General Curriculum Report #238

UNIVERSITY OF IDAHO - REGISTRAR'S OFFICE
December 2, 2005

TO: MEMBERS OF THE UNIVERSITY OF IDAHO FACULTY

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

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Accounting

1. Change the curricular requirements of **Accounting** (B.S.Bus.) [**Effective**: Summer 2006]

   Required course work includes the university requirements (see regulation J-3) the general requirements for graduation from the College of Business and Economics (see Part 4), and:

   Acct 275 Accounting Information Systems (3 cr)
   Acct 315 Corporate Accounting and Reporting I (3 cr)
   Acct 414 Corporate Accounting and Reporting II (3 cr)
   Acct 483 Federal and State Taxes I (3 cr)
   ~~Acct 486 Accounting for Management Decision Making and Control (3 cr)~~
   Acct 492 Auditing and Controls (3 cr)
   Accounting electives chosen from the following (~~6~~ 9 cr):
   - Acct 415 Advanced Financial Accounting and Reporting (3 cr)
   - Acct 430 Accounting for Public Sector Entities (3 cr)
   - Acct 484 Federal and State Taxes II (3 cr)
   - Acct 485 Estate Planning (3 cr)
   - Acct 486 Accounting for Management Decision Making and Control (3 cr)
   - BLaw 420 Commercial Law (3 cr)

   Additional courses in communication or writing beyond the UI core (upper div preferred) (6 cr)
   Electives to total 128 credits for the degree

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

   Acct 205 Fundamentals of Accounting (4 cr) or Acct 201-202 Intro to Financial Accounting & Intro to Managerial Accounting (6 cr)
   ~~Acct 275 Accounting Information Systems (3 cr)~~
   Acct 310-311 Accounting for Business Decisions I-II or Acct 381 Accounting for Managers and Investors (3-4 cr)
   Acct 315 Corporate Accounting and Reporting I (3 cr)
   Courses selected from the following to total at least 18 cr:
   - Acct 275 Accounting Information Systems (3 cr)
   - ~~Acct 315 Corporate Accounting and Reporting I (3 cr)~~
   - Acct 414 Corporate Accounting and Reporting II (3 cr)
   - Acct 415 Advanced Financial Accounting and Reporting (3 cr)
   - Acct 430 Accounting for Public Sector Entities (3 cr)
   - Acct 483 Federal and State Taxes I (3 cr)
   - Acct 484 Federal and State Taxes II (3 cr)
   - Acct 485 Estate Planning (3 cr)
   - Acct 486 Accounting for Management Decision Making and Control (3 cr)
   - Acct 492 Auditing and Controls (3 cr)
   - BLaw 420 Commercial Law (3 cr)

Adult, Counselor and Technology Education

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

   PTTE **449 Appropriate Technology and Alternative Energy** (3 cr). Exploration of new and emerging technologies and energies with focus on social, cultural, economic, and political considerations.

   PTTE **537 Integration of Academic and Professional-Technical Education** (3 cr). Examination of philosophical/theoretical underpinnings of integration; review of models, development of curricular and instructional materials.

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

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

PTTE **101 Keyboarding & Document Preparation** (2 cr). Skill development sufficient for personal use.
Recommended Substitution: PTTE 104

PTTE **102 Advanced Keyboarding & Document Preparation** (2 cr). Skill development to occupational competence levels.
Recommended Substitution: PTTE 104

PTTE **115 Operational Safety** (3 cr). Fundamentals of industrial safety; fire protection, industrial hygiene, radiological safety, safety regulations.

PTTE **211 Communication Skills for Workforce Development** (2 cr). Development of workplace skills necessary for individuals to be successful in the work environment; projects and activities to enhance skills in accessing information, problem solving, customer/co-worker relations, leadership, organization, and basic workplace literacy and efficiency; critical thinking and teamwork infused with assignments focusing on quality, continuous improvement, and flexibility.

PTTE **311 Introduction to Industrial Efficiency** (3 cr). In-depth examination and implementation of techniques used by industrial engineers to optimize operations.

PTTE **312 Introduction to Quality Assurance in the Nuclear Industry** (3 cr). In-depth examination and implementation of nuclear industry; planning, managing, conducting, and evaluating quality assurance program.

PTTE **313 Technical Sketching** (2 cr). In-depth examination and implantation of sketching techniques applied to industrial drawing; emphasis on sketching or mechanical drawings, pictorials, and architectural forms. One lec and 1 hr of lab a wk.

PTTE **317 Principles of Dimensional Inspection** (3 cr). In-depth examination and implementation of concepts, principles, classification, and control in dimensional inspection for quality assurance.

PTTE **330 Industrial Instrumentation I** (3 cr). Use of electronic circuits and devices for process parameter measurements.

PTTE **331 Industrial Instrumentation II** (3 cr). Methods of process control from digital and analog signals; investigation of computer control concepts.

PTTE **365 Industrial Supervision** (3 cr). Principles and practices; duties and responsibilities of plant supervisors; use of rating scales and other employee evaluation devices; supervisory methods used in on-the-job and in-plant training program; methods of conducting job analysis; preparation and use of job descriptions. (Alt/yrs)

PTTE **368 Applied Structures and Concrete Design** (3 cr). In-depth examination of column and beams design and selection, use of steel construction handbook joint design; simple concrete slab and wall design. Note: Will not substitute for engineering degree requirement.

PTTE **406 Principles of Quality Assurance** (3 cr). In-depth examination and preparation for Quality Engineering Certificate Exam offered by American Society for Quality Control.

PTTE **440 Piping Systems** (3 cr). System and component selection and specifications, stress calculations, hanger design, schedules and pressure rating. Prereq: PTTE 338.

PTTE **442 Concrete Design** (3 cr). Structures and component selection and specification, stress calculations hanger design, schedules and pressure rating. Recommended Preparation: PTTE 338.

PTTE **457 Transitioning to Work** (3 cr). Planning and managing cooperative, technical preparation, and other transitional programs.

PTTE **489 Records Management** (3 cr). ARMA filing rules, organization and maintenance of paper files, using database management software.

PTTE **491 Business, Marketing & Retailing Methods** (2 cr). Effective methods and materials for teaching basic business subjects, marketing, and retail merchandising. Prereq: perm. (Fall only)
Recommended Substitution: Waive the course.

PTTE **515 Instructional Strategies and Learning Styles** (3 cr). Design and application of teaching strategies for learning domains and learning styles appropriate for adult learners.

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

PTTE **104** **Input Technologies for the 21st Century** ~~**Keyboarding**~~ (~~1~~ 3 cr). Skill development in Microcomputer applications. Skills include but are not limited to document preparation, voice recognition, exposure to emerging technologies as well as review of foundational skills. ~~Microcomputer keyboarding skills development. Accelerated 9-wk course. Two lec and 2 hrs of lab a wk.~~

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

PTTE **130 Basic Electronics** (~~4~~ 3 cr). For beginning students with no experience in electricity; properties of resistors, capacitors, and inductors in electrical circuit; basics of power distribution system and house wiring; use of meters and oscilloscopes in lab. Three 1-hr lec and one 2-hr lab a wk. Enrollment per section limited to lab stations available. Knowledge of algebra recommended.

PTTE **350 Teaching and Learning Construction Systems** (~~4~~ 3 cr). Teaching techniques and methods of instruction for systems approach to construction technology including residential, commercial, and civil. Three lec and 4 hrs of lab a wk. Enrollment limited to lab stations available.

PTTE **352 Manufacturing Technology Systems** (~~4~~ 3 cr). In-depth examination and implementation to manufacturing theory, applications, and processes including research and development, starting and organizing manufacturing companies, and product production and marketing. Two lec and 6 hrs of lab a wk.

PTTE **353 Teaching and Learning Advanced Manufacturing Systems Technology** (~~4~~ 3 cr). In-depth examination and implementation on industrial system manufacturing processing; manufacturing organization and management; address societal, environmental, and labor relations of manufacturing. Three lec and 3 hrs of lab a wk. Recommended Preparation: PTTE 352.

PTTE **402 Teaching and Learning Principles of Technology** (~~4~~ 3 cr). In-depth examination and implementation of physical science in industrial situations; emphasizes principles rather than specifics of technology; illustrates application of mathematics associated with these principles. Three lec. and 4 hours of lab a week.

PTTE **428 Teaching and Learning Computer Operating Systems for Technology** (~~4~~ 3 cr). In-depth examination and implementation of advanced DOS, multi-tasking and network operating systems, planning and maintenance of computer systems. Three lec and 4 hrs of lab a wk. Enrollment per section limited to computer stations available. Prereq: PTTE 111 or perm.

PTTE **462 Teaching and Learning Communication Technology Systems** (~~4~~ 3 cr). Teaching techniques and methods of instruction for study of communication technology including sub systems of interpersonal human communication and communication between humans and machines. Two lec and 6 hrs of lab a wk.

PTTE **473 Teaching and Learning Power, Energy, and Transportation Technology Systems** (~~4~~ 3 cr). In-depth examination and implementation of internal-external combustion engines; solar, wind, water, biomass, and nuclear energy; lab experience in generating, transporting, and converting energy forms. Enrollment per section limited to lab stations available. Three lec. and 4 hrs of lab a week.

PTTE **475 LAN Technology** (~~4~~ 3 cr). Advanced LAN technologies emphasizing design and implementation of most LAN technology systems. Three lec and 4 hrs of lab a wk. Recommended Preparation: PTTE 428 or Bus 352.

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

PTTE **495 Administrative Techonology ~~Office~~ Management and Procedures** (3 cr). Administrative procedures and generic policies in technological business environments are studied and practiced. Relevant knowledge, skills, and dispositions are addressed. ~~Administrative office procedures, components, and responsibilities.~~

PTTE **518 Advanced Input Technologies for the 21st Century~~Keyboarding and Technology Methods~~** (3 cr). Advanced teaching methods and materials of inputting~~keyboarding~~ and computer technology, identified best practices will be emphasized as well as a review of research literature. This course will include a field experience as well as a unit on trouble shooting computer hardware.

Art and Design

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

Art **208 Italian Renaissance Art and Culture** (3 cr). Same as RelS 208. *May be used as core credit in J-3-d.* A study of painting, sculpture, architecture, and art theory in Italy from c. 1350-1600. The art of Giotto, Duccio, Brunelleschi, Ghiberti, Alberti, Donatello, Fra Angelico, Fra Filippo Lippi, Andrea Mantegna, Botticelli, Leonardo da Vinci, Raphael, Michelangelo, Bramante, Palladio, Giorgione and Titian, among others, is examined along with the broader components of Italian Renaissance culture.

Biological and Agricultural Engineering

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

BAE **ID&WS352 Soil and Water Engineering** (3 cr). WSU BSysE 352. Plant-soil-water relationships, applied hydraulics, soil erosion principles and control, drainage, and legal aspects of water resources. Two lec and one 3-hr lab a wk. Prereq: Engr 335 and BAE ~~351~~355.

BAE **ID&WS-J452/ID&WS-J552 Environmental Water Quality** (3 cr). WSU BSysE 452. Engineering design to monitor, evaluate, and minimize non-point pollution from agriculture, environmentally acceptable disposal of wastes, bioremediation. Graduate credit requires an additional project and report. Two lec and one 3-hr lab a wk. Prereq: ~~BAE 351,~~ Chem 112 and Soil 205 or MMBB 250, and BAE 355 or BAE 450~~, Chem 112~~.

BAE **ID&WS-J459/J559 Irrigation System Design** (3 cr). WSU BSysE 453. Crop water requirements, irrigation scheduling and water management, selection and design of irrigation systems, pump selection. Additional projects/assignments reqd for grad cr. Two lec and one 3-hr lab a wk; one 1-day field trip. Recommended Preparation: BAE 352. Prereq: Engr 335.

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

BAE **450 Environmental Hydrology** (3 cr). Carries no credit after BAE 351, BAE 355 or CE 325. The objective of this course is to provide a comprehensive understanding of the hydrologic processes associated with the environmental processes. Includes components of the hydrologic cycle, analysis of precipitation and run off, evapotranspiration, routing, peak flow, infiltration, soil and water relationships, snowmelt, and frequency analysis. Prereq: Math 170. (Spring only)

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

BAE **ID451 Engineering Hydrology** (3 cr). Same as CE 421. WSU BSysE 451. Hydrologic cycle as applied to engineering projects; hydrograph routing; design hydrographs; intro to hydrologic simulation. Recommended Preparation: BAE ~~351~~355. Prereq: Engr 335.

Biological Sciences

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

Biol **354 Experimental Approaches in the Biological Sciences** (~~2~~ 3 cr). Experimental analysis of biological systems. Prereq: Biol 210, 212, and 213, or perm. (~~Spring~~ Fall only).

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

Biol **521 Graduate Teaching Practicum** (3 cr). Organization, preparation, and teaching of lab experiments or demonstrations under faculty supervision. Prereq: graduate standing and perm.

Biol **525 Readings in Ecological and Evolutionary Genetics** (1 cr). Seminars and discussion of current research in genetics as it applies to ecology and evolution. (Fall only)

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

Biol **ID427 Vertebrate Histology and Organology** (4 cr). WSU Zool 421. Microscopic anatomy of tissues and major mammalian organs. Three lec and 3-hr lab a wk. Prereq: Biol 115 and 116; or Biol 120.

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

Biol ~~**ID&**~~**WS435 Limnology and Aquatic Ecosystem Management** (~~4~~ 3 cr). WSU ES/RP 411 and Zool 411.~~See Fish 415.~~ Prereq: Biol 115 and Chem 111.

Biol ~~**ID**~~**WS509** ~~**Generation, Degeneration, and Regeneration in**~~**Development and Plasticity of the Nervous System** (~~2~~ 3 cr). WSU Biol ~~509~~553. A comparative approach to neural development and repair in invertebrates and vertebrates. Prereq: Biol 210; and MMBB 300 or 380; and Biol 423 or a 400-level neurobiology course.

Civil Engineering

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

CE **527 Computational Hydrology** (3 cr). Fundamental and applied issues in hydrologic modeling, including hydrologic model classification and availability governing equations and applicable numerical methods, simulation of rainfall-runoff processes at various scales, watershed and channel routing, and parameter estimation. Emphasis is placed on mechanistic modeling. Kinematic wave theory/applications and finite difference techniques are covered in some detail. Recommended preparation: Proficient in the use of computers; plus the ability to write simple computer programs in any language. Prereq: CE 325. (Spring, alt/yrs)

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

CE **326 Hydrologic Measurement Techniques** (1 cr). Same as BAE 356 and For 463. 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. This course is intended to complement CE 325. Coreq: CE 325/BAE 355, ~~or~~ BAE ~~351~~ 450, ~~or~~ For 462 or Geog 320.

College of Business and Economics

1. Change the curricular requirements of the **CBE General Core Requirements** [**Effective**: Summer 2006]

UNIVERSITY/CBE GENERAL CORE REQUIREMENTS:

Communication:
- Comm 101 Fundamentals of Public Speaking (2 cr)
- Engl 101 Introduction to College Writing (3 cr)
- Engl 102 College Writing and Rhetoric (3 cr)
- Engl 207 Persuasive Writing or Engl 208 Personal and Exploratory Writing or Engl 209 Inquiry-Based Writing or Engl 313 Business Writing or Engl 317 Technical Writing (3 cr)

Mathematics:
- At least two courses in mathematics numbered 130 or higher including at least one course in calculus (7-8 cr)
- Stat 271 Statistical Inference & Decision Analysis; or Stat 251 Statistical Methods and Stat 262 Decision Analysis (4 cr)

Social Sciences:
- Econ 272* Foundations of Econ Analysis or Econ 201, 202 Principles of Econ (4-6 cr)
- Social science elective** (3 cr)

Humanities:

Phil 103 Ethics (3 cr)
Humanities elective** (3 cr)
Literature elective (3 cr)
Natural and Applied Sciences:
Natural and applied sciences electives** (8 cr)

Other courses:
Acct 205 Fundamentals of Accounting or Acct 201-202 Intro to Financial Acct and Managerial Accounting (4-6 cr)
Bus 100 The Business Profession (1 cr)
BLaw 265 Legal Environment of Business (3 cr)
Select one Environmental Related Course from the following (3 cr):
AgEc 451 Land and Natural Resource Economics (3 cr)
CSS 383 Resource Economics for Environmental Policymaking (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)
Fish 290 Fish and Wildlife Ecology, Management, and Conservation (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 452 Environmental Philosophy (3 cr)
PolS 364 Politics of the Environment (3 cr)
Nonbusiness electives (~~8~~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.

B. CBE COMMON PROGRAM REQUIREMENTS:

Acct 310 Accounting for Business Decisions I (2 cr)
Acct 311 Accounting for Business Decisions II (2 cr)
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)
Bus 490 Strategic Management (3 cr)
Econ 340 Managerial Economics (2 cr)
Upper-division economics electives (3 cr)

C. REQUIREMENTS IN MAJOR (major-specific required credits).

D. ELECTIVES. Chosen in consultation with the student's advisor.

Computer Science

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

CS **112 Introduction to Problem Solving and Programming** (3 cr). *May be used as core credit in J-3-c.* Carries 2 credits after CS 120. Intro to fundamental problem solving techniques using the computer; use of a programming language, structured programming concepts; use of fundamental data types, including arrays and structures; basic concepts of computer organization, editing, and program execution; programming lab in which the student solves problems using C++. Prereq: Math 107 or sufficiently high ACT, SAT, or Math Placement Test score to qualify for Math 143.

CS **120 Computer Science I** (4 cr). Carries 2 credits after CS 112. Fundamental programming constructs, Algorithms and problem-solving, Fundamental data structures, Overview of programming languages, Virtual machines, Introduction to language translation, Declarations and types, Abstraction mechanisms, Object-oriented programming. Three lec and one 2-hr lab a wk. Prereq: Math 108 or sufficiently high ACT, SAT, or Math Placement Test score to qualify for Math 143.

CS **121 Computer Science II** (4 cr). Abstract data types and data structures: linked lists, stacks, queues, trees, and graphs. Methods to implement and algorithms to manipulate these structures. Dynamic memory methods, sequential file processing, additional searching and sorting algorithms, recursion, and object-oriented programming.~~Fundamental data structures, Recursion, Event driven programming, Object oriented programming, Basic algorithmic analysis, Algorithmic strategies, Foundations of human computer interaction and graphics.~~ Three lec and one 2-hr lab a wk. Prereq: CS 120, and Math 176.

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

   CS **481 Senior Capstone Design** (4 cr). Application of formal design techniques to development of a large computer science project performed by students working in teams. Significant lab work reqd. Prereq: CS ~~382~~ 384 and Engl 317, or CS 480.

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

   CS ~~**ID&WS-**~~**J486/ID&WS-J586 Software Specification** (3 cr). WSU Cpt S ~~464/564~~524. Formal specification and analysis of software using a formal specification language, and case studies of designs expressed in a formal specification language. Additional projects/assignments reqd for grad cr. Prereq: perm.

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

   CS **J439/J539 Applied Security Concepts** (3 cr). Hands-on approach to computer security with emphasis on developing practical knowledge of how cyber attacks work and how to defend against them. Detailed exploration of attacks such as buffer overruns, string attacks, worms, trojan horses, and denial-of-service attacks, and development of defenses against them. Additional work reqd for grad cr. Recommended preparation: Good knowledge of C, operating system concepts and Unix. Prereq: CS 336 or perm.

   CS **539 Applied Security Concepts** (3 cr). See CS J439/J539.

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

   CS **214 Background Study in Data Structures** (1 cr). Not applicable toward any UI undergraduate degree; valid only for removal of CS 121 deficiency for graduate students who do not have B.S.C.S. See CS 121 for course description. Graded P/F based on comprehensive examination at completion of course.

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

   CS ~~**381**~~ **383 Software Engineering I** (3 cr). Current topics in development of software systems; software life cycle model, requirements definition, design, verification and validation, and project management techniques. Prereq: CS 270 or perm.
   Equivalent Course: CS 381

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

   CS ~~**382**~~ **384 Software Engineering II** (3 cr). Continuation of CS ~~381~~383, Individual projects are developed. Prereq: CS ~~381~~383.
   Equivalent Course: CS 382

8. Change the curricular requirements of **Computer Science** (B.S.C.S.) [**Effective**: Summer 2006]

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

   Comm 101 Fundamentals of Public Speaking (2 cr)
   CS 120 Computer Science I (4 cr)
   CS 121 Computer Science II (4 cr)
   CS 150 Computer Organization and Architecture (3 cr)
   CS 210 Computing Languages (3 cr)
   CS 240 Computer Operating Systems (3 cr)
   CS 270 System Software (3 cr)
   CS ~~381~~ 383 Software Engineering I (3 cr)
   CS ~~382~~ 384 Software Engineering II (3 cr)
   CS 401 Contemporary Issues in Computer Science (1 cr)
   CS 385 Theory of Computation (3 cr)
   CS 395 Analysis of Algorithms (3 cr)
   CS 481 Senior Capstone Design (4 cr)
   Engl 317 Technical Writing (3 cr)
   Math 170 Analytic Geometry and Calculus I (4 cr)
   Math 175 Analytic Geometry and Calculus II (4 cr)
   Math 176 Discrete Mathematics (3 cr)
   Math 330 Linear Algebra (3 cr)
   Stat 301 Probability and Statistics (3 cr)
   One of the following laboratory science sequences (8-9 cr):
   - Biol 115 Cells and the Evolution of Life and Biol 116 Organisms and Environments (8 cr)
   - Chem 111 Principles of Chemistry I and Chem 112 Principles of Chemistry II (9 cr)
   - Phys 211 Engineering Physics I and Phys 212 Engineering Physics II (8 cr)
   - Phys 211 Engineering Physics I and Phys 213 Engineering Physics III (8 cr)

   Upper-division technical electives selected to satisfy the credit distribution in these categories (15 cr):
   Computer Science (12 cr) – any upper-division CS course except 499. .
   Mathematics (3 cr) – Math 275 or any upper-division Math or Stat course except Math 400, 404, 499, and 513-519.
   Science electives (4 cr)
   The minimum number of credits for the degree is 128, not counting Engl 101, Math 143, and other courses that might be required to remove deficiencies.

Students majoring in computer science must earn a grade of C or better, with a 2.50 GPA or higher, in CS 120, 121, and 150 and a C or better in Math 176 before registration is permitted in 200 level CS courses. Students majoring in computer science must earn a grade of C or better in CS 210, 240, 270, and Math 170~~,~~ and 175 ~~and 176~~ before registration is permitted in upper-division CS courses.

Students must consult with their advisors when selecting electives within the curriculum to insure that their career objectives are met.

Conservation Social Science

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

CSS ~~ID~~**287 Foundations of Conservation Leadership and Management** (2 cr). *May be used as core credit in J-3-d.* ~~WSU NATRS 371.~~ Overview of conservation leadership and management from a political, economic, behavioral, and land use management perspective; philosophical, theoretical, historical, and managerial foundations of conservation as they relate to societal trends. Recommended Preparation: NR 101. (Fall only)

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

CSS ~~ID~~**387 Environmental Communication Skills** (3 cr). ~~WSU NATRS 373.~~ Introduction to communications skills in the context of natural resources, including environmental and cultural interpretation; communication psychology and media applied to noncaptive audiences in natural resource situations. Field trip may be required. Special fee assessed. Prereq: CSS 287 or perm. (Fall only)

CSS ~~ID~~**486 Public Involvement in Natural Resource Management** (3 cr). ~~WSU NATRS 477.~~ *May be used as core credit in J-3-d.* Theoretical and applied concepts of public involvement in both public and private sectors of natural resource management; historical and legal mandates, government agency responsibilities, applied methods and techniques, case studies, and practical experience. Three lec and three hrs of lab a wk; field trip may be reqd. (Spring only)

CSS ~~ID~~**487 Environmental Education** (3 cr). ~~WSU NATRS 476.~~ Concept and techniques of environmental education with emphasis on informal education settings such as residential and day-use environmental education centers, nature centers, visitor centers. Field trip may be required. (Spring only)

Economics, Finance and Information Systems

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

Bus **302 Intermediate Financial Management** (3 cr). Advanced course in managerial finance that addresses more complex issues such as risk in capital budgeting, working capital management, mergers, business failure and reorganization, and lease financing. May involve evening exams. Prereq: Bus 301; or Acct 310, Bus 340-342 and Econ 340; and ~~OR~~ prereq or coreq: Bus 343-345.

Bus **343 Planning and Decision Making in Organizations** (2 cr). *May be used as core credit in J-3-d.* Open only to undergraduate CBE majors. An overview of the managerial planning process with a focus on business decision making through the collection and analysis of data; decision-making models and approaches, sources of information, value of information, pro-forma financial analysis, and forecasting; a comprehensive integrative case is used to illustrate these ideas. May involve evening exams. Prereq: Acct 310, Bus 340-342 and Econ 340. ~~Coreq: Bus 344, Bus 345, and Acct 311~~. Prereq or coreq: Engl 207, Engl 208, Engl 209, Engl 313~~,~~ or Engl 317. Coreq: Bus 344, Bus 345 and Acct 311

Bus **344 Managing the Firm's Resources** (3 cr). *May be used as core credit in J-3-d.* Open only to undergraduate CBE majors. An overview of the decisions necessary for the effective management of the firm's financial, human, and information resources; topics include: management of the firm's financial structure, dividend policy, and working capital; attracting, maintaining, and developing the work force; systems planning, requirements analysis, and data design; a comprehensive integrative case is used to illustrate these ideas. May involve evening exams. Prereq: Acct 310, Bus 340-342 and Econ 340. Prereq or coreq: Engl 207, Engl 208, Engl 209, Engl 313 or Engl 317. Coreq: Acct 311, Bus 343 and 345.

Bus **345 Business Operating Decisions** (3 cr). *May be used as core credit in J-3-d.* Open only to undergraduate CBE majors. An overview of the business operating decisions associated with creating demand for the firm's products and services as well as producing the system outputs; a systems approach is used to illustrate how the various business functions and support staff interact in executing these decisions; examination of the use of information technology to facilitate integration; a comprehensive integrative case is used to illustrate these ideas. May involve evening exams. Prereq: Acct 310, Bus 340-342 and Econ 340. Prereq or coreq: Engl 207, Engl 208, Engl 209, Engl 313 or Engl 317. Coreq: Acct 311, Bus 343 and Bus 344.

Bus **355 Systems Analysis and Design** (3 cr). Introduction to analysis and design of modern information systems. May involve evening exams. Prereq: Bus 340-342, Acct 310, and Econ 340. ~~or coreq~~Coreq: Bus 343-345 and Acct 311.

Bus **407 Financial Institutions** (3 cr). Management and regulation of commercial and nonmonetary financial institutions including savings and loan institutions. May involve evening exams. Prereq: Bus 301 or 340-345; and Acct 310, Acct 311, Econ 340 and Econ 343.

Bus **408 Security Analysis** (3 cr). Emphasis on theory and practice of security analysis and other techniques of financial analyses; may involve management of actual portfolios. Prereq: Acct 310, Acct 311, Bus 302, Bus 340-345 and Econ 340. ~~Prereq or coreq: Acct 315.~~

Bus **409 Problems in Financial Management** (3 cr). Analysis of selected topics in financial management; asset allocation; capital budgeting and valuation; synthesis of financial management skills through case analysis; written and oral reports and computer simulations. May involve evening exams. Prereq: Acct 310, Acct 311, Bus 302, Bus 340-345 and Econ 340.

Bus **413 Leadership and Organizational Behavior** (3 cr). Micro oriented treatment of areas including communication, motivation, group process, conflict, leadership style. Prereq: AgEc ~~391~~ 278 or Bus 311; ~~OR~~ or prereq or coreq: Bus 343-345.

Bus **452 Business Telecommunications Management** (3 cr). Survey of telecommunications management issues in a business environment; topics include local and wide area networks, telephony, public networks, and application of telecommunications technology in strategic business management. Prereq: Acct 311, Bus 343-345 and Bus 352.

Bus **453 Database Design** (3 cr). Introduction to modern database management systems and their use in solving business problems. May involve evening exams. Prereq: Acct 311, Bus 250, Bus 343-345~~,~~ and Bus 355.

Bus **454** (s) **Current Issues in Information Systems** (3 cr, max arr). Discussion of major topics of current importance in information systems. Prereq: Acct 311, Bus 343-345 and perm.

Bus **455 IS Project** (3 cr). Development of information systems and management of IS projects. May involve evening exams. Prereq: Acct 311, Bus 343-345, Bus 352, Bus 355~~,~~ and Bus 453.

Bus **461 Retirement Planning and Employee Benefits** (3 cr). Study and analysis of the retirement planning process; topics include pensions, employee benefit plans and the regulatory and legislative environment for the retirement field, and the ethics of professional financial planners as it relates to retirement planning. The course is geared towards students who plan to pursue a career in the financial services industry. May involve evening exams. Prereq: Acct 310, Acct 311, Bus 340-345 and Econ 340; or graduate standing in the College of Business and Economics. (Fall only)

Bus **462 Principles of Financial Planning** (3 cr). Study and analysis of the financial planning process including the assessment of investor risk profiles, construction of comprehensive personal financial statements and financial plans, ethics and responsibilities of professional financial planners, and regulation of the financial planning industry. The course is geared towards students who plan to pursue a career in the financial services industry. May involve evening exams. Prereq: Acct 310, Acct 311, Bus 340-345 and Econ 340; or graduate standing in the College of Business and Economics. (Spring only)

Bus **481 International Finance** (3 cr). *May be used as core credit in J-3-d.* Study of financial problems facing business engaged in international activities; foreign exchange risk management, international diversification, multinational capital budgeting, country risk analysis, financing foreign investments, international financial markets. Prereq: Acct 310, Acct 311, Bus 302, Bus 340-345 and Econ 340; or Bus 301 and Econ 446~~; or Bus 340-345~~.

Bus **490 Strategic Management** (3 cr). *May be used as core credit in J-3-d.* Capstone, integrative course; formulation and implementation of competitive strategies; both written and oral reports and case analysis. May involve evening exams. Prereq: Engl 207, ~~or~~ Engl 208, ~~or~~ Engl 209, ~~or~~ Engl 313 or Engl 317; and Bus 301, Bus 311, Bus 321, or Bus 340-345; and Acct 310, Acct 311 and Econ 340; and Sr standing.

Econ **453 Econometrics** (3 cr). Same as Stat 433. Use of quantitative techniques to analyze and test economic theories. Prereq: Stat 251, ~~or~~ Stat 271 or Stat 301~~,~~; and Math 160 or 170.

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

Bus ~~405~~ **463 Portfolio Management** (3 cr). (Bus 405). Application of security selection, portfolio theory and construction; financial futures; risk and return in investments; may involve management of actual portfolios. Prereq: Acct 310, Acct 311, Bus 340-345 and Econ 340.

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

Econ **490 Economic Theory and Policy** (3 cr). *May be used as core credit in J-3-d.* A capstone course for economics majors. Integrates theory, quantitative methods, and policy in the economics major; will involve independent research projects. ~~A capstone course for economics majors that integrates the theory, quantitative methods, and policy in the undergraduate economics major.~~ Prereq: Econ 351, Econ 352, Econ 353, Econ 453 or perm.

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

Bus **370 ~~Production/~~Introduction to Operations Management** (3 cr). Introduction to operations management, including overviews of product and process design, forecasting, inventory management, total quality management, project management, master scheduling, material and capacity requirements planning, theory of constraints, production activity control, and lean manufacturing. May involve evening exams. ~~Intro to production/operations management, including product design, process design, facility layout, facility location, job design, work measurement, project management, quality control, inventory management, maintenance, and operations scheduling and control. May involve evening exams.~~ Prereq: Stat 251 or 271 or 301.

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

Bus **470 ~~Purchasing and Materials~~ Supply Chain Management** (3 cr). In-depth study and analysis of the supply chain management integrated approach to business with emphasis on the transportation, purchasing, packaging, inventory management, and international logistics functions, as well as issues in negotiation and relationship management. May involve evening exams. ~~Overview of materials management function in organizations; includes consideration of purchasing, logistics, and inventory management.~~ Prereq: Acct 310, Acct 311 and Econ 340; and Bus 370 or Bus 340-345.

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

Bus **439 Systems and Simulation** (3 cr). Distribution theory, random numbers, modeling concepts and simulation of queuing and inventory systems. Students must have access to a laptop computer for use in class. May involve evening exams.~~Distribution theory, random numbers, modeling concepts and simulation of queuing and inventory systems. May involve evening exams.~~ Prereq: Acct 310, Acct 311 and Econ 340; and Bus ~~332 or~~ 340-345 or Bus 370.

Education

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

ED ~~580~~ 570 **Foundations of Educational Research** (3 cr). (ED 580). Examines various and diverse philosophical/theoretical frameworks, methodologies, strategies/techniques, and design. Explores three paradigms: Positivism/Post positivism, Interpretive/Constructivist and Action/Emancipatory with an emphasis in conducting research in multicultural/diverse settings.

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

ED ~~581~~ 572 **Introduction to Quantitative Analysis in Education** (3 cr). (ED 581). An introduction to quantitative analysis methods in education and social sciences. Fundamental topics in descriptive statistics are explored from both conceptual and hands-on perspectives. Topics include: variable types and measurements scales; visual displays of data; measures of central tendency and variability (mean, median, mode, range, standard deviation, variance); data distributions; standard scores; data transformations; bi-variate correlations; basic probability theory; simple regression; assumption diagnostics; statistical software skills development; and reading/interpreting quantitative research results.~~An introduction to quantitative research methods in education and the social sciences. The overall goal of the course is to prepare students to understand the process of scientific inquiry, fundamental statistical concepts and procedures of data analysis. The contents will include research design, measurement, and data analysis procedures commonly used in educational research.~~

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

ED ~~582~~ 571 **Introduction to Quantitative Research Methods** (3 cr). (ED 582). Overview of quantitative research approaches (experimental, quasi-experimental, non-experimental) and experimental design. Topics include: selecting research topics; identifying research questions; variable types; operationalizing constructs; data sampling; survey design and methodology; measurement and data collection; descriptive and inferential analysis; reading/interpreting/critiquing quantitative research; and writing/presenting quantitative research results.~~Overview of research techniques, emphasizing experimental, quasi-experimental, descriptive, analytical, single subject designs. Special emphasis on interpreting and critically evaluating research articles; planning, analyzing, and writing quantitative research studies.~~ Prereq: graduate standing.

ED ~~583~~ 573 **Action Research ~~Teacher as Researcher~~** (3 cr). (ED 583). Introduction to action research as a form of systematic applied inquiry conducted by professionals to gain insight, develop reflective perspective, effect change, enhance environment, and improve practice, pedagogy, learner/participant outcomes, policies/procedures. Goals of course include: understanding the theoretical foundations of practical and critical action research, self-study, and teacher research; examining the impact of action research on professional knowledge/actions/environment; exploring processes for identifying area of focus, generating data, analyzing and interpreting data, and developing an action plan for change.~~Introduction to classroom research to explore practice, pedagogy, and student learning using qualitative methodology; self-study, action research, collaborative research, and classroom observation.~~

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

ED ~~588~~ 574 **Introduction to Qualitative Research** (3 cr). (ED 574). Introduction to historical background and theoretical foundations of qualitative research. Addresses issues of design, methods, analysis, political, and ethical issues as they relate to practice. Goals of course include: developing introductory understanding of designing a qualitative study; exploring framework and methods within qualitative research; appreciation of complexities within approach; and developing beginning skills through conducting a qualitative inquiry project.~~Introduction to rationale, theoretical foundations, design, methods, and ethical issues in conducting qualitative research.~~ Prereq: ED 570 or perm.

ED ~~684~~ 584 **Intermediate Quantitative Analysis in Education** (3 cr). (ED 684). An in-depth coverage of inferential analysis approaches used in education and social sciences. Intermediate topics are covered from both conceptual and hands-on perspectives. Topics include: sampling distributions; statistical inference and interval estimation; hypothesis testing; inferential comparison of means, proportions, correlation coefficients and variances; two-predictor regression, part and partial correlation; one-factor analysis of variance (ANOVA); multiple comparisons & trend analysis; factorial ANOVA; fixed, random and mixed ANOVA designs; repeated measures ANOVA; non-parametric techniques; data screening and diagnostics; extensive use of statistical software; and reading/interpreting; writing quantitative research results.~~An in-depth analysis of quantitative research methods in social and behavioral sciences. The overall goal of the course is to prepare students to apply quantitative research methodology in education. Topics include understanding applied experimental, quasi-experimental and behavioral designs, survey design, measurement and instrumentation, sampling, item analysis, reliability analysis, and validity assessment.~~ Prereq: ~~ED 581 and ED 582, and enrollment in a doctoral program.~~Introductory statistics coursework and permission.

ED ~~689~~ 589 **Designing and Conducting Qualitative Research** (3 cr). (ED 689). Addresses philosophical foundations underlying qualitative research and extends understanding of design, methods of data generation, and analysis .Goals of course include understanding: relationship of design to methodologies; contextual considerations; role of Critique of Literature in developing theoretical framework; approaches to analysis; issues of trustworthiness and credibility; Researcher as Instrument; and ethical issues. Forms of reporting/writing/ representing data are introduced through reporting on newly collected or existing data.~~Examination of data collection and analysis process, role of literature critique, survey of computer applications, and ethical issues.~~ Prereq: ED ~~588~~ 578 or perm~~, and enrollment in a doctoral program~~.

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

ED **687 Advanced Quantitative Analysis in Education** (3 cr). Introduction to multivariable and multivariate statistical techniques and concepts including: multiple regression; canonical correlation; logistic regression; exploratory factor analysis; MANOVA; MANCOVA; discriminate analysis; data screening and assumption diagnostics; multicollinearity; general linear models; path analysis; confirmatory factor analysis; structural equation modeling; programming statistical software syntax; and writing/interpreting multivariate research results. Emphasis is on developing the knowledge and skills required to apply appropriate statistical techniques to address specific types of research questions and associated data sets, and to independently use and interpret sophisticated data analysis methods.~~Advanced analysis of quantitative research methods in education and social sciences. The goal of the course is to expose students to multivariate statistics and quantitative research approaches. Topics include multiple correlation/regression, discriminate analysis, exploratory and confirmatory factor analysis, multivariate analysis of variance (MANOVA), multivariate analysis of covariance (MANCOVA), canonical correlation analysis, cluster analysis, log linear model, path analysis and structural equation modeling.~~ Prereq: ED ~~684~~ 584 and 586, or perm.~~, and enrollment in a doctoral program.~~

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

ED **690 Qualitative Research: ~~Critiquing Frameworks, Practice, and Application~~ Writing, Critiquing, Practice, and Application** (3 cr). Advanced course to develop in-depth understanding of qualitativemethodologies and relationship to methods, analysis, reporting, and theoretical framework. Examines diverse perspectives, current issues in research, standards of quality, and ethical issues. Focuses on writing, interpreting qualitative data, and theory building. Goals of course include: understanding various formats for writing/reporting data; presenting and publishing qualitative research; formats for critiquing; understanding the responsibility/ commitment of researcher and research to participants/community; and use of findings from educational/social/political perspectives.~~Advanced qualitative research issues: methodologies, interpretation, formats and perspectives for reporting/publication, application, and ethics.~~ Prereq: ED ~~689~~ 589 or perm, and enrollment in a doctoral program.

Electrical and Computer Engineering

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

ECE **350 Signals and Systems I** (3 cr). Continuous and discrete, linear time invariant systems. Continuous and discrete linear time invariant systems. Sampling. Differential and difference equations. Convolution integrals and sums. Fourier and Laplace transforms. Discrete time Fourier transforms and Z transforms. State variables. Emphasis on practical applications to engineering systems. Prereq: ECE 212~~,~~ and Math 310~~ and Math 330.~~ Coreq: ECE 351.

ECE **450 Signals and Systems II** (3 cr). Continuation of ECE 350. Two-sided Laplace transform. Relationships among Fourier series, Fourier transform, and Laplace transform. Feedback, modulation, filtering, DFT algorithm, signal flow graphs, state space analysis, and modeling of electromechanical systems. Emphasis on practical applications of theory to solve engineering problems. Prereq: ECE 350 and Math 330.

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

ECE **~~466~~ 460 Semiconductor Devices** (3 cr). (ECE 466). Introduction to semiconductor physics and basic semiconductor devices; intro to electro-optical devices. Prereq: ECE ~~330~~350.

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

ECE **554 ~~Information~~ Theory ~~I~~ of Error Correcting Codes** (3 cr). Introduction to error control coding; finite field mathematics; polynomial fields; general theory of block codes; syndrome decoding; cyclic codes; encoders and decoders for cyclic codes; generator polynomials; BCH and Reed-Solomon codes; convolutional codes; the Viterbi algorithm; convolutional encoders and decoders; Trellis coded modulation. Prereq: ECE 455 ~~or 550~~ or perm.

ECE **555 Information Theory ~~II~~** (3 cr). Introduction to Shannon Theory; entropy, relative entropy, and mutual information; asymptotic equipartition; entropy rates of stochastic processes; data compression; channel capacity, differential entropy; the Gaussian channel, Lempel-Ziv coding, rate distortion theory. Prereq: ECE 455 or ECE 554 or perm.

4. Add the following 400 level course and change the number, description and prerequisites of the following joint-listed courses [**Effective**: Summer 2006]

ECE **J462/J562~~560~~ Semiconductor Theory** (3 cr). (ECE 560). Fundamental theory and behavior of modern semiconductor devices. Additional projects/assignments reqd for grad cr. Prereq: ECE 350 or perm.

ECE **~~560~~ 562 Semiconductor Theory** (3 cr). (ECE 560). ~~Fundamental theory and behavior of modern semiconductor devices.~~See ECE J462/J562.

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

ECE **J451/J551 Electroacoustic Sensors and Systems** (3 cr). Review linear systems. Derive and solve wave equation for strings, membranes, plates, acoustic waveguides. Radiation, reflection, transmission of sound. Analogies among electrical, magnetic, mechanical, acoustical systems. Strong emphasis on 2-port networks. Modeling transducers: loudspeakers, microphones, hydrophones. Sound perception and models of human hearing. Applications to voice communication systems, medical imaging, sonar, spatial listening, seismology, hearing protectors and hearing aids, materials inspection, room acoustics, etc. Additional projects/assignments required for grad credit. Prereq: ECE 350 or ME 313 or perm. (Fall only)

ECE **551 Electroacoustic Sensors and Systems** (3 cr). See ECE J451/J551.

6. Change the curricular requirements of **Electrical Engineering** (B.S.E.E.) [**Effective**: Summer 2006]

….
Upper-division engineering science elective chosen from Engr 320, 335, 350, or CE 402 (3 cr)
Technical electives taken from upper-division Engineering, Math, Physics, and Computer Science courses. Of these eighteen credits a minimum of twelve credits must be selected from electrical engineering courses including at least nine credits from the follow courses: ECE 410, 420, 430, 440, ~~and~~ 450 and 460. (18 cr)

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

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

Engineering Management

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

EM **587 Quality Engineering** (3 cr). See ME 587.

Environmental Science

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

EnvS **J446/J546 Drinking Water and Human Health** (3 cr). Same as Soil 546. Understand the characterization, testing, and treatment of chemical, microbial and hazardous compounds and their impact on human health. Be familiar with drinking water standards, regulatory aspects and protection of municipal, community, and private well systems. (Spring, Alt/yrs)

Foreign Languages and Literatures

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

FLEN **315 French Cinema** (3 cr). Same as TheF 314. *May be used as core credit in J-3-d.* Genre, structure, style of representation fiction and non-fiction films of France and the Francophone world.

FLEN **391 Hispanic Film** (3 cr). Same as TheF 391. *May be used as core credit in J-3-d.* Open to all students. A maximum of 3 cr in FLEN 391, 393, and 394 may be counted toward a major in Spanish. Genre, structure, and style of representative fiction

Forest Resources

1. Change the curricular requirements of the **Forest Resources Minor** [**Effective**: Summer 2006]

For/Rnge/WLF 221 Ecology (3 cr)
For 235 Society and Natural Resources (3 cr)
~~For 270 Principles of Forest Ecosystem Management (2 cr)~~
For 320 Dendrology (3 cr)
For 484 Forest Policy and Administration (2 cr)
One of the following courses (3 cr):
- For 375 Airphoto Interpretation and Mapping (3 cr)
- For 383 Economics for Natural Resource Managers (3 cr)
- For 474 Quantitative Resource Analysis (3 cr)

One of the following courses (2-3 cr):
- For 330 Forest Ecosystem Processes (3 cr)
- For 426 Wildland Fire Management and Ecology (3 cr)
- For 462 Watershed Management (3 cr)
- ForP 430 Forest Engineering and Harvesting (3 cr)
- Rnge 430 Riparian Ecology and Management (2 cr)
- WLF 314 Wildlife Ecology I (3 cr)

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

Geography

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

Geog **180 Geospatial Graphics** (3 cr). *May be used as core credit in J-3-d.* An introduction to cartography and some of the tools of map-making. The course includes instruction in the graphic language of maps, map reading and interpretation, map use, map use and new mapping technologies. Two lec and 1 hr of lab a wk. Prereq: Math 130 or Math 143 or higher.

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

Geog **301 Meteorology** (3 cr). Atmospheric processes that produce weather; temperature; moisture, clouds, and precipitation; synoptic-scale weather; severe storms; weather instrumentation, weather maps, and forecasting; influences of weather on humans and impacts of humans on weather. ~~One 1/2-day field trip.~~ Prereq: Geog 100 or Phys 100; and Math 143, or perm. (Fall only)

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. Prereq: ~~Geog 100 or~~ Geog 301 ~~or Phys 100 or perm~~. (Spring ~~only~~, alt/yrs)

Geog **J427/J526 Spatial Decision Support Techniques** (3 cr). *May be used as core credit in J-3-d.* Multiple criteria decision-making (MCDM); decision alternatives and constraints; spatial weighting schemes (criterion weighting techniques); collaborative spatial decision-making, MCDM and GIS; linear programming (simple versus multiple objective function); location analysis; location-allocation models integrated with GIS; gravity models. Additional projects/assignments required for graduate credit.~~Theory and applications of evaluation, collaborative spatial decision making, and optimization techniques in planning and management of natural resource systems; focus on operational knowledge of techniques, applicability, and limitations. Additional assignments and exams reqd for grad cr.~~ Prereq: Geog 427: Geog ~~240~~ 385, ~~and~~ Math ~~160~~ 143 or higher; or Stat 251 or perm; ~~.~~ Geog 526: Geog 475, Math 326 or perm. (Alt/yrs)

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

Geog **470 Geographic Visualization** (~~3~~ 4 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.~~An introduction to the science and art of cartography and spatial graphic representation. The theory and methods of spatial information representation are presented in the context of map design and data composition. Geographic data mining, geospatial data visualization and manipulation, representation modes and the components of cartographic implementation are discussed.~~ Prereq: Geog 385 and Stat 251. (Spring only)

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

Geog **380 Cartography and Graphic Communication** (3 cr). For the map-using professions (e.g., agriculture, engineering, forestry, geosciences, planning). Map design and construction; maps as graphic communication devices, design and drafting processes for map creation and production. Two lec and 6 hrs of lab a wk.
Recommended Substitution: Geog 385

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

Geog **450 Global Climate Summit Course** (3 cr). Physical concepts of past, present, and future climatic change, sustainable energy options, natural versus human-induced climatic change, impacts of projected change on human societies globally, "summit meeting" to propose action for global sustainability in which students represent the perspective of different nations. Prereq: Math 143 or Stat 251. (Spring, alt/yrs)

Geological Sciences

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

Geol **579 Advanced Geochemistry of Natural Waters Laboratory** (1 cr). Must be taken concurrently with Geol 578. Lab will stress familiarity with analytical techniques for natural waters including those adaptable for field use, computer modeling of aqueous equilibria. Three hrs of lab a wk; one 2-day field trip. Prereq: Geol J464/J564 or perm. Coreq: Geol 578.

Hydr **513 Applied Hydrogeologic Concepts** (3 cr). See Hydr J413/J513.

2. Change the description and joint-listing of the following course [**Effective**: Summer 2006]

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

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

Geol **578 Advanced Geochemistry of Natural Waters** (3 cr). Same as Hydr 578. Detailed application of aqueous geochemistry to natural waters at an advanced level; advanced treatment of subjects introduced in Geol ~~J468/J568~~ ~~J468/J568~~ J464/J564, especially carbonate equilibria, alkalinity, mineral solubility, and aqueous complexation.~~, plus computer modeling of aqueous equilibria; accompanying lab will stress familiarity with analytical techniques including those adaptable for field use. Students must complete an in-depth term project involving design, execution, and interpretation of analyses of a contaminated water.~~ Two 75 min lec ~~and 3 hrs of lab~~ a wk~~; one 2-day field trip~~. Prereq: Geol ~~J468/J568~~J464/J564 or perm.

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

Geol **ID-J476/ID-J576 Mineral ~~Deposits~~ & Petroleum Exploration Methods** (3 cr). Characteristics of ~~metallic and nonmetallic economic mineral deposits~~ mineral and petroleum resources and design of ~~mineral~~ exploration programs through integration and

evaluation of geological, geochemical, and geophysical exploration techniques in a project-based 3-D digital environment. Graduate credit requires an additional independent project and demonstration through ~~exam work and~~ papers of a more in-depth understanding of the material. ~~One 10-day field trip~~ Two 2-5 day field trips. Prereq: Geol 249 and 345.

Geol **ID576 Mineral ~~Deposits~~ & Petroleum Exploration Methods** (3 cr). See Geol J476/J576.

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

Geol **309 Ground Water Hydrology** (3 cr). Occurrence, movement, and properties of subsurface water; intro to ground water geology and hydrology. Prereq: Geol 101 or 111, and Math 130 or 143.

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

Hydr **~~ID~~ J472/~~ID~~ J572 Ground Water Management** (3 cr). ~~WSU C-E 578.~~ Hydrologic, legal, environmental and economic factors controlling development and management of ground water resources. Additional projects/assignments reqd for grad cr. Prereq or coreq: Geol 309.

Health, Physical Education, Recreation and Dance

1. Change the curricular requirements of **Athletic Training** (B.S.P.E.) [**Effective**: Summer 2006]

FCS 305 Nutrition Related to Fitness and Sport (3 cr)
H&S 150 Wellness Lifestyles (3 cr)
H&S 245 Introduction to Athletic Injuries (3 cr)
H&S 288 First Aid: Emergency Response (2 cr)
H&S 289 Drugs in Society (2 cr)
H&S 350 Stress Management and Mental Health (2 cr)
H&S 390 Athletic Training High School Clinical Experience (1 cr)
H&S 391 Athletic Training Sports Medicine Clinical Experience (1 cr)
H&S 392 Athletic Training General Medical & Orthopedic Clinical Experience (1 cr)
~~H&S 412 Emergency Response Instructorship (1 cr)~~
H&S 466 Athletic Training Evaluation (3 cr)
H&S 467 Athletic Training Rehabilitation (3 cr)
H&S 468 Athletic Training Modalities (3 cr)
H&S 469 Athletic Training Organization and Administration (3 cr)
H&S 470 Seminar in Athletic Training (2 cr)
PEB ~~105~~ 106 ~~Dance~~Individual and Dual Sports: Step Aerobics or Aerobics/Body Toning (1 cr)
PEB 106 Individual and Dual Sports: Weight Training (1 cr)
~~PE activity/skill classes (see division director for selection) (2 cr)~~
PEP 101 Introduction to Athletic Training (1 cr)
PEP 171 Athletic Training Clinical Experience I – Observation (1 cr)
PEP 201 Fitness Activities and Concepts (2 cr)
PEP 272 Athletic Training Clinical Experience II (1 cr)
PEP 273 Athletic Training Clinical Experience III (1 cr)
PEP 300 Applied Human Anatomy and Biomechanics (2 cr)
PEP 305 Applied Sports Psychology (3 cr)
PEP 360 Motor Behavior (3 cr)
PEP 371 Athletic Training Clinical Experience IV (1 cr)
PEP 372 Athletic Training Clinical Experience V (1 cr)
PEP 380 Measurement and Evaluation (2 cr)
PEP 418 Physiology of Exercise (3 cr)
PEP 455 Design & Analysis of Research in HPERD (3 cr)
PEP 471 Athletic Training Clinical Experience VI (2 cr)
PEP 472 Athletic Training Clinical Experience VII (2 cr)
PEP 475 Moral Reasoning in Sport (2 cr)
PEP 493 Fitness Assessment and Prescription (3 cr)
Rec 110 Recreation for People with Disabilities ~~or Rec 330 Recreational Therapy Programming for People with Disabilities or PEP 424 Physical Education for Special Populations~~ (~~2~~ 3 cr)
Rec 431 Medical Terminology (2 cr)
Electives to total 128 cr for the degree

Management, Marketing and Operations

1. Change the curricular requirements of **Management and Human Resources** (B.S.Bus) [**Effective**: Summer 2006]

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

Bus 412 Human Resource Management (3 cr)
Bus 413 Leadership and Organizational Behavior (3cr)
Bus 418 Organization Design and Changes (3 cr)

And one of the following emphases:

Management Emphasis

Bus 414 Entrepreneurship (3 cr)
P/OM Elective: select ~~O~~one of the following courses (3 cr):
- Bus 378 Project Management (3 cr)
- Bus 456 Quality Management (3 cr)
- Bus 470 Purchasing and Materials Management (3 cr)
- Bus 472 Operations Planning and Scheduling (3 cr)

Marketing Elective: select ~~O~~one of the following courses (3 cr):
- Bus 324 Buyer Behavior (3 cr)
- Bus 420 Promotional Strategy (3 cr)
- Bus 422 Personal Selling and Sales Force Management (3 cr)
- Bus 425 Retail Distribution Management (3 cr)
- Bus 426 Marketing Channels Management (3 cr)
- Bus 427 Services Marketing (3 cr)

Finance Elective: select ~~O~~one of the following courses (3 cr):
- Bus 302 Intermediate Financial Management (3 cr)
- Bus 362 Real Property Appraisal (3 cr)
- Bus 364 Insurance (3 cr)
- Bus 407 Financial Institutions (3 cr)
- Bus 481 International Finance (3 cr)

One additional course selected from those not taken in the three groups above (3 cr)
Supporting Elective: select ~~O~~one of the following courses (3 cr):
- Anth 462 Human Issues in International Development (3 cr)
- Comm 233 Interpersonal Communication (3 cr)
- Comm 235 Organizational Communication (3 cr)
- Comm 331 Conflict Management (3 cr)
- Comm 335 Intercultural Communication (3 cr)
- Comm 432 Gender and Communication (3 cr)
- Comm 433 Organizational Communication Theory and Research (3 cr)
- Comm 491 Communication and Aging (3 cr)
- Psyc 320 Introduction to Social Psychology (3 cr)
- Soc 301 Introduction to Diversity and Stratification (3cr)
- Soc 427 Race and Ethnic Relations (3 cr)

Quantitative Elective: select a total of three credits from the following courses (3 cr):
- Math 330 Linear Algebra (3 cr)
- Math 451 Probability Theory (3 cr)
- Stat 401 Statistical Analysis (3 cr)
- Stat 422 Sample Survey Methods (3 cr)
- Stat 423 Beginning SAS Programming (1 cr)
- Stat 424 Intermediate SAS Programming (1 cr)
- Stat 425 Topics in SAS Programming (1 cr)
- Stat 433 Econometrics (3 cr)*
- Stat 451 Probability Theory (3 cr)
- Stat 514 Nonparametric Statistics (3 cr)

Electives to total 128 cr for the degree

*Note: Stat 433/Econ 453 Econometrics does not satisfy the Upper Division Economics requirement.

Human Resources Management Emphasis

Bus 416 Staffing and Compensation (3 cr)
Bus 441 Labor Relations (3 cr)
Specialized Elective: select ~~O~~one of the following courses (3 cr):
- Psyc 416 Industrial/Organizational Psychology (3 cr)
- Psyc 430 Tests and Measurements (3 cr)
- Psyc 435 Personnel Psychology (3 cr)
- Psyc 450 Training and Performance Support (3 cr)
- Bus 461 Retirement Planning and Employee Benefits (3 cr)

Supporting Electives: select two of the following courses (at least one selection must be an upper-division course) (6 cr):
- Anth 462 Human Issues in Human Development (3 cr)
- Comm 233 Interpersonal Communication (3 cr)
- Comm 235 Organizational Communication (3 cr)
- Comm 331 Conflict Management (3 cr)
- Comm 332 Communication and the Small Group (3 cr)
- Comm 335 Intercultural Communication (3 cr)
- Comm 432 Gender and Communication (3 cr)
- Comm 491 Communication and Aging (3 cr)
- Soc 301 Introduction to Diversity and Stratification (3 cr)
- Soc 427 Racial and Ethnic Relations (3 cr)

~~One of the following courses (3 cr):~~
- ~~Comm 235 Organizational Communication (3 cr)~~
- ~~Comm 331 Conflict Management (3 cr)~~
- ~~Comm 332 Communication and the Small Group (3 cr)~~
- ~~Soc 427 Racial and Ethnic Relations (3 cr)~~

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

Math 330 Linear Algebra (3 cr)
Math 451 Probability Theory (3 cr)
Stat 401 Statistical Analysis (3 cr)
Stat 422 Sample Survey Methods (3 cr)
Stat 423 Beginning SAS Programming (1 cr)
Stat 424 Intermediate SAS Programming (1 cr)
Stat 425 Topics in SAS Programming (1 cr)
Stat 433 Econometrics (3 cr)*
Stat 451 Probability Theory (3 cr)
Stat 514 Nonparametric Statistics (3 cr)

Electives to total 128 cr for the degree

*Note: Stat 433/Econ 453 Econometrics does not satisfy the Upper Division Economics requirement.

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

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 331 Conflict Management (3 cr)
Comm 332 Communication and the Small Group (3 cr)
Tier 1 Marketing Electives: three of the following courses:
Bus 420 Promotional Strategy (3 cr)
Bus 422 Personal Selling and Sales Force Management (3 cr)
Bus 423 Internet Marketing (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 482 International Marketing (3 cr)
~~Tier 2 Business Electives: Two upper division (300-400 level) CBE courses, excluding Bus 321 (6 cr)~~
Tier 2 Business Elective : one upper division (300-400 level) CBE, statistics, or mathematics courses, (excluding Bus 301, 311, 321, 350, 370.) (3 cr)
Quantitative Elective: select a total of three credits from the following courses (3 cr):
Math 330 Linear Algebra (3 cr)
Math 451 Probability Theory (3 cr)
Stat 401 Statistical Analysis (3 cr)
Stat 422 Sample Survey Methods (3 cr)
Stat 423 Beginning SAS Programming (1 cr)
Stat 424 Intermediate SAS Programming (1 cr)
Stat 425 Topics in SAS Programming (1 cr)
Stat 433 Econometrics (3 cr)*
Stat 451 Probability Theory (3 cr)
Stat 514 Nonparametric Statistics (3 cr)

Electives to total 128 cr for the degree

*Note: Stat 433/Econ 453 Econometrics does not satisfy the Upper Division Economics requirement.

3. Change the curricular requirements for **Production/Operations Management** (B.S.Bus.) [**Effective**: Summer 2006]

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 Purchasing and Materials Management (3 cr)
Bus 472 Operations Planning and Scheduling (3 cr)
Three courses selected from the following (9 cr):
Acct 275 Accounting Information Systems (3 cr)
Acct 486 Accounting for Management Decision Making and Control (3 cr)
Acct 492 Auditing and Controls (3 cr)
Bus 355 Systems Analysis and Design (3 cr)
Bus 398 Internship (must be taken for 3 cr to satisfy this requirement)
Bus 412 Human Resource Management (3 cr)
Bus 413 Leadership and Organizational Behavior (3 cr)
Bus 418 Organization Design and Changes (3 cr)
Bus 441 Labor Relations (3 cr)
Bus 453 Database Design (3 cr)
EnvS 428 Pollution Prevention (3 cr)

Electives to total 128 cr for the degree

Mathematics

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

Math **123** **Mathematics Applied To The Modern World** ~~**The Spirit of Mathematics**~~ (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, number theory, geometry, probability, and combinatorics; discussion of historical development. ~~For students who are curious about what mathematics is and what mathematicians do but who do not plan to use mathematics as an essential tool in their careers; discussion of some aspects of mathematics through study of problems of "applied" and of "pure" type, taken from areas such as number theory, geometry, topology, probability, and combinatorics; discussion of the historical development.~~

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

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

Basic courses:
Math 170 Analytic Geometry and Calculus I (4 cr)
Math 175 Analytic Geometry and Calculus II (4 cr)
Math 275 Analytic Geometry and Calculus III (3 cr)
Math 330 Linear Algebra (3cr)

And one of the following options:

A. General Option

This is the traditional curriculum in Mathematics. It is more mathematically rigorous than the other options. It is especially good for secondary education majors and students intending to go to graduate school in Mathematics or other sciences.

Math Courses:
- Math 215 Seminar in the Topology of the Plane (3 cr)
- Math 461 Abstract Algebra (3 cr)
- Math 471 Advanced Calculus (3 cr)
- Math 462 Abstract Algebra or Math 472 Advanced Calculus (3 cr)
- ~~Math electives in courses numbered 303-499 or Stat 301 at least 6cr of which are in courses numbered 401 and above (12 cr)~~
- Math electives in courses numbered 303-499 or Stat 301 (6 cr)
- Math electives in courses numbered 401-499 or Math 385 (6 cr)

Supporting Courses:
- Physics 211, 212 Engr Physics I, II and either Physics 213 or an upper division physics course (except Phys 371) with a Math 170 prerequisite (to acquaint the students with an area in which math is systematically applied; upon approval of the department, substitution of other courses to meet this requirement may be allowed (9 cr)

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)
- ~~Math 453 Stochastic Models (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 432 Numerical Linear Algebra (3 cr)
- Math 433 Numerical Analysis (3 cr)
- Math 471-472 Advanced Calculus (6 cr)

Supporting Courses:
- CS 112 Introduction to Problem Solving and Programming or CS 120 Computer Science I (3-4 cr)
- Stat 401 Statistical Analysis (3 cr)
- Stat 423 Beginning SAS Programming (1 cr)
- One course selected from the following (3-4 cr):
  - Stat 251 Statistical Methods (3 cr)
  - Stat 271 Statistical Inference and Decision Analysis (4 cr)
  - Stat 301 Probability and Statistics (recommended) (3 cr)

At least ~~one~~ two courses from the following (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)
- Econ 353 Quantitative Economics and Forecasting (3 cr)

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

C. Applied - Computation Option

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D. Applied - Modeling Option

The emphasis is on the mathematics used to model phenomena in the sciences. With a second major in a science this provides ideal preparation for graduate school.

Math courses:
Math 310 Ordinary Differential Equations (3 cr)
Math 451 Probability Theory (3 cr)
Math 437 Mathematical Biology or WLF ~~504~~ 552 Ecological Modeling
Five Additional courses from the following:
Math 326 Linear Programming (3 cr)
Math 371 Mathematical Physics (3 cr)
Math 376 Discrete Mathematics II (3 cr)
Math 420 Complex Variables (3 cr)
Math 426 Discrete Optimization (3 cr)
Math 432 Numerical Linear Algebra (3 cr)
Math 433 Numerical Analysis (3 cr)
Math 435 Topics in Applied Mathematics (cr arr)
Math 452 Mathematical Statistics (3 cr)
Math 453 Stochastic Models (3 cr)
Math 471 Advanced Calculus (3 cr)
Math 472 Advanced Calculus (3 cr)
Math 476 Combinatorics (3 cr)
Math 480 Partial Differential Equations (3 cr)
Stat 301 Probability and Statistics (3 cr)
Supporting courses:
CS 112 Introduction to Problem Solving and Programming or CS 120 Computer Science I (3-4 cr)
Stat 301 Probability and Statistics or Math 452 Mathematical Statistics (3 cr)
Two courses at the 300 level or above in one area of science, engineering, or other quantitative area.

Mechanical Engineering

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

   ME **323 Design Seminar** (3 cr). Structuring a solution approach for open-ended problems. Elements of modern design theory. Multidisciplinary teamwork. Information collection and self-directed learning. Professional issues in engineering practice such as economics, ethics, environmental topics, safety, and patents. Approximately 25% of class time is devoted to project work. One or two field trip(s). Prereq: ME 223.
   Recommended Substitution: ME Technical Elective

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

   ME **401** (s) **Engineering Team Projects** (2-3 cr, max arr). Students will employ a systems approach to designing, testing, building and delivering an interdisciplinary engineering project. Projects are chosen at the discretion of the department. Prereq: ME Certification and perm.

   ME **428 Computer Aided Simulation** (3 cr). The course focuses on extending student knowledge of numerical simulation in the area of mechanics, heat transfer and fluid flow. The focus will be on both the theory and application using the computer with current methodologies. The focus will be on finite elements, boundary elements, and finite differences. Prereq: ME 301, ME 345, Engr 335 and Engr 350.

   ME **587 Quality Engineering** (3 cr). Same as EM 587. Designing quality into products and processes through designed experiments; Taguchi techniques and other quality topics of Six Sigma. Prereq: Stat 301. (Fall, alt/yrs)

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

   ME **585** ~~**Advanced Topics in Engineering**~~ **Design for Six Sigma** (3 cr). An introduction to the theory, process, and application of Design for Six Sigma. Topics include DFSS methodology, QFD, axiomatic design, TRIZ, and failure analysis.~~Introduction to advanced methodologies for the design and manufacture of products; topics include robust design, concurrent engineering, design for manufacture and assembly, and expert systems.~~ Prereq: ME 424 and Stat 301, or grad standing and perm. (Fall, alt/yrs)

4. Change the curricular requirements of **Mechanical Engineering** (B.S.M.E.) [**Effective**: Summer 2006]

   ….
   ME 301 Advanced Engineering Graphics (3 cr)
   ME 313 Dynamic Modeling of Engineering Systems (3 cr)
   ~~ME 323 Mechanical Engineering Design Seminar (3 cr)~~
   ME 324 Dynamic Analysis in Machine Design (3 cr)
   ME 325 Machine Component Design I (3 cr)
   ME 330 Experimental Methods for Engineers (3 cr)

ME 341 Intermediate Mechanics of Materials (3 cr)
ME 345 Heat Transfer (3 cr)
ME 345 Heat Transfer (3 cr)
ME 424 Mechanical Systems Design I (3 cr)
ME 426 Mechanical Systems Design II (3 cr)
ME 430 Senior Laboratory (3 cr)
ME 435 Thermal Energy Systems Design (3 cr)
Phys 211, 212, 213 Engineering Physics I-II-III (12 cr)
Technical electives selected from ME 409, 410, 411, 412, 413, 415, 416, 417, 420, 422, 425, 433, 443, 444, 451, 461, 472, 473, 481 ~~(9 cr)~~, plus one more technical elective that is from either the preceding list or from Math 330, 420, 432, 433, 480, Stat 301, 401, 446. (12 cr)
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Metallurgical Engineering

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

   Met **308 Thermodynamics of Materials** (3 cr). Same as MSE 308. Intro; first, second, and third law; auxiliary functions; behavior of solutions; free energy composition and phase diagrams of binary systems; reaction equilibria in systems containing components in condensed solutions; ternary diagrams; thermodynamics of alloys and ceramic materials. ~~Recommended Preparation: Chem 111 and 112, and Math 310.~~Prereq: Chem 111 and Chem 112. (Spring only)

   Met **J423/J523 Corrosion** (3 cr). Same as MSE J423/J523. Engineering aspects of corrosion and its control presented in ways of importance to a practicing engineer. Topics include corrosion economics, detecting and monitoring corrosion, regulations, specifications, safety. Emphasis on corrosion monitoring and corrosion fundamentals: chemical and electrochemical reactions; chemical and electrochemical equilibria-including Pourbaix diagrams; electrochemical kinetics. Selection and use of materials, from stainless steels to plastics. Failure analysis. Additional projects/assignments reqd for grad cr. ~~Recommended Preparation: Chem 111, 112, and Met/MSE 201.~~Prereq: Chem 111, Chem 112 and Chem 305. (Fall only)

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

   Met **344 Hydroprocessing of Materials** (4 cr). Same as MSE 344. Intro to hydroprocessing; dissolution of metals, minerals, and materials; recovery of metals from solutions: solvent extraction, ion exchange, precipitation; electrometallurgy; bioprocessing; design of agitators, mixer-settlers, electrolytic cells; flowsheet design and analysis. Three lec and one 3-hr lab a wk. Prereq: Chem 111, Chem 112, Chem 305, Met 308 and Met 309. (Spring only)

   Met **ID415 Materials Selection and Design** (3 cr). Same as MSE 415 and ME 415. WSU MSE 415. Selection of materials for use in structural applications; consideration of environment, stress conditions, cost, and performance as guide to properties; optimization of choice of materials and fabrication methods; open-ended problems of real applications in various industries. Recommended Preparation: Met 313 and 407. Prereq: Met 201 and Engr 350. (Spring only)

Nuclear Engineering

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

   NE **R450 Principles of Nuclear Engineering** (3 cr). Basic nuclear and atomic processes; radioactive decay, binding energy, radiation interactions, reaction cross sections. Neutron diffusion, radiation sources. Prereq: Math 310, Engr 320, or perm.

   NE **R462 Nuclear Reactor Codes and Standards** (3 cr). Codes and standards by NRC, EPA, ASME and others applicable to design, construction, and operation of nuclear facilities. Prereq: perm.

   NE **R525 Neutron Transport Theory** (3 cr). Modeling of neutron transport through various media using transport principles and techniques. Emphasis is giving to methods used for reactor core and component analysis. Prereq: NE 460, Math 480 or perm.

   NE **R544 Reactor Analysis - Statics and Kinetics** (3 cr). Behavior of nuclear reactors in steady state and transient conditions. Calculation of varying power conditions, fuel burn-up, coolant perturbations, and other reactor parameters. Prereq: NE 460 or perm.

   NE **R554 Radiation Detection and Shielding** (3 cr). Radiation transport and shielding concepts. Methods for quantifying attenuation of nuclear particles and electromagnetic radiation. Radiation detection methods, data acquisition and processing. Prereq: Math 310 or perm.

   NE **R570 Nuclear Chemical Engineering** (3 cr). Chemical engineering processes related to the nuclear industry; metals dissolution, solvent extraction, isotope separation, uranium processing and other topics. Prereq: perm.

   NE **R575 Advanced Nuclear Power Engineering** (3 cr). Present and advanced nuclear power plant descriptions and analysis. Engineering aspects of converting nuclear fission energy to useful work. Prereq: NE 460 or perm.

   NE **R582 Spent Nuclear Fuel Management and Disposition** (3 cr). The management of nuclear fuel after removal from a nuclear reactor; storage options, recycle and recovery of uranium and other radionuclides, geological repositories and related topics. Prereq: perm.

NE **R585 Nuclear Fuel Cycles** (3 cr). Processes to support the existing LWR fuel cycle. Alternative fuel cycles including U-233, Pu 239 and mixed oxide fuels, and advanced reactor concepts. Recycling and recovery of nuclear materials, with emphasis on traditional fast reactor recycle. Prereq: perm.

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

NE **R460 Nuclear Reactor Engineering** (3 cr). Nuclear reactor design problems in thermodynamics, fluid flow, heat transfer, fuel preparation, waste disposal, and material selection. Prereq: Math 310 or perm.

NE **R470 Nuclear Reactor Safety** (3 cr). Light water reactor safety, liquid metal reactor safety and high temperature reactor safety; evaluation methods, system disturbances, safety criteria, containment, NRC licensing process, and computer codes for nuclear safety analysis. Prereq: NE 460 or perm.

NE **R530 Two Phase Flow** (3 cr). Treatment of fluid mechanics and heat transfer in conjunction with nuclear reactors where two-phase flow problems are found. Prereq: perm.

NE **R540 Fusion Energy** (3 cr). Basic concepts and experimental approaches to fusion, elementary plasma theory, plasma oscillations, heating; fusion reactor technology development and long-range prospects. Prereq: perm.

NE **R565 Reactor Engineering** (3 cr). Radiation shielding, materials, instrumentation and controls, separation of stable isotopes, chemical separation and processing, special techniques. Prereq: NE 460, Math 480 or perm.

NE **R580 Waste Management and Nuclear Fuel Reprocessing** (3 cr). Head-end processing, solvent extraction processes, ion exchange processes, precipitation processes, and effluent management and disposal. Prereq: perm.

NE **R581 Treatment of Radioactive Waste** (3 cr). Alternative processes and operations for treatment of radioactive wastes before storage/disposal. Prereq: NE 460 or perm.

Plant, Soil and Entomological Science

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

Soil **546 Drinking Water and Human Health** (3 cr). See EnvS J446/J546.

Religious Studies

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

RelS **208 Italian Renaissance Art and Culture** (3 cr). See Art 208.

RelS **422 Plateau Indians** (3 cr). See Anth 422.

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

Courses in religious traditions chosen from the following (at least 3 cr in Asian and Pacific Religious Traditions and at least 3 cr in Western Religious Traditions) (9 cr):

Asian and Pacific Religious Traditions
- Hist 180 Introduction to East Asian History (3 cr)
- Phil 306 Hindu Thought (3 cr)
- Phil 307 Buddhism (3 cr)
- Phil 308 Confucianism and Taoism (3 cr)
- RelS 204/404 Special Topics related to this category

Western Religious Traditions
- Hist 442 The Medieval Church (3 cr)
- Hist 447 The Age of the Renaissance and Reformation (3 cr)
- Phil 302 Biblical Judaism: Texts and Thought (3 cr)
- Phil 303 Early Christianity: Texts and Thought (3 cr)
- RelS 204/404 Special Topics related to this category

Courses in approaches to religious studies and religion and culture chosen from least 3 cr in Religion and Culture (9 cr):

Approaches to Religious Studies
- Anth 327 Belief Systems (3 cr)
- CORE 116 Core Discovery: The Sacred Journey: Religions of the World or CORE 166 Core Discovery: The Sacred Journey: Religions of the World (3-4cr)
- Engl 375 The Bible as Literature (3 cr)
- Phil 305 Philosophy of Religion (3 cr)
- RelS 101 Introduction to Religious Studies (3 cr)
- RelS 204/404 Special Topics related to this category
- Soc 414 Development of Social Theory (3 cr)

Religion and Culture

Anth 329 North American Indians (3 cr)
Anth 422 Plateau Indians (3 cr)
Art 208 Italian Renaissance Art and Culture (3 cr)
FLEN 211 Classical Mythology (Gods) (2 cr)
FLEN 212 Classical Mythology (Heroes) (2 cr)
FLEN 441 Ancient Greek Civilization (3 cr)
FLEN 442 Civilization of Ancient Rome (3 cr)
Hist 101-102 History of Civilization (6 cr)
Hist 457 History of the Middle East (3 cr)
Phil 240 Belief and Reality (3 cr)
Phil 315 Existentialism (3 cr)
Phil 320 History of Ancient and Medieval Philosophy (3 cr)
Phil 321 History of Modern Philosophy (3 cr)
RelS 133 Religion and Family (2 cr)
RelS 204/404 Special Topics related to this category

Foreign languages appropriate to the minor are strongly recommended. For example, Japanese or Chinese is recommended for concentration in Asian and Pacific traditions, and Greek or Latin for those focusing on Western traditions.

Sociology, Anthropology and Justice Studies

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

   Anth **ID-J422/ID-J522 Plateau Indians** (3 cr). Same as RelS 422. WSU Anth 428/528. *May be used as core credit in J-3-d.* An overview of historic and contemporary Indian cultures of the Plateau; oral traditions, ceremonial life, social organization, and subsistence activities; history of contact with Euro-American society. Two 1 to 2-day field trips reqd. Additional projects/assignments reqd for grad cr.

Special Education

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

   EDSP **483 Special Education Internship I** (3-6 cr). Guided observation, supervised instruction, comprehensive individual and team instruction and program development for students with disabilities in the school setting. Recommended preparation: All special education undergraduate courses. Prereq: EDSP 425 and EDSP 426.

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

   EDSP **484** (s) **Special Education Internship II** (1-15 cr). Guided observation, supervised instruction, and comprehensive team and independent teaching in school settings. Prereq: perm of division. Coreq: integrated course work and ED 401.

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

   EDSP **480 Practicum** (7 or 14 cr). Dual majors enroll for 7 cr; single majors for 14 cr. Supervised classroom experience with students with disabilities. Graded P/F. Prereq: admission to teacher education, 2.5 GPA, and perm of dept. (Submit application to director of clinical experiences in teacher education by December 1 of school year before enrolling.)
   Equivalent Course: EDSP 484

Statistics

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

   Stat **525 Econometrics** (3 cr). See AgEc 525.
   Equivalent Course: AgEc 525

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

   Stat **446 Six Sigma Innovation** (3 cr). Six Sigma is a highly structured strategy for acquiring, assessing, and applying customer, competitor, and enterprise intelligence for the purposes of product, system or enterprise innovation and design. It has two major thrusts, one that is directed toward significant innovation or improvement of an existing product, process or service that uses an approach called DMAIC (Define - Measure - Analyze - Improve - Control) and a second dedicated to design of new processes, products or services. This course focuses on the innovation aspects of Six Sigma. Recommended preparation: Stat 401. Prereq: Stat 251, Stat 271, or Stat 301. (Spring, alt/yrs)

   Stat **WS527 Quality Control** (3 cr). WSU Stat 572. Simple quality assurance tools; process monitoring; Shewhart control charts; process characterization and capability; sampling inspection; factorial experiments.

3. Change the curricular requirements of the **Statistics Minor** [**Effective**: Summer 2006]

   Math 160 Survey of Calculus or Math 170 Analytic Geometry and Calculus (4 cr)
   Stat 251 Statistical Methods, Stat 301 Probability and Statistics, or Stat 271 Statistical Inference and Decision Analysis (3-4 cr)

Stat 401 Statistical Analysis (3 cr)
Stat 422 Sample Survey Methods (3 cr)
Three of the following courses (9 cr):
Bus 421 Marketing Research and Analysis (3 cr)
Math 330 Linear Algebra (3 cr)
Math 451 Probability Theory (3 cr)
Math 452 Mathematical Statistics (3 cr)
Stat 423 Beginning SAS Programming (1 cr)
Stat 424 Intermediate SAS Programming (1 cr)
Stat 425 Topics in SAS Programming (1 cr)
Stat 433 Econometrics (3 cr)
Stat 437 Statistics for Business Decisions (3 cr)
Stat 456 Quality Management (3 cr)
Stat 514 Nonparametric Statistics (3 cr)
Stat 519 Multivariate Analysis (3 cr)

Teaching, Learning and Leadership

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

   EDTE **418 Identifying and Correcting Mathematics Deficiencies** (3 cr). Study of teaching arithmetic including appropriate diagnostic-prescriptive strategies for correcting arithmetic deficiencies; microcomputers and calculators as instructional tools; consumer mathematics as an area of application.

   EDTE **508 Standards-Based Curriculum in Science** (3 cr). Preparation of practicing teachers to implement standards-based curriculum and assessment; focus on teacher's discipline area of certification; examination and development of curriculum, inquiry strategies, assessment strategies, and teaching strategies aligned with the science standards.

   EDTE **581 Systematic and Objective Analysis of Instruction** (4 cr). Supervision as a change process and analysis of supervisory cycle; application of supervisory cycle in K-12 classroom situations; designed to improve individual skill in analysis of instruction and to relate theory to practice. Graded P/F.

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

   ~~EDTE~~ EDAD **530 Ethical Leadership and Law in Education** (3 cr). Ethical and legal principles undergirding schools in the U.S.; statutory and case laws focusing on Idaho and surrounding states.

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

   EDAD **566 Leading Continuous School Improvement** (4 cr). The focus of this course is the improvement of teaching and learning through the use of student achievement data analysis and application to classroom and school improvement. It is structured around three themes: 1) Interpersonal Communications, 2) Student Achievement Data Analysis and Application and 3) Collaborative Coaching. This course is designed to develop instructional leaders who are able to implement continuous school improvement efforts through the application of these three themes. By demonstrating the use of data as the basis for educational decisions, leaders will be expected to improve achievement through the supervision of learning and the creation of a professional learning organization that promotes the learning of all: students, teachers, parents, and administrators. (Spring)

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

   EdAd **ID&WS509 Educational Policy and Politics for ~~Principals~~ Educational Leaders** (2-3 cr). WSU Ed Ad 580. Principles and problems of organization and administration of American education, including local, regional, and state systems.

5. Change the co-requisites of the following courses [**Effective**: Summer 2006]

   EDTE **423 Integrated Literacy in the Classroom** (1 cr). Facilitate intern teachers' understanding of literacy development and applications of appropriate literacy methods and materials. Interns will be expected to implement various approaches to the integration of reading, writing, speaking and listening and the selection of appropriate literature to support the content. Prereq: EDTE 321 and 322. ~~Coreq: EDTE 483.~~

   EDTE **425 Elementary Art in the Classroom** (1 cr). Implementation of methods, research, curricula, and media in teaching elementary art. Prereq: EDTE 325. ~~Coreq: EDTE 483.~~

   EDTE **427 Elementary Mathematics in the Classroom** (1 cr). Implementation of methods, research, curricula, and media in teaching elementary mathematics. Prereq: EDTE 327. ~~Coreq: EDTE 483.~~

   EDTE **428 Elementary Social Studies in the Classroom** (1 cr). Implementation of methods, research, curricula, and media in teaching elementary social studies. Students will teach social studies to elementary students 2-3 hrs a wk as part of the internship experience. Prereq: EDTE 328. ~~Coreq: EDTE 483.~~

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

   EDTE **429 Elementary Science in the Classroom** (1 cr). Implementation of methods, research, curricula, and media in teaching elementary science. ~~Recommended Preparation: EDTE 329 and 484.~~ Prereq: EDTE 329.

7. Change the co-requisites and credits of the following course [**Effective**: Summer 2006]

EDTE **483 Elementary Internship I** (~~4~~ 7 cr). Guided observation, supervised instruction and comprehensive team and independent teaching in school settings with a discipline-specific and integrated pedagogical focus. Graded P/F. ~~Coreq: EDTE 423, 425, 427, 428, and 429.~~

8. Change the curricular requirements of **Elementary Education** (B.S.Ed.) [**Effective**: Summer 2006]

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

Comm 101 Fundamentals of Public Speaking (2 cr)
ED 201 Diverse Learners in Schools and Social/Cultural Contexts (3 cr)
ED 301 Principles of Learning and Development in Education (3 cr)
ED 302 Curriculum, Instruction, and Assessment Strategies (3 cr)
ED 401 Professional Role Development (3 cr)
EDTE 320 Foundations of Literacy Development (4 cr)
Engl 102 College Writing and Rhetoric (3 cr)
Hist 101 or 102 History of Western Civilization (3 cr)
Hist 111 or 112 Intro to U.S. History (3 cr)
~~Intr 103 Integrated Science for Elementary Education Majors (4 cr)~~
Math 143 Pre-calculus Algebra and Analytic Geometry (3 cr)
Math 235 Mathematics for Elementary Teachers I (3 cr)
Math 236 Mathematics for Elementary Teachers II (3 cr)
MusT 381 Elementary School Music Methods for Nonmajors (3 cr)
Psyc 305 Developmental Psychology (3 cr)
Advanced composition elective (Engl 207, 208, 209, 291, 292, 309, 313, 317 or 401) (3 cr)
Art elective (non-methods course) (2 cr)
~~Earth science or physical science elective (4 cr)~~
Earth science elective (4 cr):
- Geog 100 Physical Geography (4 cr)
- Geol 101 Physical Geology (4 cr)

Physical science elective (4 cr):
- Chem 101 Introduction to Chemistry I (4 cr)
- Chem 111 Principles of Chemistry I (4 cr)
- Chem 112 Principles of Chemistry II (5 cr)
- Phys 103 General Astronomy and Phys 104 Astronomy Lab (4 cr)
- Phys 111 General Physics I (4 cr)

English elective in composition or literature (excluding Engl 101 and 102) (3 cr)
Life science elective (4 cr):
- Biol 102 Biology and Society (4 cr)
- Biol 115 Cells and the Evolution of Life (4 cr)

Literature elective (3 cr)
Music elective (non-methods course) (2 cr)
Social science electives other than psychology (6 cr)
….

9. Change the curricular requirements of **Secondary Education** (B.S.Ed.) [**Effective**: Summer 2006]

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

Comm 101 Fundamentals of Public Speaking (2 cr)
….

10. Change the curricular requirements of the **Earth Science Teaching Major** [**Effective**: Summer 2006]

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

Chem 111 Principles of Chemistry I (4 cr)
Geog 301 Meteorology (3 cr)
Geol 102 Historical Geology (4 cr)
Geol 324 Principles of Stratigraphy and Sedimentation (4 cr)
Geol 335 Geomorphology (3 cr)
Math 143 Pre-Calculus Algebra & /Analytic Geometry (3 cr)
Phys 103 General Astronomy (3 cr)
Phys 104 General Astronomy Lab (1 cr)
Phys 111 General Physics I (4 cr)
One of the following:
- Geog 100 Physical Geography (4 cr)
- Geog 450 Global Climate Summit Course (3 cr)

Geol 101 Physical Geology (4 cr)
Geol 111 Physical Geology for Science Majors (4 cr)
Advisor Approved Science Electives (12 cr)

~~In addition to the above teaching major requirements, the following special methods sequence is also required:~~
~~EDTE 433 Secondary Science Methods I (3 cr)~~
~~EDTE 443 Secondary Science Methods Lab (1 cr)~~

11. Change the curricular requirements of the **Geography Teaching Major** [**Effective**: Summer 2006]

A. ~~30~~31-CREDIT GEOGRAPHY TEACHING MAJOR

Geog 100 Physical Geography (4 cr)
Geog 165 Human Geography (3 cr)
Geog 180 Geospatial Graphics (3 cr)
Geog 200 World Regional Geography (3 cr)
~~Geog 330 Urban Geog or 240 Econ Geog or 346 Transportation (3 cr)~~
~~Geog 364 Idaho and Pacific Northwest (3 cr)~~
Geog 385 GIS Primer (3 cr)
~~Geog 401 Climatology or Geog 360 Population Dynamics and Distribution or Geog 427 Decision Making in Resource Management (3 cr)~~
~~Geog 470 Geographic Visualization (3 cr)~~
~~Additional geography courses to total 30 credits (2 cr)~~
Five courses from the following (15 cr):
Geog 240 Economic Geography (3 cr)
Geog 330 Urban Geography (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 401 Climatology (3 cr)
Geog 427 Spatial Decision Support Techniques (3 cr)
Geog 470 Geographic Visualization (3 cr)

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

12. Change the curricular requirements of the **Geography Teaching Minor** [**Effective**: Summer 2006]

Geog 100 Physical Geography (4 cr)
Geog 165 Human Geography (3 cr)
Geog 180 Geospatial Graphics (3 cr)
Geog 200 World Regional Geography (3 cr)
Geog 240 Economic Geography (3 cr)
Geog 385 GIS Primer (3 cr)
Additional geography courses to total 22 credits (3 cr)
~~Geog 401 Climatology or Geog 360 Population Dynamics and Distribution or Geog 427 Decision Making in Resource Management (3 cr)~~
~~Geog 470 Geographic Visualization (3 cr)~~

13. Change the curricular requirements of the **Social Science Teaching Major** [**Effective**: Summer 2006]

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

History (15 cr):
Hist 101, 102, 111, 112 (12 cr)
Modern U.S. or European history (1 course minimum)
Economics (6 cr):
Econ 201 and 202 (6 cr)
Geography (6 cr):
Geog 165, 200, ~~or~~ 330, 360 or 365 (choose two or more) (3-4 cr)
Political Science (6 cr):
PolS 101 (3 cr)
PolS 275 or 381 (choose one or more) (3 cr)
Sociology/Anthropology – choose one of the following: (6 cr)
Soc 101 and any other sociology course (excluding courses on social welfare and services) (6 cr) OR
Anth 100 and any other anthropology course (6 cr)
Electives. Two additional courses taken from any two of the areas listed above (excluding history) (6 cr)

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

Theatre and Film

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

   TheF **221 History of World Cinema I** (3 cr). Introduction to film history; a comprehensive survey of the major film movements from the birth of the cinema to the mid 20th Century.

   TheF **222 History of World Cinema II** (3 cr). Introduction to modern film history; a comprehensive survey of the major film movements from the mid 20th Century to the contemporary cinematic scene.

   TheF **314 French Cinema** (3 cr). See FLEN 315.

   TheF **391 Hispanic Film** (3 cr). See FLEN 391.
   Equivalent course: TheF 315

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

   TheF **220 History of World Cinema** (3 cr). *May be used as core credit in J-3-d.* A comprehensive survey of the major film movements; introduction to film history and techniques. (Spring only)
   Recommended substitution: TheF 221 or TheF 222.

   TheF **315** (s) **National Cinemas** (3 cr, max 9). An examination of selected national cinemas in terms of major periods, themes, styles, and forms, and in relation to both national and international cultural histories.
   Equivalent course: TheF 314 or TheF 391.

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

   TheF ~~288~~ 188 **Introduction to Film Studies** (3 cr). (TheF 288). *May be used as core credit in J-3-d.* Introduction to the study of film; survey of film aesthetics, form, theory, style, and analysis.

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FOR THE FACULTY'S INFORMATION

Correction to General Curriculum Report 236:

Changes to Cooperative Courses Approved Since Last General Curriculum Report:
(ID = taught only at UI; WS = taught only at WSU, LC = taught only at LCSC; ID&WS = can be taught at both UI & WSU; ID&LC = can be taught at both UI & LCSC)

Other Informational Changes: