429 Landscape Ecology (3 cr)

REM 440 Wildland Restoration Ecology (3 cr)

WLF 314 Wildlife Ecology I (3 cr)

WLF 440 Conservation Biology (3 cr)

Applied Tools and Technology (3-4 cr):

~~For 435 or For 535~~ Remote Sensing of Active Fire and Post-Fire Effects (3 cr)

~~For 472 or~~ Remote Sensing of the Environment (4 cr)

~~REM 472~~

Geog 385 GIS Primer (3 cr)

Geog 401 Climatology (3 cr)

REM ~~357~~ 411 Ecological Monitoring and Analysis (4-2 cr)

~~REM 407 or~~ GIS Applications in Fire Ecology and Management (2 cr)

~~REM 510~~

Natural Resources Management, Planning and Policy (6 cr):

CSS 385	Conservation Management and Planning I (4 cr)
CSS 490	Wilderness and Protected Area Management (3 cr)
For 324	Forest Regeneration (3 cr)
For 424	Forest Dynamics and Management (4 cr)
For 454 or For 554	Air Quality and Smoke Management (3 cr)
For 430	Forest Operations (3 cr)
For 462	Watershed Science and Management (3 cr)
ForP 430	Forest Engineering and Harvesting (3 cr)
REM 456	Integrated Rangeland Management (3 cr)

Courses to total 120 credits for this degree

8. Change the curricular requirements of **Forest Resources** (B.S.For.Res.) [**Effective:** Summer 2013]

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

Biol 115	Cells and the Evolution of Life (4 cr)
Biol 116	Organisms and Environments or
PISe 205	General Botany (4 cr)
Chem 101	Introduction to Chem I or
Chem 111	Principles of Chem I (4 cr)
CSS 383	Natural Resource and Ecosystem Service Economics (3 cr)
Econ 202	Principles of Economics (3 cr)
Engl 317	Technical Writing or
Engl 313	Business Writing (3 cr)
For 102	Introduction to Forest Management (1 cr)
For 221	Ecology or
REM 221	Ecology (3 cr)
For 235 or CSS 235	Society and Natural Resources (3 cr)
Ent 469	Introduction to Forest Insects (2 cr)
For 274	Forest Measurement and Inventory (3 cr)
For 320	Dendrology (4 cr)
For 324	Forest Regeneration (3 cr)
For 330	Forest Ecosystem Processes (3-4 cr)
For 373	Forest Sampling Methods (2 cr)
For 375	Introduction to Spatial Analysis for Natural Resource Management (3 cr)
For 424	Forest Dynamics and Management (4 cr)
For 462	Watershed Science and Management (3 cr)
For 430	Forest Operations (3 cr)
For 468	Forest and Plant Pathology (2 cr)
For 484	Forest Policy and Administration (2 cr)
Math 143	Pre-calculus Algebra and Analytic Geometry (3 cr)* or SAT math score of 610 or above, or ACT math score of 27 or above
Math 144	Analytic Trigonometry (1 cr)*
NR 101	Exploring Natural Resources (1 cr)
Phys 100, 100L	Fundamentals of Physics and Lab or
Phys 111, 111L	General Physics I and Lab (4 cr)
Soil 205, 206	The Soil Ecosystem and Lab (4 cr)
Stat 251	Statistical Methods (3 cr)
<u>One of the following (4 cr):</u>	
Biol 116	Organisms and Environments (4 cr)
PISe 205	General Botany (4 cr)
<u>One of the following (4 cr):</u>	
Chem 101	Introduction to Chemistry I and Lab (4 cr)
Chem 111	Principles of Chemistry I and Lab (4 cr)
<u>One of the following (3 cr):</u>	
Engl 313	Business Writing (3 cr)
Engl 317	Technical Writing (3 cr)
<u>One of the following (3 cr):</u>	
For 221	Ecology (3 cr)
REM 221	Ecology (3 cr)
Restricted Electives (16-11 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)
Fish 314	Fish Ecology (3 cr)
Fish 415	Limnology (4 cr)
Fish 430	Riparian Ecology and Management (3 cr)
For 425	Forest and Soil Nutrient Cycling (3 cr)
For 426	Fire Ecology and Management (3 cr)
For 427	Prescribed Burning Lab (3 cr)
For 463	Hydrologic Measurement Techniques (1 cr)
For 472 or REM 472	Remote Sensing of the Environment (4 cr)
For 497	Senior Thesis (2-4 cr)
ForP 321	Renewable Materials Anatomy and Properties (3 cr)
ForP 430	Forest Engineering and Harvesting (3 cr)
ForP 432For 431	Low Volume Forest Roads Designing Forest Access (3-2 cr)
ForP 434For 436	Forest Tractor and Cable Systems (4-2 cr)
ForP 444	Primary Wood Products Manufacturing (3 cr)
Geog 301	Meteorology (3 cr)
Geog 385	GIS Primer (3 cr)
Geol 111, Geol 111L	Physical Geology for Science Majors (4 cr)
Math 160	Survey of Calculus or (4 cr)**
Math 170	Analytic Geometry and Calculus I (4 cr)**
PoIS 364	Politics of the Environment (3 cr)
REM 357	Ecological Monitoring and Analysis (4 cr)
REM 407	GIS Applications in Fire Ecology and Management (2 cr)
REM 411	Ecological Monitoring and Analysis (2 cr)
REM 429	Landscape Ecology (3 cr)
REM 440	Wildland Restoration Ecology (2 cr)
REM 459	Rangeland Ecology (2 cr)
REM 460	Rangeland Ecology Current Topics and Field Studies (1 cr)
RMat 321	Renewable Materials Anatomy and Properties (3 cr)
RMat 444	Primary Products Manufacturing (3 cr)
Soil 446	Soil Fertility (1-3 cr)
Soil 454	Soil Development and Classification (3 cr)
Stat 431	Statistical Analysis (3 cr)
WLF 314	Wildlife Ecology I (3 cr)
WLF 316	Wildlife Ecology II (3 cr)
WLF 440	Conservation Biology (3 cr)

Courses to total 120 credits for this degree

**Note: A SAT math score of 610 or above, or ACT math score of 27 or above can be used to satisfy the Math 143 and Math 144 requirements.*

***Note: Either Math 160 or Math 170 may be used as a restricted elective, but not both.*

9. Change the curricular requirements of **Rangeland Ecology and Management** (B.S.Rangeland Ecol.-Mgt.) [Effective: Summer 2013]

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

First and Second Years

Biol 115	Cells and the Evolution of Life (4 cr)
Biol 116	Organisms and Environments (4 cr)
Biol 213	Principles of Biological Structure and Function or
PISc 205	General Botany (4 cr)
Chem 101	Introduction to Chemistry I or
Chem 111	Principles of Chemistry I (4 cr)
Chem 275	Carbon Compounds (3 cr)
Comm 101	Fundamentals of Public Speaking (2 cr)
Econ 202	Principles of Economics (3 cr)
For 235 or CSS 235	Society and Natural Resources (3 cr)
Math 143	Pre-calculus Algebra and Analytic Geometry or
Math 160	Survey of Calculus (3-4 cr)
REM 221	Ecology or
For 221	Ecology or (3 cr)
REM 151	Rangeland Principles (2 cr)
NR 101	Exploring Natural Resources (1 cr)

[REM 151](#) [Rangeland Principles \(2 cr\)](#)

Soil 205 The Soil Ecosystem (3 cr)
 Soil 206 The Soil Ecosystem Lab (1 cr)
 Stat 251 Principles of Statistics (3 cr)

[One of the following \(4 cr\):](#)

[Biol 213](#) [Principles of Biological Structure and Function \(4 cr\)](#)

[PISc 205](#) [General Botany \(4 cr\)](#)

[One of the following \(4 cr\):](#)

[Chem 101](#) [Introduction to Chemistry I and Lab \(4 cr\)](#)

[Chem 111](#) [Principles of Chemistry I and Lab \(4 cr\)](#)

[One of the following \(3-4 cr\):](#)

[Math 143](#) [Pre-calculus Algebra and Analytic Geometry \(3 cr\)](#)

[Math 160](#) [Survey of Calculus \(4 cr\)](#)

[One of the following \(3 cr\):](#)

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

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

Third and Fourth Years

AVS 474 Beef Cattle Science **or**
 AVS 476 Sheep Science (3 cr)
 CSS 383 Natural Resource and Ecosystem Service Economics (3 cr)

[Engl 317](#) [Technical Writing **or**](#)

[Engl 313](#) [Business Writing \(3 cr\)](#)

Fish 430 Riparian Ecology and Management (3 cr)

REM 252 Wildland Plant Identification Field Studies (3 cr)

REM 341 Systematic Botany (3 cr)

[REM 357](#) [Ecological Monitoring and Analysis \(4 cr\)](#)

For 375 Introduction to Spatial Analysis for Natural Resource Management (2-3 cr)

[REM 410](#) [Principles of Vegetation Measurement and Assessment \(2 cr\)](#)

[REM 411](#) [Ecological Monitoring and Analysis \(2 cr\)](#)

REM 440 Wildland Restoration Ecology (3 cr)

[REM 452](#) [Western Wildland Landscapes \(2 cr\) **or**](#)

[REM 429](#) [Landscape Ecology \(3 cr\)](#)

REM 456 Integrated Rangeland Management (3 cr)

REM 459 Rangeland Ecology (2 cr)

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

Soil 454 Soil Development and Classification (3 cr)

[One of the following \(3 cr\):](#)

[Engl 313](#) [Business Writing \(3 cr\)](#)

[Engl 317](#) [Technical Writing \(3 cr\)](#)

[One of the following \(2-3 cr\):](#)

[REM 452](#) [Western Wildland Landscapes \(2 cr\)](#)

[REM 429](#) [Landscape Ecology \(3 cr\)](#)

Students must also complete ~~16-12~~ credits of advisor approved electives in emphasis areas that include: Restoration Ecology, Field Botany, Spatial Ecology, Watershed Science, Wildland Fire Management, Invasive Plant Management, Wildlife Habitat Management, Tribal Land Management, Rangeland Economics, Natural Resource Communication, and Environmental Consulting.

Courses to total ~~128-122~~ credits for this degree

10. Change the curricular requirements of **Fire Ecology and Management (Minor)** [Effective: Summer 2013]

Fire Core (8 cr):

For 426 Fire Ecology and Management (3 cr)

REM 244 Wildland Fire Management (2 cr)

One of the following (3 cr):

For 427 Prescribed Burning Laboratory (3 cr)

[For 433](#) [Fire and Fuel Modeling \(2 cr\)](#)

For 450 Fire Behavior (3 cr)

[For 454](#) [Fuels Inventory and Management \(3 cr\)](#)

Ecology (2-3 cr):

For 330 Forest Ecosystem Processes (~~3-4~~ cr)

REM 429 Landscape Ecology (3 cr)

REM 440 Wildland Restoration Ecology (3 cr)
 REM 459 Rangeland Ecology (2 cr)
 REM 460 Rangeland Ecology Current Topics and Field Studies (1 cr)
 WLF 314 Wildlife Ecology I (3 cr)

Applied Tools and Technology (3 cr):

[For 375](#) [Introduction to Spatial Analysis for Natural Resource Management \(3 cr\)](#)

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

Geog 301 Meteorology (3 cr)

Geog 385 GIS Primer (3 cr)

Geog 401 Climatology (3 cr)

Geog 475 Intermediate GIS (3 cr)

[REM 402](#) [GIS Applications in Natural Resources \(2 cr\)](#)

[REM 407](#) [GIS Applications in Fire Ecology and Management \(2 cr\)](#)

Management, Planning, & Policy (6 cr):

CSS 490 Wilderness and Protected Area Management (3 cr)

For 324 Forest Regeneration (3 cr)

For 424 Forest Dynamics and Management (4 cr)

[For 430](#) [Forest Operations \(3 cr\)](#)

For 462 Watershed Science and Management (3 cr)

For 484 Forest Policy and Administration (2 cr)

[ForP 430](#) [Forest Engineering and Harvesting \(3 cr\)](#)

REM 456 Integrated Rangeland Management (3 cr)

Courses to total 20 credits for this minor, with at least 12 credits in courses numbered 400 or above.

11. Change the curricular requirements of **Forest Operations** (Minor) [**Effective:** Summer 2013]

[Acct 201](#) [Introduction to Financial Accounting \(3 cr\)](#)

[Acct 202](#) [Introduction to Managerial Accounting \(3 cr\)](#)

[For 430](#) [Forest Operations \(3 cr\)](#)

[For 431](#) [Low Volume Forest Roads \(2 cr\)](#)

[For 436](#) [Cable Systems \(2 cr\)](#)

[ForP-RMat 100](#) [Introduction to Renewable Materials \(2 cr\)](#)

[ForP-RMat 321](#) [Renewable Materials Anatomy and Properties \(3 cr\)](#)

[ForP 430](#) [Forest Engineering and Harvesting \(3 cr\)](#)

[ForP 432](#) [Designing Forest Access \(3 cr\)](#)

[ForP 434](#) [Forest Tractor and Cable Systems \(4 cr\)](#)

[ForP-RMat 444](#) [Primary Wood Products Manufacturing \(3 cr\)](#)

Courses to total ~~20~~ 18 credits for this minor

12. Change the curricular requirements of **Forest Products** (Minor) [**Effective:** Summer 2013]

For students in business, engineering, forestry, or vocational education who wish to gain specific background and knowledge related to the forest products industry.

[For 430](#) [Forest Operations \(3 cr\)](#)

[ForP-RMat 321](#) [Renewable Materials Anatomy and Properties \(3 cr\)](#)

[ForP 430](#) [Forest Engineering and Harvesting \(3 cr\)](#)

[ForP-RMat 444](#) [Primary Wood Products Manufacturing \(3 cr\)](#)

Electives in ~~forest products~~ [renewable materials](#) (~~11-9~~ cr)

Courses to total ~~20~~ 18 credits for this minor

13. Change the curricular requirements of **Forest Resources** (Minor) [**Effective:** Summer 2013]

Courses from the following to total 18 credits:

[For 274](#) [Forest Measurement and Inventory \(3 cr\)](#)

[For 320](#) [Dendrology \(4 cr\)](#)

[For 324](#) [Forest Regeneration \(3 cr\)](#)

[For 326](#) [Fire Ecology and Management \(3 cr\)](#)

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

[For 373](#) [Forestry Sampling Methods \(2 cr\)](#)

[For 375](#) [Introduction to Spatial Analysis for Natural Resource Management \(3 cr\)](#)

[For 424](#) [Forest Dynamics and Management \(4 cr\)](#)

For 430	Forest Operations (3 cr)
For 462	Watershed Science and Management (3 cr)
For 468	Forest and Plant Pathology (2 cr)
For 221	Ecology (3 cr)
For 235	Society and Natural Resources (3 cr)
For 274	Forest Measurement and Inventory (3 cr)
For 320	Dendrology (4 cr)
For 484	Forest Policy and Administration (2 cr)
One or more of the following courses:	
CSS 383	Natural Resource and Ecosystem Service Economics (3 cr)
For 375	Introduction to Spatial Analysis for Natural Resource Management (3 cr)
One or more of the following courses:	
For 324	Forest Regeneration (3 cr)
For 330	Forest Ecosystem Processes (3 cr)
For 424	Forest Dynamics and Management (4 cr)
For 462	Watershed Science and Management (3 cr)
ForP 430	Forest Engineering and Harvesting (3 cr)
REM 244	Wildland Fire Management (2 cr)
WLF 314	Wildlife Ecology I (3 cr)
Courses to total 20 18 credits for this minor	

14. Change the curricular requirements of **Fire Ecology, Management and Technology** (UG Academic Certificate) [**Effective:** Summer 2013]

Note: A grade of 'B' or higher is required in all coursework for this academic certificate.

Fire Ecology Course Group (3 cr):

For 326	Fire Ecology and Management (3 cr)
For 426	Global Fire Ecology and Management (3 cr)
For 526	Fire Ecology (3 cr)

Ecology Course Group (2-3 cr):

For 330	Forest Ecosystem Processes (3 cr)
REM 527	Landscape Ecology of Forests and Rangelands (3 cr)
For 531	Invasion Biology (3 cr)
REM 429	Landscape Ecology (3 cr)
REM 440	Wildland Restoration Ecology (3 cr)
REM 459	Rangeland Ecology (2 cr)
REM 460	Rangeland Ecology Current Topics and Field Studies (1 cr)

Fuels and Fuels Management Course Group (3 cr):

For 427	Prescribed Burning Lab (3 cr)
For 433	Science-Based Fuels Management Planning (2 cr)
For 450	Fire Behavior (3 cr)

Applied Tools and Analysis Course Group (3 cr):

For 375	Introduction to Spatial Analysis for Natural Resource Management (3 cr)
For 435 or For 535	Remote Sensing for Fire Management (3 cr)
For 472 or REM 472	Remote Sensing of the Environment (4 cr)
For 570	Advanced Remote Sensing Measurement Methods (3 cr)
For 572	Spatial and Biophysical Modeling (3 cr)
Geog 475	Intermediate GIS (3 cr)
REM 407	GIS Application in Fire Ecology and Management (2 cr)

Management, Planning and Policy Course Group (2-3 cr):

CSS 490	Wilderness and Protected Area Management (3 cr)
CSS 573	Planning & Decision Making for Watershed Management (3 cr)
For 424	Forest Dynamics and Management (4 cr)
For 454	Air Quality and Smoke Management (3 cr)
For 430	Forest Operations (3 cr)
For 462	Watershed Science and Management (3 cr)
For 484	Forest Policy and Administration (2 cr)
For 529	Forest Ecosystem Analysis (3 cr)
For 585	Natural Resources Policy Analysis (2 cr)
ForP 430	Forest Engineering and Harvesting (3 cr)
REM 456	Integrated Rangeland Management (3 cr)

WLF 492 Wildlife Management (4 cr)
Electives to total 15 for the certificate

Geography

1. Add the following course [Effective: Summer 2013]

Geog 513 Global Climate Change (3 cr)
See Geog J313/J513.

2. Change the following courses [Effective: Summer 2013]

Geog 202–J313/J513 Global Climate Change- (3 cr)

Scientific basis of the climate system and global climate changes; process-based understanding of past, present and future climate change; natural and anthropogenic influences; interactions between climate, society and ecosystems; scientific review and politicization; climate change solutions and opportunities. Students in 513 will be required to solve additional quantitative problem sets and synthesize journal articles. (Fall only)

Geog 390 Geographic Visualization Cartographic Design & Geovisualization (3 cr)

Map projections, map generalization, cartographic design, map symbology, and typography; statistical, isarithmic and multivariate mapping; static versus dynamic mapping; interactive and internet mapping; cartographic animation; 2 hrs of lab/wk. (Spring only)
Prereq: Geog 385 and Stat 251

Short Course Title: Cartographic Design & Geovis

Geog 401 Climatology (3 cr)

Physical basis for climatic processes and patterns; mechanics of global atmospheric circulation; radiation balance and heat budget of the earth; models of weather patterns and climate. (Spring, alt/yrs)
Prereq: Geog 301, Geog 313, or Graduate Standing

Geog 415 Scientific Data Analysis with Computer Programming (3 cr)

Manipulation, visualization, and analysis of geographic, ~~biological~~, and environmental data. Analysis methods applicable in Python, IDL, Matlab, or similar environments. ~~Topics include:~~ review of programming and concepts relevant to analysis of spatial data and/or time series scientific applications; mapping and remote sensing imagery analysis and display; uncertainty and sensitivity analysis; appropriate presentation of data in figures, figure preparation.
Prereq: Math 143 and Stat 251

Geog J424/J524 Hydrologic Applications of GIS and Remote Sensing (3 cr)

Concepts of area-based hydrologic modeling and assessment and the various types of spatially distributed information commonly used in these activities, such as topographic data, vegetation cover, soils and meteorologic data. Hands-on experience in manipulating these types of data sets for hydrologic applications. Recommended Preparation: ~~Geog 385~~, For 462, BAE 355, or CE 325; or Equivalent.
Prereq: Geog 385 or equivalent work experience

Geog 479 GIS Programming (3 cr)

An introduction to the use of programming languages, such as Python with standard ArcGIS concepts. ~~An introduction to Python ArcObjects, AML, and Visual Basic.~~
Prereq: Geog 475 or Geog 390; and CS 112 or Geog 415

3. Change the following course and change its status from Dormant to Active [Effective: Summer 2013]

Geog 491 (s) Field Techniques (1-3 cr, max 6)

Acquisition of data in the field, analysis, interpretation, and presentation of results of field investigations. May also be taken in conjunction with other geography courses.
Prereq: Permission

4. Change the curricular requirements of **Geography (B.S.)** [Effective: Summer 2013]

This program is offered through the College of Science. Required course work includes the university requirements (see regulation J-3) and:

Note: Students must earn a grade of "C" or better in all Geography courses.

- Engl 313 Business Writing or
- Engl 317 Technical Writing (3 cr)
- Geog 100, Physical Geography and Lab (4 cr)
- Geog 100L
- Geog 165 Human Geography (3 cr)
- Geog 200 World Regional Geography (3 cr)
- Geog Global Climate Change (3 cr)
- ~~202~~313
- Geog 385 GIS Primer (3 cr)

Geog 390	Cartographic Design & Geovisualization Geographic Visualization (3 cr)
Geog 493	Senior Capstone in Geography (3 cr)
Math 143	Pre-calculus Algebra and Analytic Geometry (3 cr)
Stat 251	Statistical Methods (3 cr)

Students must also choose 3 credits from the following courses in human geography (3 cr):

Geog 240	Economic Geography (3 cr)
Geog 330	Urban Geography (3 cr)
Geog 340	Business Location Decisions (3 cr)
Geog 350	Geography of Development (3-4 cr)
Geog 360	Population Dynamics and Distribution (3-4 cr)
Geog 364	Idaho and the Pacific Northwest (3 cr)
Geog 365	Political Geography (3 cr)
Geog 409	Rural Development (3 cr)
Geog 420	Land, Resources, and Environment (3 cr)
Geog 440	The New Global Economy (3 cr)

Student must also choose 3 credits from the following courses in physical geography (3 cr):

Geog 301	Meteorology (3 cr)
Geog 401	Climatology (3 cr)
Geog 410	Biogeography (3 cr)
Geog 412	Applied Meteorology and Climatology (3 cr)
Geog 450	Global Environmental Change (3 cr)

Student must also choose 3 credits from the following courses in human-environment interactions (3 cr):

Geog 364	Idaho and the Pacific Northwest (3 cr)
Geog 411	Natural Hazards and Society (3 cr)
Geog 420	Land, Resources, and Environment (3 cr)
Geog 435	Climate Change Mitigation (3 cr)
Geog 455	Societal Resilience and Adaptation to Climate Change (3 cr)

[Geog 491](#) [Field Techniques \(3 cr\)](#)

6 additional credits in Geography courses, for a total minimum number of 36 credits in Geography

Courses to total 120 credits for this degree

Students interested in obtaining more depth in any of the departmental focus areas (Geographic Information Science (GIS), spatial analysis, physical science and the environment, regional/global development) are encouraged to discuss with their advisor recommended courses in Geography and other departments appropriate to those depth areas.

5. Change the curricular requirements of **Geographic Information Systems** (UG Academic Certificate) [**Effective: Summer 2013**]

Geog 385	GIS Primer (3 cr)
Geog 475	Intermediate GIS (3 cr)

Electives (9 cr)

Geog 390	Cartographic Design & Geovisualization Geographic Visualization (3 cr)
Geog 407	Spatial Analysis and Modeling (3 cr)
Geog 424 or Geog 524	Hydrologic Applications of GIS and Remote Sensing (3 cr)
Geog 483 or Geog 583	Remote Sensing/GIS Integration (3 cr)
Geog 486 or Geog 586	Transportation, GIS and Planning (3 cr)
Geog 479	GIS Programming (3 cr)
Geog 575	Advanced GIS (3 cr)
Geog 580	GIS Seminar (3 cr)
Geog 587	Advanced Topics in Remote Sensing (3 cr)

Courses to total 15 credits for this certificate

Geological Sciences

1. Add the following courses [**Effective: Summer 2013**]

Geol 471 Ore Deposits and Exploration (3 cr)

The geologic origin of metallic ore deposits, and the methods used to search for them. Taught in alternating years. 3-hr lec per week. One one-day and one three-day field trips.

Prereq: Geol 249

Geol 549 Principles of Electron Microscopy (3 cr)

Theory and principles of scanning and transmission electron microscopy as an investigative tool; includes physical principles of electron microscopy, operation and maintenance of the electron microscope, specimen preparation, and digital image capture. Lab section involves

hands-on use of SEM and TEM. Students registering are required to complete a research project. One 1.5-hr lec and one 2-hr lab a week. (Fall only)

Short Course Title: Electron Microscopy

2. Change the curricular requirements of **Geological Sciences (B.S.) [Effective: Summer 2013]**

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

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

One of the following (4 cr):

Geol 101,	Physical Geology and Lab (4 cr)
Geol 101L	
Geol 111,	Physical Geology for Science Majors and Lab (4 cr)
Geol 111L	

One of the following (4 cr):

Phys 111,	General Physics 1 and Lab (4 cr)
Phys 111L	
Phys 211,	Engineering Physics I and Lab (4 cr)
Phys 211L	

And the completion of one of the following options:

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History

1. Add the following courses [**Effective:** Summer 2013]

Hist 549 Tudor-Stuart Britain 1485-1660 (3 cr)

See Hist J449/J549.

Hist 495 History Senior Seminar (3 cr)

Directed research in primary and secondary sources, culminating in substantial research paper. Course themes and instructor will vary semester to semester.

Prereq: Hist 290 or equivalent

2. Change the following course [**Effective:** Summer 2013]

Hist J449/J549 Tudor-Stuart Britain 1485-1660 (3 cr)

This course examines the brilliance of the 1485-1660 period in British history. It is organized around three themes: the religious revolution and its consequences; the transformation of personal government of dynasties into Parliamentary government; and the cultural, social and economic ramifications that both drove and was driven by these movements. Recommended Preparation: Hist 371. Additional assignment/projects required for graduate credit.

International Studies

1. Change the following courses [**Effective:** Summer 2013]

IS 321 UN and Related Agencies (1 cr)

Companion course to IS 320, this course permits students to further hone their knowledge of a particular UN or related agency through a combination of directed study and roundtable discussions.

Prereq/Coreq: IS 320

2. Change the curricular requirements of **International Studies (B.A.)** [**Effective:** Summer 2013]

Required course work includes the university requirements (see regulation J-3 on page **Error! Bookmark not defined.**), the general requirements for the B.A. degree, and:

Econ 201 and Econ 202	Principles of Economics; or
Econ 272	Foundations of Economic Analysis (4-6 cr)
IS 310	The United Nations or
PoIS 235	Political Research Methods and Approaches (3 cr)
IS 495	International Studies Senior Seminar (3 cr)
PoIS 237	International Politics or
PoIS 205	Introduction to Comparative Politics (3 cr)
Stat 251	Statistical Methods (3 cr)

Six credits chosen from:

Anth 220	Peoples of the World (3 cr)
Engl 485	Global Literatures in English (3 cr)
EnvS 225	International Environmental Issues Seminar (3 cr)
Geog 200	World Regional Geography (3 cr)
IS 195	International Studies Freshman Seminar (3 cr)
JAMM 490	Global Media (3 cr)
Soc 323	Political Economy (3 cr)

At least 12 cr from one of the following issue emphases: international relations, international economics and business, global resources and development (see courses below)

At least 12 cr from one of the following regional emphases: Latin America, Europe, Asia (see courses below)

Demonstrated proficiency in a modern foreign language correlating with the region of emphasis and equivalent to that gained from six semesters of university study. Exceptions include any class taught in English. (0-22 cr)

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

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

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

Issue Emphases in International Studies

Recommended courses for completion of requirement (special topic courses may be used when approved by the director).

A. International Relations

Geog 365	Political Geography (3 cr)
Hist 430	U.S. Diplomatic History (3 cr)
Hist 458	Military History (3 cr)
IS 320	Model United Nations (2 cr)
IS 321	UN and Related Agencies (1 cr)
JS 335 or Soc 335	Terrorism, Society and Justice (3 cr)
PoIS 338	American Foreign Policy (3 cr)
PoIS 440	International Organizations and International Law (3 cr)
PoIS 449	World Politics and War (3 cr)
PoIS 487	Political Violence and Revolution (3 cr)

B. International Economics and Business

AgEc 481	Agricultural Markets in a Global Economy (3 cr)
Bus 381	International Finance (3 cr)
Bus 482	International Marketing (3 cr)
Econ 446	International Economics (3 cr)
Econ 447	International Development Economics (3 cr)

C. Global Resources and Development

AgEc 481	Agricultural Markets in a Global Economy (3 cr)
Anth 462	Human Issues in International Development (3 cr)
CSS 493	International Land Preservation and Conservation Systems (3 cr)

FCS 411	Global Nutrition (3 cr)
Geog 350	Geography of Development (3 cr)
Geog 360	Population Dynamics and Distribution (3 cr)
Geog 409	Rural Development (3 cr)
IS 322	International Environmental Organizations (3 cr)
IS 410	NGOs in the International Systems (3 cr)
PoIS 480	Politics of Development (3 cr)
Soc 340	Social Change & Globalization (3 cr)
Soc 440	Post-Colonialism (3 cr)

Regional Emphases in International Studies

A. Latin America

FLEN 394	Latin American Literature in Translation (3 cr)
Hist 435	Latin America: The Colonial Era (3 cr)
Hist 438	Modern Mexico (3 cr)
Hist 439	Modern Latin America (3 cr)
Hist 440	Social Revolution in Latin America (3 cr)
Span 306	Culture and Institutions of Latin America (3 cr)
Span 402	Readings: Spanish American Literature (3 cr)
Span 413	Spanish American Short Fiction (3 cr)

B. Europe

Engl 342	Survey of British Literature (3 cr)
FLEN 307	The European Union (3 cr)
FLEN 308	European Immigration and Integration (3 cr)
FLEN 313	Modern French Literature in Translation (3 cr)
FLEN 324	German Literature in Translation (3 cr)
FLEN 393	Spanish Literature in Translation (3 cr)
Fren 304	Connecting French Language and Culture (4 cr)
Fren 305	Reading French Texts (3 cr)
Fren 407	Topics in French Literature (3 cr)
Fren 408	French and Francophone Culture and Institutions (3 cr)
Germ 306	Introduction to German Literature (3 cr)
Germ 420	Topics in German Culture and Literature - Themes (3 cr)
Hist 350	European Cultural History, 1600-1800 (3 cr)
Hist 366	Intellectual and Cultural History of Modern Europe (3 cr)
Hist 447	The Renaissance (3 cr)
Hist 451	Age of the French Revolution (3 cr)
Hist 452	19th Century Europe (3 cr)
Hist 455	Modern Europe (3 cr)
Hist 466	Eastern Europe Since 1774 (3 cr)
Hist 467	Russia to 1894 (3 cr)
Hist 468	Russia and Soviet Union Since 1894 (3 cr)
Hist 469	Modern France (3 cr)
PoIS 381	Western European Politics (3 cr)
Span 305	Culture and Institutions of Spain (3 cr)
Span 401	Readings: Spanish Literature (3 cr)

C. Asia/Africa

FLEN 331	Japanese Anime (3 cr)
Hist 331	The Age of African Empires (3 cr)
Hist 457	History of the Middle East (3 cr)
Hist 481	America's Wars in Asia (3 cr)
Hist 482	Japan, 1600 to Present (3 cr)
Hist 484	Modern China, 1840s to Present (3 cr)
Hist 485	Chinese Social and Cultural History (3 cr)
IS 325	The Contemporary Muslim World (3 cr)
IS 326	Africa Today (3 cr)
Phil 307	Buddhism (3 cr)
PoIS 420	Introduction to Asian Politics (3 cr)

Courses to total 120 credits for this degree

Other courses with an international component may be used as electives with permission of the school director.

Journalism and Mass Media

1. Add the following courses [**Effective:** Summer 2013]

JAMM 339 Crime and the Media (3 cr)

See Soc 339.

JAMM 351 Alumni Newsletter Production (1-3 cr)

Concept development, interviewing, writing and editing for the School of Journalism and Mass Media's twice-yearly newsletter for students, alumni and other audiences; emphasis on multi-media content, including photographs, audio and video.

Prereq: JAMM 350 or Permission

2. Change the following course [**Effective:** Summer 2013]

JAMM 425 Feature Article Writing (3 cr)

~~Strategies and approaches for writing and producing human-interest stories for print and online media; introduction to a variety of feature-writing styles, including columns, reviews, and arts and culture coverage. Topics vary. Writing human-interest stories, editorials, reviews, and columns. Recommended Preparation: JAMM 121.~~

Prereq: JAMM 225 or Permission

3. Change the curricular requirements of **All JAMM majors** (B.A. and B.S.) [**Effective:** Summer 2013]

Majors cannot apply more than 45 hours of courses in Journalism and Mass Media toward the 120-credit degree requirement and are required to take no fewer than ~~61-60~~ hours in the liberal arts and sciences. Majors may count no more than 8 hours of courses in Physical Education activity courses (PEB 106, PEB 107 and PEB 108) toward the 120 credits required for the degree.

4. Change the curricular requirements of **All JAMM Majors** (B.S. or B.A.) [**Effective:** Summer 2013]

Courses required in all majors in the School of Journalism and Mass Media:

Comm 101	Fundamentals of Public Speaking (2 cr)
JAMM 100	Media and Society (3 cr)
JAMM 121	Media Writing (3 cr)
JAMM 341	Mass Media Ethics (3 cr)
JAMM 448	Law of Mass Media (3 cr)

Two of the following courses:

JAMM 339	Crime and the Media (3 cr)
JAMM 340	Cultural Diversity and the Media (3 cr)
JAMM 378	American Television Genres (3 cr)
JAMM 379	Hollywood Portrayals of Journalists (3 cr)
JAMM 440	Critical Issues in Mass Media (3 cr)
JAMM 443	Media Management and Economics (3 cr)
JAMM 444	Mass Media and Public Opinion (3 cr)
JAMM 445	History of Mass Media (3 cr)
JAMM 465	Political Advertising (3 cr)
JAMM 477	Documentary Film (3 cr)
JAMM 490	Global Media (3 cr)

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

Students in the School are required to complete 15 credit hours within one of the four majors: Advertising; Broadcasting and Digital Media; Journalism; and Public Relations:

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Law

1. Drop the following course [**Effective:** Summer 2013]

Law 972 Legal Externship (1 cr)

Legal work under the supervision of judges or government, non-profit, or private attorneys. Graded P/F; credits earned are not class hours.

Prereq: Approval of Director of Clinical Programs under standards approved by the faculty and available to students and supervising attorneys

Recommended Substitution: None.

2. Add the following course [**Effective:** Summer 2013]

Law 851 Advanced Torts (2-3 cr)

Selected topics in tort law, including products liability, traditional strict liability, defamation, and business torts. Two-credit course covers fewer areas of study.

Prereq: Law 809

3. Change the following courses [**Effective:** Summer 2013]

Law 912 Civil Mediation (2 cr)

~~Credit may not be earned in both Law 912 and Law 913. A study of conflict resolution, negotiation, and mediation theory, process, and skills. Exploration of each stage of the mediation process and attendant strategies and skills. Offered through the Northwest Institute for Dispute~~

Resolution. Accelerated course. Dynamics, benefits, and skills needed in third-party intervention in the settlement of civil disputes; step-by-step introduction to mediation process; examination of mediation as a collaborative process of resolving conflicts and assisting disputants to reach mutually satisfactory agreements. The final paper required in this course does not count toward the upper-division writing requirement. Accelerated course.—Graded P/F.

Prereq: Permission

Law 913 Family Mediation (2 cr)

Credit may not be earned in both Law 912 and Law 913. A skills-based study of family mediation designed for those wishing to mediate or represent clients in the mediation process. Topics covered include structuring the mediation process, guidelines for division of assets, construction of parenting plans, and ethical concerns. Offered through the Northwest Institute for Dispute Resolution. Accelerated course. Graded P/F. The process of divorce mediation from initial consultation through and beyond settlement; dispute resolution theory and the practical application of these theories. The final paper required in this course does not count toward the upper-division writing requirements. Accelerated course.—Graded P/F.

Prereq: Permission

Law 914 (s) Dispute Resolution (1 cr, max 4)

Specialty course in dispute resolution offered through the Northwest Institute for Dispute Resolution. Course topic and content will be announced in advance. Accelerated course. Graded P/F.As part of the Northwest Institute for Dispute Resolution, the College offers one or two courses each year that examine discrete areas of dispute resolution. Accelerated course.

Prereq: Permission

Law 918 Cyberlaw (2-3 cr)

Introduction to the legal and policy challenges presented by commerce and communication on the Internet. Topics include Internet governance, sovereignty and jurisdiction, free speech, privacy and surveillance, and the protection of intellectual property. Two-credit course covers fewer areas of study.Introduction to the legal and policy challenges presented by the revolution in creative and commercial activity generated by the advent of the Internet. Topics will include jurisdictional issues arising from the transnational and fundamentally placeless character of digital commerce and communication; questions concerning rights to free speech and privacy on the Internet; and debates concerning the status of intellectual property online and the online distribution of creative content. The course will consider efforts by Congress to regulate—and by private parties to control—various types of online activities, including, among others, “cybersquatting,” peer-to-peer file sharing, the distribution of “spam” and pornography, and online speech. Limited enrollment.

Law 955 Appellate Advocacy Program (1-2 cr)

A brief-writing and oral advocacy course run as the McNichols Moot Court competition. Students attend class once a week for the first six weeks of the semester, write a two-issue appellate brief, and make a minimum of two oral arguments. Accelerated course.A brief-writing seminar including two briefs and the preliminary oral arguments of the McNichols Competition; the faculty advisor is the final arbiter of the number of credits awarded within the guidelines. Graded P/NP; credits earned are not class hours.

Prereq: Law 815

Law 973 Non-Classroom Credit Public Service Externship (1-10 cr, max 10)

Students perform legal work in selected public service positions under the supervision of experienced judges and lawyers. Graded P/F. Credits earned are not classroom credits. Note: a maximum of 5 credits may be taken during the summer semester.Includes placements with judges, prosecutors, public defenders, other government attorneys, or attorneys for non-profit organizations. The following courts and offices have programs with standing approval of the director: The Supreme Court and Court of Appeals of Idaho, the United States Court of Appeals for the Ninth Circuit, the United States District Court for the District of Idaho, the Attorney General of Idaho, and the United States Attorney for the District of Idaho. Graded P/F; credits earned are not class hours.

Prereq: Approval of Director of Clinical Programs under standards approved by the faculty and available to students and supervising attorneysPermission

Short Course Title: Non-Class Credit Externship

Law 975 Classroom Credit Public Service Externship (1-5 cr, max 10)

Students perform legal work in selected public service positionsplacements under the supervision of experienced judges and lawyers.; attendance at a weekly seminar required (the seminar is available in Moscow, Boise, Coeur d'Alene, and Idaho Falls through interactive video). Students must attend periodic classes. Graded P/F.

Prereq: Permission

Law 976 Semester in Practice (1-12 cr, max 12)

Students attend periodic classes and perform legal work as externs in the public and or private sector under the supervision of a faculty supervisorthe External Programs Coordinator. Open only to students in their last year of law school. Graded P/F.

Prereq: Permission

Law 977 Clinical Lab (1 cr, max 4)

The College offers oOne-credit lab courses that providinge clinical experience for interested upper-division second and third-year students. The labs are designed to allow students to obtain practical experience in conjunction with upper-division substantive courses.—. The labs are supervised by experienced practitioners. Graded P/F.

Prereq: Permission

Law 980 Copyrights (2-3 cr)

A survey of U.S. domestic copyright law, focusing on current provisions of the Copyright Act of 1976, as amended, and leading cases interpreting those provisions. Particular attention is paid to policy challenges created by the Internet and by the increasing internationalization of copyright law. Two-credit course covers fewer areas of study.A survey of the history and evolution of copyright law and policy in the U.S., focusing on

current provisions of the Copyright Act and leading cases interpreting these provisions. Particular attention paid to economic and policy challenges created by the Internet and to the increasing internationalization of copyright law.

Law 984 Real Estate Transactions (2-3 cr)

Aspects of the standard commercial real estate purchase transaction, including real estate contracts, title issues, construction, default, financing, leasing, and structuring real estate development transactions. Two-credit course covers fewer areas of study. Aspects of the standard real estate purchase transaction, including the real estate contract, title searches, methods of assuring title including title insurance, financing, conveyancing, and recording.

Law 987 Law Practice Management (1-2 cr)

Topics in the business of law practice, including accepting and billing clients, managing case files and client trust accounts, making business arrangements, and managing human, physical, and financial resources. Graded Pass/No Pass. [Two-credit course covers more areas of study.](#)

Law 988 Writing the Environment (1 cr)

Intensive writing course limited to 3L students completing the Natural Resources and Environmental Law Emphasis. Students will develop critical legal writing and analytical skills through public presentations and defenses of their own written work, and the review and editing of their colleagues' works. Permission required. [Graded P/NP.](#) (Fall only)

Mathematics

1. Change the following courses [Effective: Summer 2013]

Math 123 Mathematics Applied To The Modern World (3 cr)

May be used as core credit in J-3-c. Discussion of some aspects of mathematical thought through the study of problems taken from areas such as logic, [political science, management science, number theory](#), geometry, probability, and combinatorics; discussion of historical development [and topics discovered in the past 100 years.](#)

Math 461 Abstract Algebra I (3 cr)

Groups, rings, and fields. (Fall only)
Prereq: Math 215 and Math 330; or Permission

Math 462 Abstract Algebra II (3 cr)

Groups, rings, and fields. (Spring only)
Prereq: Math 461

Math 471 Introduction to Analysis I (3 cr)

Topology of Euclidean n-space, limit and continuity, differentiation, integration. (Fall only)
Prereq: Math 275, and Math 215; or Permission

Math 472 Introduction to Analysis II (3 cr)

Topology of Euclidean n-space, limit and continuity, differentiation, integration. (Spring only)
Prereq: Math 471 or Permission

Math 521 Topology I (3 cr)

Basic concepts of point set and algebraic topology. This is a cooperative course available to WSU degree-seeking students. (Fall, Alt/yrs)

Math 522 Topology II (3 cr)

Basic concepts of point set and algebraic topology. (Spring, Alt/yrs)

Math 523 Algebraic Topology I (3 cr)

Basic homotopy theory, covering spaces, homology theory, and applications. (Alt/yrs)

Math 524 Algebraic Topology II (3 cr)

Basic homotopy theory, covering spaces, homology theory, and applications. (Alt/yrs)

Math 571 Functional Analysis I (3 cr)

Linear topological spaces and linear operators. (Fall, Alt/yrs)
Prereq: Math 536

Math 572 Functional Analysis II (3 cr)

Linear topological spaces and linear operators. (Spring, Alt/yrs)
Prereq: Math 536

Math 575 Graph Theory I (3 cr)

Basic concepts and theorems; topics include trees and connectivity, eulerian and hamiltonian graphs, graph colorings, matchings, graph decomposition, and extremal graph theory. (Fall, Alt/yrs)

Math 576 Graph Theory II (3 cr)

Basic concepts and theorems; topics include trees and connectivity, eulerian and hamiltonian graphs, graph colorings, matchings, graph decomposition, and extremal graph theory. (Spring, Alt/yrs)

2. Change the curricular requirements of **Mathematics (B.S.) [Effective: Summer 2013]**

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B. Applied - Statistics Option

The emphasis is on the design and analysis of experiments. With a major or minor in another department this is an excellent preparation for work in industry or for graduate school in Statistics.

Math Courses:

Math 451 Probability Theory (3 cr)
Math 452 Mathematical Statistics (3 cr)

At least two courses from the following (6 cr):

Math 395 Analysis of Algorithms (3 cr)
Math 426 Discrete Optimization (3 cr)
Math 428 Numerical Methods (3 cr)
Math 432 Numerical Linear Algebra (3 cr)
Math 471 Introduction to Analysis 1 (3 cr)
Math 472 Introduction to Analysis 2 (3 cr)

Supporting Courses:

~~CS 112~~ ~~Introduction to Problem Solving and Programming or~~
~~CS 120~~ ~~Computer Science I (3-4 cr)~~
Stat 426 SAS Programming (3 cr)
Stat 431 Statistical Analysis (3 cr)

One of the following (3-4 cr):

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

One course selected from the following (3-4 cr):

Stat 251 Statistical Methods (3 cr)
Stat 301 Probability and Statistics (recommended) (3 cr)

At least two courses from the following (6 cr):

Econ ~~353~~~~453~~ ~~Econometrics (3 cr)~~ ~~Quantitative Economics and~~
~~Forecasting (3 cr)~~

Math 453 Stochastic Models (3 cr)
Stat 422 Sample Survey Methods (3 cr)
Stat 507 Experimental Design (3 cr)
Stat 550 Regression (3 cr)
Stat 514 Nonparametric Statistics (3 cr)
Stat 519 Multivariate Analysis (3 cr)
Stat 555 Statistical Ecology (3 cr)

Approved electives in fields where statistics is applied (not to be in Statistics (Stat) courses) (6 cr)

Courses to total 120 credits for this degree

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E. Applied - Actuarial Science and Finance Option

This curriculum provides the background to become an actuary and work in the insurance industry, or to work in finance.

Math courses:

Math 310 Ordinary Differential Equations (3 cr)
Math 451 Probability Theory (3 cr)
Math 452 Mathematical Statistics (3 cr)

Three additional courses chosen from Math courses numbered above 400 or Stat 422 (9 cr)

Supporting courses:

Acct 201 Introduction to Financial Accounting (3 cr)
Acct 202 Introduction to Managerial Accounting (3 cr)
~~Bus 301~~ ~~Financial Management (3 cr)*~~
~~Bus 342~~ ~~Product and Process Planning (3 cr)*~~
~~CS 112~~ ~~Introduction to Problem Solving and Programming or~~
~~CS 120~~ ~~Computer Science I (3-4 cr)~~
Econ 201 Principles of Economics (3 cr)
Econ 202 Principles of Economics (3 cr)
~~Stat 251~~ ~~Statistical Methods or~~
~~Stat 301~~ ~~Probability and Statistics (preferred) (3 cr)~~
~~Stat 426~~ ~~SAS Programming or~~
~~Stat 431~~ ~~Statistical Analysis (3 cr)~~
Bus 339 Spreadsheet Modeling (1-3 cr)

One of the following (3 cr):

[Bus 301](#) [Financial Management \(3 cr\)*](#)

[Bus 342](#) [Product and Process Planning \(3 cr\)*](#)

[One of the following \(3-4 cr\):](#)

[CS 112](#) [Introduction to Problem Solving and Programming \(3 cr\)](#)

[CS 120](#) [Computer Science I \(4 cr\)](#)

[One of the following \(3 cr\):](#)

[Stat 251](#) [Statistical Methods \(3 cr\)](#)

[Stat 301](#) [Probability and Statistics \(preferred\) \(3 cr\)](#)

[One of the following \(3 cr\):](#)

[Stat 426](#) [SAS Programming \(3 cr\)](#)

[Stat 431](#) [Statistical Analysis \(3 cr\)](#)

At least three courses selected from the following (7-9 cr):

[Bus 302](#) [Intermediate Financial Management \(3 cr\)](#)

[Bus 364](#) [Insurance \(3 cr\)](#)

[Bus 381](#) [International Finance \(3 cr\)](#)

[Bus 408](#) [Security Analysis \(3 cr\)](#)

[Bus 463](#) [Portfolio Management \(3 cr\)](#)

[Bus 464](#) [Derivatives and Risk Management \(3 cr\)](#)

[Bus 465](#) [Introduction to Market Trading \(3 cr\)](#)

[Bus 469](#) [Risk and Insurance \(3 cr\)](#)

[Econ 351](#) [Intermediate Macroeconomic Analysis \(3 cr\)](#)

[Econ 352](#) [Intermediate Microeconomic Analysis \(3 cr\)](#)

[Math 455](#) [Applied Actuarial Science \(1 cr\)](#)

One course selected from the following (3 cr):

[Econ 353](#) [Quantitative Economics and Forecasting \(3 cr\)](#)

[Stat 433](#) [Econometrics \(3 cr\)](#)

[Stat 550](#) [Regression \(3 cr\)](#)

Courses to total 120 credits for this degree

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Mechanical Engineering

1. Drop the following courses [**Effective:** Summer 2013]

ME J418/J518 Discrete System Simulation and Animation (3 cr)

How to model discrete systems such as those found in manufacturing. A non-procedural computer language for writing computer code will be taught. Topics include inventory control, scheduling, and optimization; animation of simulation results. Special software for the animation will be covered. Additional exercises and a major term project required for graduate credit.

Prereq: ME 418: Junior status or Permission ME 518: Permission

Recommended Substitution: None

ME 419 Advanced Simulation and Animation (3 cr)

Advanced topics in discrete system simulation with emphasis on topics of interest to the Mechanical Engineer. Students will learn how to model complex discrete systems using special software for both simulation and animation. Topics include: interfacing the simulation language with other software, creating stand-alone animations, creating presentations showing the animation results. Each student will be assigned a major project to simulate. (Spring only)

Prereq: ME 418

Recommended Substitution: None

2. Add the following courses [**Effective:** Summer 2013]

ME J450/J550 Computational Fluid Dynamics (3 cr)

Governing equations of fluid flow; fundamentals of turbulence modeling; accuracy and stability of discretization schemes; verification and validation; boundary and initial conditions; grid generation; CFD post-processing. Application of CFD software (ANSYS FLUENT) through five hands-on CFD Labs including internal viscous pipe flows, external flows over a 2D airfoil and a circular cylinder, and flows in a 2D driven cavity. Additional projects/assignments required for graduate credits.

Prereq: Engr 335 and Math 330

3. Change the following courses [**Effective:** Summer 2013]

ME 123 Introduction to Mechanical Design (3 cr)

Introduction to engineering design process and analysis techniques including problem solving skills, development of software learning skills, graphical analysis, data analysis, ~~and economic decision making~~, documentation skills, ~~and use of structured programming concepts in designing personal applications~~. Three lec and one open 2-hr lab a wk. (Fall only)

Coreq: Math 170

ME 223 Mechanical Design Analysis (3 cr)

Use of design and problem solving methodology to model requirements, conduct project learning, develop concepts, and realize prototypes. Projects feature elements of electromechanical design, rapid prototyping, and experimentation. Use of a design and problem solving methodology in the creation of application programs; matrix methods; numerical integration; solution of differential equations; oral/written communication. Three-lecture and one 2-hr open lab a wk.

Prereq: ME 123
Coreq: Math 175

ME 301 Computer Aided Design Methods (3 cr)

Engineering drawing literacy, pre-CAD planning, part modeling, assembly modeling, drawing package formulation, culminating team project involving virtual dissection and reassembly of a complex machine. Two and three dimensional graphics including geometric dimensioning and tolerancing (GD&T); use of solid modeling software in engineering design (CAD); finite element analysis (FEA), and manufacturing (CAM).

Prereq: ME 223

ME 322 Mechanical Engineering Thermodynamics (3 cr)

Thermodynamic properties of substances, first and second laws of thermodynamics, thermodynamic analysis of mechanical engineering thermal components and cycles, psychrometric process, and introduction to combustion systems. (Fall only)

Prereq: Chem 111 and ~~Math 310~~ [Phys 211](#)

ME 325 Machine Component Design I (3 cr)

Study of stress, deflection and stiffness, material properties, static and fatigue failure theory in the context of the analysis and design of machine components such as fasteners, welds, spring design and bearings. [Significant use of solid modeling and use of equation solvers.](#)

Prereq: ME 341 and MSE 201

ME 330 Experimental Methods for Engineers (3 cr)

Measurement systems and their application to engineering problems; topics include generalized performance of measurement systems, measuring and control devices, data acquisition and analysis, and report writing. Two lec and one 2-hr lab a wk.

Prereq: ~~ME 223~~ [Engr 240](#)
Coreq: ~~Engr 240, 320, 335, and 350~~

ME 341 Intermediate Mechanics of Materials (3 cr)

[Mechanics of materials approach to: three-dimensional stress and strain, unsymmetrical bending, shear centers, curved beams, thick-walled pressure vessels, non-circular torsion; energy methods and advanced strength theories. Introduction to elementary kinematics. Significant use of solid modeling and use of equation solvers.](#) Mechanics of materials approach to three dimensional stress and strain, plates, curved beams, pressure vessels, non-circular torsion and unsymmetrical bending; introduction to elementary energy methods and advanced strength theories.

Prereq: ~~Engr 350, Math 275, 310~~ [ME 301 and Certification](#)
Coreq: [MSE 201](#)

ME 345 Heat Transfer (3 cr)

Transmission by conduction of heat in steady and unsteady states, by free and forced convection, and by radiation; combined effects of conduction, convection, and radiation.

Prereq: ~~ME 223, ME 322, and Math 310~~
Coreq: [Engr 335](#)

ME J421/J521 Advanced Computer Aided Design (3 cr)

Use of solid modeling software for advanced component design, creation of complex multi-component assemblies, animation studies, and rendering. [There are two major projects: solid modeling to reverse engineer an existing design and solid modeling for detail design synthesis. Course concludes with one month-long final project.](#)

Prereq: ME 301 and [ME 341](#)

ME 422 Applied Thermodynamics (3 cr)

Advanced topics in applied thermodynamics including availability (exergy) analysis of systems, advanced power and refrigeration cycles, combustion, [and thermodynamic properties of real fluids, phase equilibrium, and chemical equilibrium.](#)

Prereq: ~~Engr 320~~ [ME 322](#)

ME 424 Mechanical Systems Design I (3 cr)

May be used as core credit in J-3-d. Study of production realization including project planning, concept design, detail design, and manufacturing processes with multiple realistic constraints. Concepts learned are applied to a two-semester, [industrial-sponsored](#) capstone design project. The project is continued in ME 426. (Fall only)

Prereq: ME 301, ME 313, ME 325, ME 330, ME 345, and Certification

ME 425 Machine Component Design II (3 cr)

[A continuation of the analytical study of concepts in ME 325 Machine Component Design, by studying how these components are used in applications. In this context, material selection, machinability and strengthening is addressed. Special emphasis is placed on discussions of case studies and detailed design projects involving machine component elements. Significant use of solid modeling and use of equation solvers.](#) Emphasis on material selection, machineability, joining, materials strengthening and surface treatment; design using metals, non-metals and composite materials for strength, fatigue, creep and corrosion resistance; other topics include lubrication theory. Discussions of case studies and detailed design projects involving machine component elements.

Prereq: ME 325

ME 426 Mechanical Systems Design II (3 cr)

May be used as core credit in J-3-d. Continuation of each two-semester, ~~industrial-sponsored~~ capstone design project that was started in ME 424. (Spring only)

Prereq: ME 424

Coreq: ME 435

ME 430 Senior Lab (3 cr)

Detailed lab investigation of engineering problem; statistical design of experiments; application of engineering principles to analyze experimental data; technical report writing; oral communication skills. One lec and four hrs of lab a wk.

Prereq: ME 313 and 330

Coreq: Engr 317

ME 435 Thermal Energy Systems Design (3 cr)

Application of fluid mechanics, thermodynamics and heat transfer in the design of thermal energy systems; topics include ~~engineering economy~~, thermal energy system component analysis and selection, component and system simulation, ~~dynamic response of thermal systems~~, and system optimization. (Fall only)

Prereq: Engr 335 and ME 345

Coreq: Math 330

ME J451/J551 Experimental Methods in Fluid Dynamics and Heat Transfer (3 cr)

~~Credit not granted for both ME 451 and ME 551. ME 551 same as CE 550. The objective of this course is to develop the knowledge and skills to be able to design and perform fluid dynamics experiments (and experiments in related areas) and to interpret and report the results. Learn the words, the concepts, and experimental skills in areas including dimensional analysis and scaling of experiments, flow visualization, velocity and flow rate measurements, turbulence measurements, and sediment sizing and transport measurements. Additional projects/assignments reqd for grad cr. One 1-1/2 hr lec and one 3-hr lab a wk. Recommended Preparation: Engr 317 and Engr 335. Theory and applications of transducers and instrumentation to measure velocity, temperature, and related quantities; flow visualization, pressure measurements, thermal anemometry, laser Doppler velocimetry, temperature and concentration measurement, and heat flux measurement. Additional projects/assignments reqd for grad cr. One 1-1/2 hr lec and one 3-hr lab a wk. Recommended Preparation: Engr 317, ME 345.~~

Prereq: ME 330

Short Course Title: Exp Methods Fluid Dynamics

Editor's Note: I've removed the reference to not earning credit in both ME 451 and ME 551 since that is already covered by university policy, see regulation B-12.

Modern Languages & Cultures

1. Change the following vertically-related courses [**Effective:** Summer 2013]

Vertically-related courses in this subject field are: Arbc 101-102; Fren 101-102 ~~(or 104)~~-201-202; Germ 101-102-201-202; Japn 101-102-201-202; ~~Latn 101-102~~; NezP 101-102-201-202; Span 101-102 (or 104)-201-202. Any one of the following courses may be considered the terminal course for the related vertical sequence above: Fren 301 or 302; Germ 301 or 302; Span 301 or 302. ~~Any upper-division Latin literature course may be used to receive vertically related course credit for Latn 101-102.~~ A maximum of 16 credits may be earned for vertical credit in any language, in the Department of Modern Languages & Cultures.

2. Add the following courses [**Effective:** Summer 2013]

Germ 304 20th Century German Culture and Society (3 cr)

German society, political culture, and the arts in the 20th century. Recommended Preparation: Germ 202.

Short Course Title: 20th C German Culture

German 300-level courses are needed to fulfill the 9 upper-division requirement for the German minor and the Modern Business Major.

Germ 305 Germany in the New Europe (3 cr)

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.

3. Change the curricular requirements of **All Modern Languages and Cultures Majors (B.A.)** [**Effective:** Summer 2013]

A maximum of 15 transfer credits and/or credits earned through study abroad may be applied toward the upper-division requirements for the B.A. degree in Foreign Language, French, ~~and Spanish~~ ~~Latin, and Classical Studies options. A maximum of 18 such credits may be applied toward the upper-division requirements for the B.A. degree in Foreign Language Spanish option.~~

Students who receive a C or D in their first upper-division language class are required to pass an oral and written proficiency exam to meet minimum departmental proficiency standards before being allowed to register in other upper-division language classes.

A student must receive a C or better in an upper-division course in the appropriate target language to count towards the major.

Before going on a study abroad program, students must have the approval of their major advisor to ensure that their proposed program meets with departmental approval. Upon returning to UI, the Department of Modern Languages & Cultures will evaluate the students' oral and written proficiency and determine which classes studied abroad may count towards the major. Study abroad credits with the number 404 and

University of Idaho credits with the number 449, 498, or 499 will not automatically count toward the Foreign Languages, French, or Spanish majors; they will be evaluated by a Modern Languages and Cultures advisor and may be used to complete the major only upon approval.

4. Change the curricular requirements of **Foreign Language (B.A.)** [Effective: Summer 2013]

Designed to provide the student of modern languages with a liberal arts education and a core of business courses that will open doors to a career in international business.

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

In addition to the course work specified for ~~each option~~this major, an international experience is required ~~of students pursuing the French or Spanish options~~. This requirement will normally be fulfilled by completing a program of studies abroad which takes place after the student has finished language study through the intermediate (200) level. The specific program must receive prior approval from the student's FLL-MLC advisor and must be one that lasts a minimum of 12-15 weeks. The classes taken must earn a minimum of 12 upper-division (300/400 level) academic credits, ~~and~~ be in subjects pertinent to the student's language option, ~~and offered in that language~~. Such credits may be obtained by two consecutive summer programs.

~~It is strongly suggested (but not required) that students completing a major in a foreign language offered in the Department of Modern Languages & Cultures (see below) also complete some of their credits through an international experience.~~

~~8-9 FLEN credits, of which a minimum of 5-6 FLEN credits is outside of one's language option (8-9 cr)~~

A. Business Option

~~Designed to provide the student majoring in foreign languages with a liberal arts background and a component of business courses that will form a good beginning for entering a program leading to the degree of Master of Business Administration.~~

One ~~foreign modern~~ language (Chinese, French, German, Japanese, or Spanish), elementary and intermediate (16 cr)

Approved upper-division ~~foreign language~~ courses in the same language (including one FL-business course or approved alternative in the target language) (21 cr)

Acct 201 and Intro to Financial Accounting & Intro to Managerial
Acct 202 Accounting (6 cr)
BLaw 265 Legal Environment of Business (3 cr)

~~Either the College of Business and Economics Integrated Core (Bus 340-345*) or the following (15 or 18 cr):~~

Bus 301 Financial Management (3cr)
Bus 311 Introduction to Management (3cr)
Bus 321 Marketing (3cr)
Bus 350 Management Information Systems ~~or~~
Bus 351 Introduction to Electronic Commerce (3cr)
Bus 482 International Marketing ~~or~~
Econ 446 International Economics ~~or~~
Econ 447 International Development Economics (3 cr)
Econ 272 Foundations of Econ Analysis ~~or~~
Econ 201 and Prin of Economics (4-6 cr)
Econ 202
FLEN 307 The European Union (3 cr)
Stat 251 Statistical Methods ~~or~~

~~Courses to total 120 credits for this degree~~

~~*Students completing Bus 340-Bus 345 must take either Math 160 or Math 170~~

Acct 201 Intro to Financial Accounting (3 cr)
Econ 202 Prin of Economics or
Econ 272 Foundations of Econ Analysis (3-4 cr)
Bus 301 Financial Management (3cr)
Bus 311 Introduction to Management (3cr)
Bus 321 Marketing (3cr)

Six credits of upper-division business courses (those with a BUS prefix; note that students taking Bus 340-Bus 345 will need to complete all the prerequisites for that course sequence prior to taking those courses.)

Additional courses in Business to total 21 to 22 credit depending on whether students take Econ 202 or Econ 272 (3 cr)

One of the following (3 cr)

FLEN 307 The European Union (3 cr)
FLEN 308 European Immigration and Integration (3 cr)

Approved Alternative Course (3 cr)

Courses to total 120 credits for this degree

5. Change the curricular requirements of **Foreign Language (B.A.)** [Effective: Summer 2013]

Designed to provide the student of modern languages with a liberal arts education and a core of business courses that will open doors to a career in international business.

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

In addition to the course work specified for this major, an international experience is required. This requirement will normally be fulfilled by completing a program of studies abroad which takes place after the student has finished language study through the intermediate (200) level. The specific program must receive prior approval from the student's MLC advisor and must be one that lasts a minimum of 12-15 weeks. The

classes taken must earn a minimum of 12 upper-division (300/400 level) academic credits and be in subjects pertinent to the student's language option. Such credits may be obtained by two consecutive summer programs.

Business Option

One modern language (Chinese, French, German, Japanese, or Spanish), elementary and intermediate (16 cr)

Approved upper-division courses in the same language (including one business course or approved alternative in the target language) (21 cr)

**Students completing Bus 340-Bus 345 must take either Math 160 or Math 170*

~~Acct 201 Intro to Financial Accounting (3 cr)~~

~~Econ 202 Prin of Economics or~~

~~Econ 272 Foundations of Econ Analysis (3-4 cr)~~

~~Bus 301 Financial Management (3cr)~~

~~Bus 311 Introduction to Management (3cr)~~

~~Bus 321 Marketing (3cr)~~

~~Six credits of upper-division business courses (those with a BUS prefix; note that students taking Bus 340-Bus 345 will need to complete all the prerequisites for that course sequence prior to taking those courses.)~~

~~Additional courses in Business to total 21 to 22 credit depending on whether students take Econ 202 or Econ 272 (3 cr)~~

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

~~FLEN 307 The European Union (3 cr)~~

~~FLEN 308 European Immigration and Integration (3 cr)~~

~~Approved Alternative Course (3 cr)~~

~~Acct 201 Introduction to Financial Accounting (3 cr)~~

~~One of the following (3-4 cr):~~

~~Econ 202 Principles of Microeconomics (3 cr)~~

~~Econ 272 Foundations of Econ Analysis (4 cr)~~

~~One of the following groups of courses (15-17 cr):~~

~~Group A:~~

~~Bus 301 Financial Management (3 cr)~~

~~Bus 311 Introduction to Management (3 cr)~~

~~Bus 321 Marketing (3 cr)~~

~~Six credits taken from Bus 101 or any other 300- or 400-level BUS prefix course~~

~~or~~

~~Group B:~~

~~Bus 340 Team Building and Group Dynamics (2 cr)~~

~~Bus 341 Business Systems (4 cr)~~

~~Bus 342 Product and Process Planning (3 cr)~~

~~Bus 343 Planning and Decision-Making in Organizations (2 cr)~~

~~Bus 344 Managing the Firm's Resources (3 cr)~~

~~Bus 345 Business Operating Decisions (3 cr)~~

~~Courses to total 120 credits for this degree. **Business courses to total 21 credits**~~

Editor's Note: The version used to show the proposed changes is the version that was approved by UCC and will appear on GCR 267, but has not yet received General Faculty approval yet.

6. Change the curricular requirements of **All Modern Languages and Cultures minors** (minor) [Effective: Summer 2013]

Students must complete 25-20 credits for the Asian Studies, French, German, or Spanish minor, of which at least 9 must be upper-division. Vertical credits may be acquired per Regulation I for the 101, 102, 201, and 202 courses as part of the 25-20 credits, but vertical credits may not be acquired per Regulation I for 300/400-level courses. It is not possible to challenge any upper-division courses for the minor. Study abroad credits with the number 404 and University of Idaho credits with the number 449, 498, or 499 will not automatically count toward the minor; they will be evaluated by a Modern Languages & Cultures advisor and may be used to complete the minor only upon approval.

Transfer credits may be applied toward a minor with the approval of the department offering the minor; however, the last nine credits applied to completion of the minor must be earned in 1) UI courses, 2) through UI study abroad, or 3) through student exchange programs, and may not include credits earned through correspondence study.

Students must complete at least 6 credits of the 9 credits of upper-division coursework at the University of Idaho to complete the Asian Studies, French, German or Spanish minor.

A student must receive a C or better in any course to count for the Asian Studies, French, German, or Spanish minor.

Asian Studies Minor

Two semesters of Asian Language or one semester of Approved Study Abroad in Asia. Courses from the following list; no more than 9 credits in one discipline and no more than 6 credits in student's major. Nine (9) credits of upper division coursework required. Students must complete 6 of these 9 credits of upper-division coursework at the University of Idaho to complete the Asian Studies minor.

Anth 220 Peoples of the World (3 cr)

Anth 261 Language and Culture (3 cr)

Comm 335 Intercultural Communication (3 cr)

Geog 200 World Regional Geography (3 cr)

Hist 180 Introduction to East Asian History (3 cr)

Hist 481	America's Wars in Asia (3 cr)
Hist 482	Japan, 1600 to Present (3 cr)
Hist 484	Modern China, 1840s to Present (3 cr)
Hist 485	Chinese Social and Cultural History (3 cr)
IS 325	Topics in Islamic Studies (3 cr, max 6)
Phil 307	Buddhism (3 cr)
PolS 205	Introduction to Comparative Politics (3 cr)
PolS 237	International Politics (3 cr)
PolS 420	Introduction to Asian Politics (3 cr)
The 467	Asian Theatre History (3 cr)

Courses to total 20 credits for this minor

French Minor

Fren 101-	Elementary French I-II (8 cr)
Fren 102	
Fren 201-	Intermediate French I-II (8 cr)
Fren 202	

Nine credits of upper-division French courses (not including lab-based, FLEN, or lit/film and lit in translation courses) (9 cr) Students must complete 6 of these 9 credits of upper-division coursework at the University of Idaho to complete the French minor.

Courses to total 20 credits for this minor

German Minor

Germ 101- Germ	Elementary German I-II (8 cr)
102	
Germ 201- Germ	Intermediate German I-II (8 cr)
202	

Nine credits of upper-division German courses (not including lab-based, FLEN, or lit/film and lit in translation courses) (9 cr) Students must complete 6 of these 9 credits of upper-division coursework at the University of Idaho to complete the German minor.

Courses to total 20 credits for this minor

Spanish Minor

Span 101-	Elementary Spanish I-II (8 cr)
Span 102	
Span 201-	Intermediate Spanish I-II (8 cr)
Span 202	

Nine credits of upper-division Spanish courses including Span 301 and Span 302, but not including lab-based, FLEN, or lit/film in translation courses. (9 cr) Students must complete 6 of these 9 credits of upper-division coursework at the University of Idaho to complete the Spanish minor.

Courses to total 20 credits for this minor

Music

1. Add the following course [**Effective:** Summer 2013]

MusA J410/J510 Advanced Jazz Improvisation (2 cr)

Advanced study of jazz improvisation with an emphasis on advanced jazz theory, transcription, and developing facility in all keys. Additional projects/assignments required for graduate credit. (Fall only)

Prereq: MusA 210

Editor's Note: This request is to create MusA 410. MusA 510 already exists.

MusH J456/J556 Choral Literature I (2 cr)

Historical and analytical survey of choral literature from the early Renaissance through Classical era. Additional projects/assignments required for graduate credit.

Prereq for MusH 456: Junior Standing

MusH J457/J557 Choral Literature II (2 cr)

Historical and analytical survey of choral literature from the Romantic through Contemporary era. Additional projects/assignments required for graduate credit.

Prereq for MusH 457: MusH 456

Prereq for MusH 557: MusH 556

2. Change the following courses [**Effective:** Summer 2013]

MusA 510 Advanced Jazz Improvisation (2 cr)

~~Topics studied will include comprehensive jazz harmony, pentatonics, rhythmic displacement, solo transcribing and analysis. See MusA J410/J510.~~

MusA 587 (s) Advanced Conducting (1 cr, max arr)

Advanced score study, baton technique, expressive gestures for conductors. ~~Summers only, alternating choral (even yrs) and instrumental (odd yrs). Recommended Preparation: Undergraduate conducting course.~~

Prereq: Undergraduate conducting course

MusC 425 Composition (2 cr, max arr)

Continuation of MusC 325—Creative writing increasing with increasing emphasis on varied media and larger forms, but with value being placed on creativity and originality.

Prereq: MusC 240, MusC 242, and MusC 260; and a portfolio

MusT 383 Principles of Music Teaching (3 cr)

Philosophy, principles, curriculum, and organization of the school music program. Must be taken before enrolling in MusT 432. (Fall only)

Prereq: EDCI 201, and MusC 142, and admission to teacher education program; or Permission

MusX 283 (s) Diction for Singers (1-2 cr)

Two-semester sequence in study of English and foreign language diction as represented by the International Phonetic Association.

Prereq: Music Major or Permission

3. Change the curricular requirements of **Music: Composition (B.Mus.) [Effective: Summer 2013]**

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

MusA 114	Studio Instruction (if major performing medium is other than piano, piano is suggested for the minor area) (2 cr)
MusA 115	Studio Instruction (2 cr)
MusA 124	Studio Instruction (6 cr)
MusA 145 and MusA 245	Piano Class for Music Majors/Minors (2 cr)
MusA 146 and MusA 246	Piano Class for Music Majors/Minors (2 cr)
MusA 324	Studio Instruction (4 cr)
MusA 387	Conducting I (2 cr)
MusC 139, MusC 140, MusC 239, MusC 240	Aural Skills (6 cr)
MusC 141, MusC 142, MusC 241, MusC 242	Theory of Music (10 cr)
MusC 260	Introduction to Composition (1 cr)
MusC 328	Instrumental and Choral Arranging (3 cr)
MusC 331	Counterpoint (3 cr)
MusC 425	Composition (8 cr)
MusC 426	Electronic Music (2 cr)
MusC 442	Musical Analysis (2 cr)
MusC 490	Senior Recital (0 cr)
MusH 111	Introduction to Music Literature (3 cr)
MusH 321, MusH 322, MusH 323	Music in Western Civilization (9 cr)
MusX 101	Orientation for Music Majors (0 cr)
MusX 140	Convocation (seven semesters) (0 cr)
MusH elective at the 400-level	(3 cr)
Major ensemble (eight different semesters chosen from MusA 116/316 Concert Choir - Vandaleers, MusA 117/317 University Chorus, MusA 119/319 Marching Band, MusA 121/321 Concert Band, MusA 122/322 Orchestra, MusA 125/325 Symphonic Band or MusA 320 Wind Ensemble) (<u>Keyboard majors: six semesters of major ensembles in addition to two semesters of MusA 315 Collaborative Piano and/or MusA 365 Keyboard Ensemble</u>)(<u>Guitar majors: six semesters of major ensembles and two semesters of MusA 365 Guitar Ensemble</u>)(8 cr)	
Chamber music (two different semesters chosen from MusA 118/318 Jazz Choir, MusA 323 Jazz Ensemble, MusA 365 Chamber Ensemble, MusA 366 Orchestral Repertoire (maximum of one semester)) (one semester of MusA 315, Collaborative Piano, is reqd of students whose major applied medium is keyboard)(2 cr)	
Music electives to complete 84 cr in music (4 cr)	

Courses to total 128 credits for this degree

Students may also complete an optional Emphasis in Jazz Composition/Arranging 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)
Electives in composition, arranging, ensembles, or combos (6 cr)	

4. Change the curricular requirements of **Music: History and Literature (B.A. or B.S.) [Effective: Summer 2013]**

Required course work includes the university requirements (see regulation J-3 on page **Error! Bookmark not defined.**), the CLASS requirements for the B.A. or B.S. degree, and:

MusA 114	Studio Instruction (4 cr)
MusA 145 and	Piano Class for Music Majors/Minors (2 cr)

MusA 245	
MusA 146 and MusA 246	Piano Class for Music Majors/Minors (2 cr)
MusA 314	Studio Instruction (one instrument/voice) (4 cr)
MusC 139, MusC 140, MusC 239, MusC 240	Aural Skills (6 cr)
MusC 141, MusC 142, MusC 241, MusC 242	Theory of Music (10 cr)
MusH 111	Introduction to Music Literature (3 cr)
MusH 321, MusH 322, MusH 323	Music in Western Civilization (9 cr)
MusH 480	Senior Thesis in Music History I (1 cr)
MusH 481	Senior Thesis in Music History II (1 cr)
MusX 101	Orientation for Music Majors (0 cr)
MusX 140	Convocation (seven semesters) (0 cr)
Upper-division MusH electives (6 4 cr)	
Upper-division MusC elective (2 cr)	
MusA ensembles (in eight different semesters) (Keyboard majors: of these eight, two semesters must be MusA 315 Collaborative Piano) (Guitar majors: of these eight, two semesters must be MusA 365 Guitar Ensemble) (8 cr)	
Courses to total 128 credits for this degree (including a least 70 cr in non-music courses)	
Students may also complete an optional Emphasis in Jazz History 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 history, ensembles, combos, or applied study (2 cr)	

5. Change the curricular requirements of **Music: Theory** (B.A. or B.S.) [**Effective:** Summer 2013]

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

MusA 114	Studio Instruction (4 cr)
MusA 145 and MusA 245	Piano Class for Music Majors/Minors (2 cr)
MusA 146 and MusA 246	Piano Class for Music Majors/Minors (2 cr)
MusA 314	Studio Instruction (one instrument/voice) (4 cr)
MusC 139, MusC 140, MusC 239, MusC 240	Aural Skills (6 cr)
MusC 141, MusC 142, MusC 241, MusC 242	Theory of Music (10 cr)
MusC 442	Musical Analysis (2 cr)
MusC 480	Senior Thesis in Music Theory I (1 cr)
MusC 481	Senior Thesis in Music Theory II (1 cr)
MusH 111	Introduction to Music Literature (3 cr)
MusH 321, MusH 322, MusH 323	Music in Western Civilization (9 cr)
MusX 101	Orientation for Music Majors (0 cr)
MusX 140	Convocation (seven semesters) (0 cr)
Upper-division MusC electives (4 cr)	
MusA ensembles (in eight different semesters) (Keyboard majors: of these eight, two semesters must be MusA 315 Collaborative Piano) (Guitar majors: of these eight, two semesters must be MusA 365 Guitar Ensemble) (8 cr)	
Courses to total 128 credits for this degree (incl at least 72 cr in non-music courses)	

Natural Resources

1. Add the following courses [**Effective:** Summer 2013]

NR 406 Teaching Asst. Practicum (1-2 cr)

Instructional and other classroom assistance for NR 101 – Exploring Natural Resources performed by students under faculty supervision.

Prereq: *Permission*

NR 407 Natural Resource Ambassador Practicum (2 cr)

Student ambassadors are selected through an application and interview process to represent CNR to future students at recruiting activities and functions. Students will learn skills in leadership, communication, networking, public speaking, and time management. Students will be responsible for visiting high schools, attending college and career fairs, recruiting events on campus.

Prereq: *Permission*

Short Course Title: Nat Res Ambassador Practicum

NR 507 Moral Reasoning in Natural Resources (3 cr)

Exploration of the practical aspects of moral reasoning on current issues in natural resources. The purpose of the course is to discover the essence of reasoning, rationality, and reflection on moral and ethical dilemmas with regard to current issues in natural resources.

Short Course Title: Moral Reasoning in NR

2. Change the curricular requirements of **Ecology and Conservation Biology (B.S.Ecol.-Cons.Biol.) [Effective: Summer 2013]**

The program requires ~~128-120~~ credits, and students must choose either the natural resources ecology or conservation biology option. Students pursuing a B.S. in Ecology & Conservation Biology must receive a grade of 'C' or better in each of the following 4 indicator courses to register in upper division courses in CSS/Fish/For/REM/WLF and to graduate with a B.S. in either option: Biol 116, Biol 213, Stat 251, For 221 or REM 221. Before students are allowed to begin their senior thesis or project (485 or 497), they must attend two evening thesis / project sessions and one senior poster presentation.

Required course work includes the university requirements (see regulation J-3 on page **Error! Bookmark not defined.**) 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)
- ~~Chem 101~~ ~~Introduction to Chemistry I or~~
- ~~Chem 111~~ ~~Principles of Chemistry I (4 cr)~~
- Comm 101 Fundamentals of Public Speaking (2 cr)
- ~~CSS 383~~ ~~Natural Resource and Ecosystem Service Economics (3 cr)~~
- ~~Econ 202~~ ~~Principles of Economics or~~
- ~~Econ 272~~ ~~Foundations of Economic Analysis (3-4 cr)~~
- Engl 317 Technical Writing (3 cr)
- ~~For 221~~ ~~Ecology or~~
- ~~REM 221~~ ~~Ecology (3 cr)~~
- For 235 or Society and Natural Resources (3 cr)
- CSS 235
- For 375 Introduction to Spatial Analysis for Natural Resource Management (3 cr)
- ~~Math 160~~ ~~Survey of Calculus or~~
- ~~Math 170~~ ~~Analytic Geometry and Calculus I (4 cr)~~
- NR 101 Exploring Natural Resources (1 cr)
- NR 200 (s) Seminar (1 cr)
- REM 341 Systematic Botany or
- For 320 Dendrology (3-4 cr)
- Stat 251 Statistical Methods (3 cr)

One of the following (4 cr):

~~Chem 101~~ ~~Introduction to Chemistry I (4 cr)~~

~~Chem 111~~ ~~Principles of Chemistry I (4 cr)~~

One of the following (3-4 cr):

~~Econ 202~~ ~~Principles of Economics (3 cr)~~

~~Econ 272~~ ~~Foundations of Economic Analysis (3-4 cr)~~

One of the following (3 cr):

~~For 221~~ ~~Ecology (3 cr)~~

~~REM 221~~ ~~Ecology (3 cr)~~

One of the following (4 cr):

~~Math 160~~ ~~Survey of Calculus (4 cr)~~

~~Math 170~~ ~~Analytic Geometry and Calculus I (4 cr)~~

Choose one of the following (3 cr):

~~CSS 383~~ ~~Natural Resource and Ecosystem Service Economics (3 cr)~~

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

Choose one of the following (1 cr):

CSS 483 Senior Project Presentation (1 cr)

Fish 483 Senior Project Presentation (1 cr)

For 483 Senior Project Presentation (1 cr)

REM 483 Senior Project Presentation (1 cr)

WLF 483 Senior Project Presentation (1 cr)

Choose one of the following (3 cr):

CSS 485 Ecology and Conservation Biology Internship (3 cr)

Fish 485 Ecology and Conservation Biology Internship (3 cr)

Fish 497 Senior Thesis (3 cr)

For 485	Ecology and Conservation Biology Internship (3 cr)
For 497	Senior Thesis (3 cr)
NR 497	Senior Thesis (3 cr)
REM 485	Ecology and Conservation Biology Internship (3 cr)
REM 497	Senior Thesis (3 cr)
WLF 485	Ecology and Conservation Biology Internship (3 cr)
WLF 497	Senior Thesis (3 cr)

And one of the following options:

...

Naval Science

1. Change the following courses [**Effective:** Summer 2013]

NS 101 Introduction to Naval Science (2 cr)

~~Introduction to the Naval Service: custom and traditions, structure, career paths, basic leadership, ethics and character development, duties of a junior officer, and ships/aircraft of the U.S. Navy Fleet. This is a cooperative course available to WSU degree-seeking students.~~
Intro to the Navy: customs, structure, basic leadership, career paths, and ships and aircraft of the U.S. Fleet. This is a cooperative course available to WSU degree-seeking students. (Fall only).

NS 103 Introduction to Naval Science Laboratory (1 cr)

Practical instruction for introduction to Naval Science. Graded P/F. This is a cooperative course available to WSU degree-seeking students.

~~Prereq: NS 101~~

NS 202 Seapower and Maritime Affairs (3 cr)

~~An overview of U.S. naval history; seapower and maritime affairs beginning with the Continental Navy to present-day naval history.~~
Survey of U.S. Naval history; seapower and maritime affairs emphasizing present day concerns; comparisons of U.S. and foreign Naval strategies. This is a cooperative course available to WSU degree-seeking students. (Spring only)

NS 302 Naval Operations (3 cr)

Naval operations and tactics, relative motion, and Maneuvering Boards. This is a cooperative course available to WSU degree-seeking students. (Fall only)

~~Prereq: NS 301~~

2. Change the curricular requirements of **Naval Science (Minor)** [**Effective:** Summer 2013]

NS 102, NS 201	Ships Systems I, II (6-3 cr)
NS 201	Ship Systems II (3 cr)
NS 202	Seapower and Maritime Affairs (2-3 cr)

A minimum of 12 credits chosen from the two lists below. Students must complete a minimum of four upper-division courses and at least 2 courses from each list (12 cr):

Two to three courses from the following:

NS 301	Navigation (3 cr)
NS 302	Naval Operations (3 cr)
NS 311	Evolution of Warfare (3 cr)
NS 401	Naval Leadership and Management (2-3 cr)
NS 402	Naval Leadership and Ethics (3 cr)
NS 412	Amphibious Operations (3 cr)

Two to three courses from the following:

Hist 430	U.S. Diplomatic History (3 cr)
Hist 455	Modern Europe (3 cr)
Hist 457	History of the Middle East (3 cr)
Hist 458	Military History (3 cr)
PolS 205	Introduction to Comparative Politics (3 cr)
PolS 237	International Politics (3 cr)
PolS 338	American Foreign Policy (3 cr)
PolS 440	International Organizations and International Law (3 cr)
PolS 449	World Politics and War (3 cr)
PolS 480	Politics of Development (3 cr)
PolS 487	Political Violence and Revolution (3 cr)
Soc 301	Introduction to Diversity and Stratification (3 cr)

Courses to total 20-21 credits for this minor

Organizational Sciences

1. Add the following courses [**Effective:** Summer 2013]

OrgS 312 Practical Gerontology (3 cr)

See Psyc 312.

OrgS 414 Traumatic Events: Preparation, Intervention, Evaluation (3 cr)

See Psyc 414.

OrgS 416 Planning Professional Conferences and Events Laboratory (1 cr)

Laboratory application of tools and concepts learned in OrgS 415. Students will go through procedures to plan an event or conference. The event or conference could be a virtual one, or it could be one associated with their university or outside lives. Organizational planning and logistics for successful professional meetings, conferences, and other events. Considerations include themes and missions; physical, site, and technological needs; budgeting; invitees, attendees, and registrants, vendors; contracts, risk, and liabilities; and contingency planning.

Prereq: OrgS 210

Coreq: OrgS 415

Short Course Title: Planning Prof Confs/Events Lab

2. Change the following course [**Effective:** Summer 2013]

OrgS 415 Planning for Professional Conferences and Events (3 cr)

Organizational planning and logistics for successful professional meetings, conferences, and other events. Considerations include themes and missions; physical, site, and technological needs; budgeting; invitees, attendees, and registrants, vendors; contracts, risk, and liabilities; and contingency planning. Recommended preparation: OrgS 210.

Short Course Title: Planning Prof Confs & Events

3. Change the curricular requirements of **Organizational Sciences** (B.A. or B.S.) [**Effective:** Summer 2013]

Required course work includes the university requirements (see regulation J-3**Error! Bookmark not defined.**), the general requirements for either the B.A. or B.S. degree, and:

OrgS 210	Introduction to Organizational Sciences (1 cr)
OrgS 310	Applications/Experience in Organizational Sciences or
OrgS 317	Explore Mentoring & Leadership (1-6 cr)
OrgS 410	Capstone Project in Organizational Sciences (1-6 cr)
OrgS 444	Methods and Analysis in Organizational Science (4 cr)

Complete ~~four~~ three of the following courses (~~12-9~~ cr):

Anth 100	Introduction to Anthropology (3 cr)
Bus 101	Introduction to Business Enterprises (3 cr)
Comm 111	Introduction to Communication Studies (3 cr)
JAMM 100	Media and Society (3 cr)
JS 101	Introduction to the Justice System (3 cr)
PoIS 101	Introduction to Political Science and American Government (3 cr)
Psyc 101	Introduction to Psychology (3 cr)
Soc 101	Introduction to Sociology (3 cr)

Choose a specialization from one of the following areas:

Organizational Communication

Select 6 courses from Comm and 2 from other disciplines for this specialization. Student may not pursue both this specialization and a minor in Communication Studies (24 cr):

Comm 233	Interpersonal Communication (3 cr)
Comm 235	Organizational Communication (3 cr)
Comm 332	Communication and the Small Group (3 cr)
Comm 335	Intercultural Communication (3 cr)
Comm 347	Persuasion (3 cr)
Comm 410	Conflict Management (3 cr)
Comm 421	Nonverbal Communication (3 cr)
Comm 431	Applied Business and Professional Communication (3 cr)
Comm 433	Organizational Communication Theory, Research, and Application (3 cr)
Comm 456	Nonprofit Fundraising (3 cr)
Engl 207	Persuasive Writing (3 cr)
JAMM 265	Principles of Advertising (3 cr)
JAMM 440	Critical Issues in Mass Media (3 cr)
JAMM 444	Mass Media and Public Opinion (3 cr)
OrgS 305	Nonprofit Organizations (3 cr)
OrgS 317	Explore Mentoring & Leadership (3 cr)
OrgS 415	Planning for Professional Events (3 cr)
Psyc 320	Introduction to Social Psychology (3 cr)
Psyc 345	Group Dynamics (3 cr)

Psyc 441 Psychology in the Workplace (3 cr)

Workplace Relations Organizations and Communities

Select 6-7 courses from at least 3 different disciplines from the courses listed for this specialization (18 cr):

- Bus 311 Introduction to Management (3 cr)
- Bus 413 Leadership and Organizational Behavior (3 cr)
- Bus 414 [Entrepreneurship \(3 cr\)](#)
- Comm 235 Organizational Communication (3 cr)
- Comm 332 Communication and the Small Group (3 cr)
- Comm 347 [Persuasion \(3 cr\)](#)
- Comm 335 Intercultural Communication (3 cr)
- Comm 410 Conflict Management (3 cr)
- Comm 432 [Gender and Communication \(3 cr\)](#)
- Comm 456 or [Nonprofit Fundraising \(3 cr\)](#)
- JAMM 456
- Comm 492 Dark Side of Communication (3 cr)
- FCS 448 [Consumer Economic Issues \(3 cr\)](#)
- Hist 425 Immigration and Ethnicity in the United States (3 cr)
- JAMM 252 [Introduction to Public Relations \(3 cr\)](#)
- JAMM 325 [Publications Editing \(3 cr\)](#)
- JAMM 350 [Public Relations Writing and Production \(3 cr\)](#)
- JAMM 444 [Mass Media and Public Opinion \(3 cr\)](#)
- JAMM 452 [Public Relations Campaign Design \(3 cr\)](#)
- OrgS 305 [Nonprofit Organizations \(3 cr\)](#)
- OrgS 317 [Explore Mentoring & Leadership \(3 cr\)](#)
- OrgS 404 [Special Topics \(3 cr\)*](#)
- OrgS 415 [Planning for Professional Events \(3 cr\)](#)
- OrgS 416 [Planning Professional Conferences and Events Laboratory \(1 cr\)](#)
- OrgS 435 Personnel (3 cr)
- OrgS 450 Training and Performance Support (3 cr)
- Psyc 441 Social Psychology in the Workplace (3 cr)
- PoS 451 Public Administration (3 cr)
- PoS 452 [Administrative Law and Regulation \(3 cr\)](#)
- Psyc 315 [Psychology of Women \(3 cr\)](#)
- Psyc 320 Introduction to Social Psychology (3 cr)
- Psyc 345 Group Dynamics (3 cr)
- Psyc 404 Special Topics (3 cr)**
- Psyc 419 [Adult Development and Aging \(3 cr\)](#)
- Psyc 470 Introduction to Chemical Addictions (3 cr)
- Soc 250 Social Conflict (3 cr)
- Soc 301 or Introduction to Diversity and Stratification (3 cr)
- Anth 301
- Soc 313 Collective Behavior (3 cr)
- Soc 423 Social Class & Stratification (3 cr)
- Soc 424 Sociology of Gender (3 cr)

*Note: a maximum of 3 credits of OrgS 404 may be used towards the completion of this major.
**Note: a maximum of 3 credits of Psyc 404 may be used towards the completion of this major.

An academic minor, an academic certificate, or a CLASS approved emphasis*

Non-Profit and Community Organization

Select 6 courses from at least 3 different disciplines from the courses listed for this specialization (18 cr):

- Bus 311 Introduction to Management (3 cr)
- Bus 413 Leadership and Organizational Behavior (3 cr)
- Bus 414 Entrepreneurship (3 cr)
- Comm 347 Persuasion (3 cr)
- Comm 456 or Nonprofit Fundraising (3 cr)
- JAMM 456
- Comm 404 Special Topics (3 cr)
- Comm 431 Applied Business and Professional Communication (3 cr)
- CSS 481 Conservation Leadership (3 cr)
- CSS 486 Public Involvement in Natural Resource Management (3 cr)
- FCS 346 Personal and Family Finance and Management (4 cr)
- FCS 448 Consumer Economic Issues (3 cr)
- JAMM 252 Introduction to Public Relations (3 cr)
- JAMM 325 Publications Editing (3 cr)
- JAMM 350 Public Relations Writing and Production (3 cr)
- JAMM 404 Special Topics (3 cr)
- JAMM 444 Mass Media and Public Opinion (3 cr)
- JAMM 452 Public Relations Campaign Design (3 cr)
- OrgS 305 Nonprofit Organizations (3 cr)

OrgS 404	Special Topics (3-cr)
OrgS 415	Planning for Professional Events (3-cr)
OrgS 435	Personnel (3-cr)
OrgS 450	Training and Performance Support (3-cr)
PoIS 451	Public Administration (3-cr)
PoIS 452	Administrative Law and Regulation (3-cr)
Psyc 320	Introduction to Social Psychology (3-cr)
Psyc 441	Social Psychology in the Workplace (3-cr)
Soc 301 or Anth 301	Introduction to Diversity and Stratification (3-cr)
Soc 423	Social Class & Stratification (3-cr)

One academic minor* or academic certificate chosen from the following (12-20 cr):

Academic Minors:

Aging Studies
 American Indian Studies
 American Studies
 Communication Studies
 History
 International Studies
 Justice Studies
 Psychology
 American Government/Public Law
 Public Administration and Policy
 Religious Studies
 Sociology
 Women's Studies

Academic Minors from other disciplines may be substituted with advisor's approval

Academic Certificates:

Diversity and Stratification
 Entrepreneurship
 Organizational Dynamics
 Professional Ethics
 University of Idaho Leadership Certificate

Courses to total 120 credits for this degree

*Note: If an academic minor is used to satisfy this requirement, the area of emphasis or academic minor required for the CLASS general B.S. requirements is also considered satisfied.

Physics

1. Change the following courses [**Effective:** Summer 2013]

Phys J433/J533 Thermal and Statistical Thermodynamics Physics I (3 cr)

Phys 433 same as Chem 495. Classical thermodynamics, entropy, thermodynamic potentials, kinetic theory, classical and quantum statistical mechanics, ensembles, partition functions, introduction to phase transitions. Additional assignments required for graduate credit. Phys 533 is a cooperative course available to WSU degree-seeking students. (Fall-only)

Prereq: Chem 306 or Phys 305 or equivalent

Political Science

1. Change the curricular requirements of **Political Science** (B.A.) [**Effective:** Summer 2013]

The B.A. degree emphasizes a traditional liberal arts education including a 16-credit foreign language requirement. Political Science majors must have a minimum of 35 credits in Political Science courses with at least 23 of those credits coming in upper-division courses. The course work also includes the university requirements (see regulation J-3), the general requirements for the B.A. degree, and:

PoIS 101	Intro to Political Science and American Government (3 cr)
PoIS 235	Political Research Methods and Approaches (3 cr)
PoIS 425 or PoIS 426	History of Political Philosophy I or II (3 cr)
Stat 251	Statistical Methods (3 cr)

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

American Politics (6 cr):

<u>PoIS 275</u>	<u>American State and Local Government (3 cr)</u>
<u>PoIS 331</u>	<u>American Political Parties and Elections (3 cr)</u>
<u>PoIS 332</u>	<u>American Congress (3 cr)</u>

[PoIS 333](#) [American Political Culture \(3 cr\)](#)
[PoIS 335](#) [American Interest Groups & Social Movements \(3 cr\)](#)
[PoIS 360](#) [Law and Society \(3 cr\)](#)
[PoIS 364](#) [Politics of the Environment \(3 cr\)](#)
[PoIS 428](#) [American Political Thought \(3 cr\)](#)
[PoIS 436](#) [Policy Deliberation in the New Information Society \(3 cr\)](#)
[PoIS 437](#) [American Presidency \(3 cr\)](#)
[PoIS 439](#) [Public Policy \(3 cr\)](#)
[PoIS 451](#) [Public Administration \(3 cr\)](#)
[PoIS 452](#) [Administrative Law and Regulation \(3 cr\)](#)
[PoIS 462](#) [Natural Resource Policy \(3 cr\)](#)
[PoIS 467](#) [Constitutional Law \(3 cr\)](#)
[PoIS 468](#) [Civil Liberties \(3 cr\)](#)
[PoIS 469](#) [The Judicial Process \(3 cr\)](#)
[PoIS 471](#) [Intergovernmental Relations \(3 cr\)](#)
[PoIS 472](#) [Local Government Politics and Administration \(3 cr\)](#)

Comparative/International Relations (6 cr):

[PoIS 205](#) [Introduction to Comparative Politics \(3 cr\)](#)
[PoIS 237](#) [International Politics \(3 cr\)](#)
[PoIS 338](#) [American Foreign Policy \(3 cr\)](#)
[PoIS 381](#) [Western European Politics \(3 cr\)](#)
[PoIS 410](#) [Game Theory \(3 cr\)](#)
[PoIS 420](#) [Introduction to Asian Politics \(3 cr\)](#)
[PoIS 423](#) [Politics, Policy and Gender \(3 cr\)](#)
[PoIS 440](#) [International Organizations and International Law \(3 cr\)](#)
[PoIS 449](#) [World Politics and War \(3 cr\)](#)
[PoIS 473](#) [Sustainable Community Development Planning \(3 cr\)](#)
[PoIS 480](#) [Politics of Development \(3 cr\)](#)
[PoIS 487](#) [Political Violence and Revolution \(3 cr\)](#)

20 credits in upper-division related fields including: Anth, Bus, Comm, Econ, Engl, FLEN, Hist, IS, JAMM, Mush, OrgS 415, OrgS 444, Phil, Psyc, Soc, The 467, The 468, and The 469. Thesis and internship credits cannot be used to satisfy this requirement.

Courses to total 120 credits for this degree

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.

2. Change the curricular requirements of **Political Science (B.S.) [Effective: Summer 2013]**

The B.S. degree emphasizes methodology and requires increased course work in behavioral research methods. Political Science majors must have a minimum of 35 credits in Political Science courses with at least 23 of those credits coming in upper-division courses. Course work also includes the university requirements (see regulation J-3), the general requirements for the B.S. degree, and:

[PoIS 101](#) [Intro to Political Science and American Government \(3 cr\)](#)
[PoIS 235](#) [Political Research Methods and Approaches \(3 cr\)](#)
[PoIS 425 or](#) [History of Political Philosophy I or II \(3 cr\)](#)
[PoIS 426](#)
[Stat 251](#) [Statistical Methods \(3 cr\)](#)

American Politics (6 cr):

[PoIS 275](#) [American State and Local Government \(3 cr\)](#)
[PoIS 331](#) [American Political Parties and Elections \(3 cr\)](#)
[PoIS 332](#) [American Congress \(3 cr\)](#)
[PoIS 333](#) [American Political Culture \(3 cr\)](#)
[PoIS 335](#) [American Interest Groups & Social Movements \(3 cr\)](#)
[PoIS 360](#) [Law and Society \(3 cr\)](#)
[PoIS 364](#) [Politics of the Environment \(3 cr\)](#)
[PoIS 428](#) [American Political Thought \(3 cr\)](#)
[PoIS 436](#) [Policy Deliberation in the New Information Society \(3 cr\)](#)
[PoIS 437](#) [American Presidency \(3 cr\)](#)
[PoIS 439](#) [Public Policy \(3 cr\)](#)
[PoIS 451](#) [Public Administration \(3 cr\)](#)
[PoIS 452](#) [Administrative Law and Regulation \(3 cr\)](#)
[PoIS 462](#) [Natural Resource Policy \(3 cr\)](#)
[PoIS 467](#) [Constitutional Law \(3 cr\)](#)
[PoIS 468](#) [Civil Liberties \(3 cr\)](#)
[PoIS 469](#) [The Judicial Process \(3 cr\)](#)
[PoIS 471](#) [Intergovernmental Relations \(3 cr\)](#)
[PoIS 472](#) [Local Government Politics and Administration \(3 cr\)](#)

Comparative/International Relations (6 cr):

[PoIS 205](#) [Introduction to Comparative Politics \(3 cr\)](#)
[PoIS 237](#) [International Politics \(3 cr\)](#)
[PoIS 338](#) [American Foreign Policy \(3 cr\)](#)
[PoIS 381](#) [Western European Politics \(3 cr\)](#)

PoIS 410	Game Theory (3 cr)
PoIS 420	Introduction to Asian Politics (3 cr)
PoIS 423	Politics, Policy and Gender (3 cr)
PoIS 440	International Organizations and International Law (3 cr)
PoIS 449	World Politics and War (3 cr)
PoIS 473	Sustainable Community Development Planning (3 cr)
PoIS 480	Politics of Development (3 cr)
PoIS 487	Political Violence and Revolution (3 cr)

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

Additional research methods courses (may be counted as related field cr if upper-division) (6 cr)

Bus 350	Management Information Systems (3 cr)
Bus 352	Modern Information Technology (3 cr)
Bus 439	Systems and Simulation (4 cr)
Bus 453	Database Design (3 cr)
Comm 455	Communication Research Methods (3 cr)
Econ 353	Quantitative Economics and Forecasting (3 cr)
Econ 453	Econometrics (3 cr)
Geog 385	GIS Primer (3 cr)
Geog 475	Intermediate GIS (3 cr)
Hist 290	The Historian's Craft (3 cr)
Phil 202	Introduction to Symbolic Logic (3 cr)
Phil 450	Ethics in Science (3 cr)
Pols 410	Game Theory (3 cr)
Pols 435	Advanced Political Science and Research Methods (3 cr)
Psyc 218	Introduction to Research in the Behavioral Sciences (4 cr)
Soc 310	Methods of Social Research (3 cr)
CS course numbered 100 to 499	
Math course numbered 171 to 299	

Courses in upper-division related fields (20 cr)

Courses to total 120 credits for this degree

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 2013]

Psyc 312 Practical Gerontology (3 cr)

Same as OrgS 312. Preparation for, and accommodation to, becoming older. Emphases will be on behaviors necessary to maintain physical health, and tactics necessary to maintain brain fitness. Course is appropriate for those interested in eldercare, or for any person concerned about sustaining physical health and mental wellness through the lifespan.

Prereq: Psyc 101 or OrgS 210

Psyc 380 Activities-based Therapies (3 cr)

Techniques based on physical and recreational activities, including crafts, individual and team sports, recreational reading and game-playing. The goal of such approach is to assist clients in their return to an adaptive and or comfortable level of functioning. Both physical and psychological functioning are emphasized.

Prereq: Psyc 101 or Permission of Instructor

Psyc 414 Traumatic Events: Preparation, Intervention, Evaluation (3 cr)

Same as OrgS 414. Traumatic Events (TEs) range from local to large scale human-induced or catastrophic natural disasters (violent crimes, major accidents, weather events, etc.). This course is designed to address integral response elements: (a) preparation (e.g., organizing, planning, training, equipping) (b) intervention (e.g., multi-agency coordination, logistics, triage, first & secondary responses, volunteers, incident command, communication, mitigation, psychological first aid, media, safety, security) (c) evaluation (e.g., after-action reports, lessons learned, hotwash, best practices, research).

Prereq: Psyc 101 or Permission of Instructor

Sociology and Anthropology

1. Drop the following prefix and all courses [**Effective:** Summer 2013]

JS – Justice Studies

2. Drop the following course [**Effective:** Summer 2013]

Soc 320 Sociology of Substance Abuse (3 cr)

Sociological-psychological analysis of etiology, epidemiology, prevention, and treatment of substance abuse in U.S.; major focus on family issues (including marital relationships, co-dependency) and lifestyle changes; dynamics of social change, subcultures, and symbolic functions attached to drug abuse; issues related to gender, occupational functioning, AIDS, and other topics.

Recommended Substitution: None

3. Add the following courses [**Effective:** Summer 2013]

Anth J433/J533 Applied Cultural Resource Management (3 cr)

Introduction to the practice of archaeology in the field of Cultural Resource Management. This course emphasizes and exposes students to skills needed in today's world of CRM. Additional projects/assignments reqd for grad cr.

Short Course Title: App Cultural Resource Mngt

Soc 415 Citizen's Police Academy (3 cr)

Offered only in the spring term, students are acquainted with the activities of a local police department in a community-learning style course. This experience is an opportunity for applied learning in the field. Limited space available. Instructor permission required. Pass/fail only.

4. Delete the following Sociology course prerequisite language from the catalog [**Effective:** Summer 2013]

Prerequisite: The successful completion of Soc 101 is required for enrollment in upper-division sociology courses; exceptions by permission.

Editor's note: Several changes below remove the Soc 101 prerequisite that is currently a requirement of the Sociology upper-division courses (300- & 400- level). To prevent confusion I will add the explicit prerequisite language of "**Prereq: Soc 101**" to all upper-division sociology courses in the catalog except those courses that have been approved to remove that prerequisite e.g. Soc 323, Soc 335, Soc 420, Soc 440,

5. Change the following courses [**Effective:** Summer 2013]

Soc 250 Social Conflict (3 cr)

May be used as core credit in J-3-d. Explores the origin, escalation, and resolution of social conflict. Focuses on major conflict theories, human values and social action, and the dynamics and regulation of social conflict within and between various kinds of social groupings.

~~Prereq: Soc 101~~

Soc 301 Introduction to Diversity and Stratification (3 cr)

May be used as core credit in J-3-d. Same as Anth 301. An interdisciplinary and historical study of diversity and stratification in a cross-cultural global context. The course examines multiple forms of diversity and stratification including, but not limited to, culture, class, race/ethnic, gender/sexuality, religious diversity, and political ideology in an effort to raise students' ability to interact with and understand others in our increasingly multicultural world. May include service learning.

~~Prereq: Soc 101~~

Soc 310 Methods of Social Research (3 cr)

~~Provides an overview of the Principal-principal~~ methods of data collection, analysis, and interpretation.

~~Prereq: Stat 251; dSoc 101 and Departmental major or minor~~

Soc J311/J514 Development of Social Theory (3 cr)

Soc 311 same as ReIS 311. Development of social theory from classical roots through contemporary schools; biographical accounts and original works in sociological theory. Additional projects/assignments required for graduate credit.

~~Prereq: Soc 101~~

Soc 323 Political Economy (3 cr)

This course discusses the history of political economic theories and links contemporary issues to classical and current sociological debates in the field. Recommended Preparation: Soc 230 or Soc 250.

~~Prereq: Soc 101~~

Soc 330 Juvenile Delinquency (3 cr)

Extent, causes, and control of juvenile delinquent behavior.

~~Prereq: Soc 101 and Soc 260~~

Soc 331 Criminology Theory (3 cr)

Review and assessment of common explanations of crime, deviant behavior and control. ~~One 1-day field trip~~ May include field trips.

~~Prereq: Soc 101~~

Soc 332 Corrections-Sociology of Punishment (3 cr)

~~This course will provide an introduction to the history of criminal punishment, as well as the moral rationales for criminal punishment. The remainder of the course will focus on contemporary issues in crime, criminal punishment and imprisonment. Throughout the course, particular attention will be given to the ways that decisions about punishment affect and are affected by American culture and social structure. May include field trips.~~ Same as JS-332—History, facilities, processes, and strategies for correction and punishment of offenders; analysis of concepts of prevention and control of crime. A one-day field trip.

~~Prereq: Soc 101~~

Soc 334 Police and Social Control (3 cr)

History, development, and role of the police as a component of the justice system, with particular attention to the relationship of the police to community, society, and related institutions of social control; societal control of the police as well as the influences of social change and urban decay and disorder on methods of policing. A one-day field trip may include field trips.
Prereq: Soc 101

Soc 335 Terrorism, Society and Justice (3 cr)

Analysis of the concepts, issues and dilemmas related to domestic and international terrorism. Terrorist tactics within the context of the global world-system is considered. Examines counterterrorist strategies and the media and government response to terrorism.
See JS-335.

Soc 339 Crime and the Media (3 cr)

Same as JAMM 339. Critical evaluation of the media portrayals of crime and the criminal justice system; analysis of how the media help to shape public understanding and public policy.

Soc 340 Social Change & Globalization (3 cr)

May be used as core credit in J-3-d. Social change is a central area of study in sociology. Original studies tried to explain the reason for, and impact of, the Industrial Revolution in the 19th century. Globalization is among the key social phenomena instructing contemporary discussions in social change. This course introduces students to various discussions of social change, from the Industrial Revolution to Globalization. Through case study analysis, Globalization will be explored in examining the increased role of international organizations (such as, the IMF, World Bank, WTO, and OECD) in globalizing capital markets and trade; the social and psychological conditions of conflict (such as the state of war in the contemporary landscape, genocide, and impoverishment); and the role of diversity (social and environmental) in proposing alternatives to globalization. Recommended Preparation: Soc 250-230 and/or Soc 301-250.
Prereq: Soc 101

Soc 350 Food, Culture, and Society (3 cr)

May be used as core credit in J-3-d. Same as Anth 350. Examines the structural and cultural implications of eating and producing food in a global world. Utilizing a social scientific framework, it explores the history of particular foods and examines how food systems are racialized, classed and gendered. Primary foci include the social history of food holidays and taboos, the relationships between food and identity, the impact of agricultural production practices on food systems and food security, and forms of resistance to these impacts. Recommended Preparation: Anth 220 or a 200-level sociology course. May include field trips.
Prereq: Soc 101

Soc 420 Criminal Sociology of Law (3 cr)

The course examines law creation and law enforcement in their social, political, and economic context. Discussions include the major theories of the role of law and functioning of the modern state, and through the use of historical and contemporary case studies students will evaluate the strengths and weaknesses of these theoretical perspectives. Sources and purpose of criminal law, meaning of criminal responsibility, and elements of crime.
Prereq: Soc 101

Soc 439 Inequalities in the Justice System (3 cr)

Critical focus on the issues of race, class, and gender and their consequences for the operation of the justice system; the role of the justice system in the history and experience of various minorities, theories of minority crime, and issues of selective enforcement, sentencing disparity, and disproportionate incarceration; the role of gender considered through the examination of offenders, victims, and criminal justice professionals.
Prereq: Soc 101 and a 3 cr lower-division Soc course, or Soc 301/Anth 301

Soc 440 Post-Colonialism (3 cr)

May be used as core credit in J-3-d. This sociology course examines the history of development thought and its influence in post-colonial perspectives. Although generally conceived as a theory course in international development, this course will apply sociological tools for understanding the criticisms of modernization, neo-liberalism, and early dependency theories. Taking the position of the “other”, post-colonial theory broadens the scope of these aforementioned theories by drawing upon everyday social experience and the myriad social relations that complicate mainstream and mono-causal explanations of such things as uneven development, diversity, poverty, conflict, and environmental degradation. In learning what stirred the rise of post-colonial theories, students will learn how international development is understood from a variety of perspectives outside of the U.S. Recommended Preparation: Soc 250 or Soc 301.
Prereq: Soc 101

6. Change the curricular requirements of **Sociology** (B.S. or B.A.) [Effective: Summer 2013]

B. Inequalities and Globalization

Anth 301 or Introduction to Diversity and Stratification (3 cr)

Soc 301

Soc 343 Political Sociology (3 cr)

Soc 440 Post-Colonialism (3 cr)

Two of the following (6 cr):

Soc 323 Political Economy (3 cr)

Soc 340 Social Change & Globalization (3 cr)

Soc 343 Political Sociology (3 cr)

Soc 440 Post-Colonialism (3 cr)

One of the following (in addition to the similar requirement above for the Sociology major) (3 cr):

Soc 423	Social Class & Stratification (3 cr)
Soc 424	Sociology of Gender (3 cr)
Soc 427	Racial and Ethnic Relations (3 cr)
Soc 439	Inequalities in the Justice System (3 cr)
Selected upper-division emphasis electives (9 cr):	
Soc 315	Community Service Learning (1-4 cr, max 4)**
Soc 323	Political Economy (3 cr)
Soc 325	Family, Violence & Society (3 cr)
Soc 335	Terrorism, Society and Justice (3 cr)
Soc 336	Comparative Criminal Justice Systems (3 cr)
Soc 340	Social Change & Globalization (3 cr)
Soc 343	Political Sociology (3 cr)
Soc 350	Food, Culture, and Society (3 cr)
Soc 367	Global Justice (3 cr)**
Soc 403	Workshop (cr arr)
Soc 404	Special Topics (cr arr)
Soc 422	Religion, Culture & Society (3 cr)
Soc 423	Social Class & Stratification (3 cr)
Soc 424	Sociology of Gender (3 cr)
Soc 427	Racial and Ethnic Relations (3 cr)
Soc 439	Inequalities in the Justice System (3 cr)
Soc 440	Post-Colonialism (3 cr)
Soc 450	Dynamics of Social Protest (3 cr)
Soc 498	Internship (1-6 cr, max arr)**

Courses to total 120 credits for this degree

***Note: A maximum of 3 credits may be earned in Soc 315, Soc 367, and Soc 498, respectively*

Statistical Science

1. Change the curricular requirements of **Statistics** (GR Academic Certificate) [**Effective:** Summer 2013]

Stat 431 Statistical Analysis (3 cr)

One of the following (3 cr)

~~Stat 433 Econometrics or~~

~~Stat 550 Regression (3 cr)~~

[Stat 422 Sample Survey Methods \(3 cr\)](#)

Stat 507 Experimental Design (3 cr)

Two or more of the following (6-9 cr):

~~Stat 422 Sample Survey Methods (3 cr)~~

Stat 428 Geostatistics (3 cr)

Stat 451 Probability Theory (3 cr)

Stat 452 Mathematical Statistics (3 cr)

Stat 514 Nonparametric Statistics (3 cr)

Stat 519 Multivariate Analysis (3 cr)

Stat 555 Statistical Ecology (3 cr)

Stat 565 Computer Intensive Statistics (3 cr)

Courses to total 15 credits for this certificate

Theatre Arts

1. Add the following course [**Effective:** Summer 2013]

The J441/J541 Foundations of Screenwriting (3 cr)

Introduction to the fundamental elements of screenwriting; techniques of developing story lines and advancing a narrative in a visual way using the industry standard of a tightly structured long-form feature film. Additional projects/assignments required for graduate credit.

Prereq: Permission

Editor's Note: This request is to create The 441. The 541 already exists.

1. Change the following course [**Effective:** Summer 2013]

The 541 Foundations of Screenwriting (3 cr)

~~See The J441/J541. Introduction to the fundamental elements of screenwriting; techniques of developing story lines and advancing a narrative in a visual way using the industry standard of a tightly structured long-form feature film.~~

~~**Prereq:** Permission~~

FOR THE FACULTY'S INFORMATION

Correction to General Curriculum Report 266:

Changes to Cooperative Courses Approved Since Last General Curriculum Report:

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

Other Informational Changes: