General Curriculum Report #236

UNIVERSITY OF IDAHO - REGISTRAR'S OFFICE
October 07, 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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Adult, Counselor, and Technology Education

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

   PTTE **544 Idaho Leadership Institute** (1-12 cr, max 12). Institute for the preparation of the next generation of Idaho's leaders in professional-technical education. Prereq: Accepted into the Idaho Leadership Institute.

Biological Sciences

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

   Biol ID**558 Reproductive Biology of Fishes** (2 cr). WSU Biol 511. A graduate level course covering all aspects of the reproductive biology of fishes. The class will meet once per week for 2 hours; the first hour will be used for a formal lecture, the second hour will be used for informal student presentations/discussion of current literature topics or assigned readings in the field. Prereq: Grad standing. (Spring only, Alt/yrs)

Chemistry

1. Change the credits of the following courses [**Effective:** Spring 2006]

   Chem **J435/J535 Principles of Chemical Instrumentation** (2-4 cr, max 4). Practical theory and application of modern analog/digital electronics and small computers to chemical measurement and control systems. Registration for Chem 535 requires completion of an additional term paper or other assignment. One hr of lec and one 3-hr lab a wk. Prereq: Chem 253 or 454, Phys 212, or perm. (Fall only)

   Chem **J453/J553 Separation Theory and Chromatography** (2-3 cr, max 3). Gas and liquid chromatography and related fields. Students enrolled in Chem 553 are required to complete additional written assignments. Prereq: Chem 306.

   Chem **J467/J567 Inorganic Spectroscopy** (2-3 cr, max 3). Applications of spectroscopic methods to investigation of inorganic and organometallic compounds; topics include multinuclear and multidimensional NMR, IR and Raman, EPR, mass spectroscopy, Mossbauer spectroscopy, and x-ray crystallography. Additional projects/assignments reqd for grad cr. Prereq: Chem 306 and 454. (Alt/yrs)

   Chem **468 Organometallic Chemistry** (2-3 cr, max 3). Structure, bonding, and reaction chemistry of organotransition metal compounds; applications to homogeneous catalysis. Additional projects/assignments reqd for grad cr. Prereq: Chem 305-306. Prereq or coreq: Chem 463 or 466 or perm. (Alt/yrs)

   Chem **535 Principles of Chemical Instrumentation** (2-4 cr, max 4). See Chem J435/J535.

   Chem **513 Nuclear Chemistry** (2-3 cr, max 3). Intro to artificial and natural radioactivity, tracer methods, and atomic energy. Prereq: Chem 306 or Phys 305 or perm. (Alt/yrs)

   Chem **550 Radioanalytical Chemistry** (2-3 cr, max 3). Fundamental concepts of radiochemistry, including the principles of radioactive decay processes and counting techniques; in-depth treatment of radioanalytical techniques, especially neutron activation and isotope dilution methods; decay processes as sources of x-rays; the use of synchrotron radiation in analytical chemistry. Prereq: Chem 454, or 455, or perm. (Alt/yrs)

   Chem **551 Electronic Spectrometry** (2-3 cr, max 3). A brief review of fundamental concepts, including electronic transitions, optical properties of materials, and laws of radiation absorption; detailed coverage of instrumentation used for ultraviolet and visible absorption spectroscopy, with regard to optical components, overall design strategy, and signal processing; analytical performance related to these aspects and presented from both theoretical and practical standpoints; in-depth coverage of luminescence spectroscopy, including phosphorimetry and fluorimetry; atomic spectroscopy (both flame and plasma-based versions), including principles of operation, instrumental requirements, and analytical application; survey of x-ray absorption and fluorescence spectroscopy. Prereq: Chem 454, 455 or perm. (Alt/yrs)

Chem **552 Analytical Vibrational Spectrometry** (2-3 cr, max 3). Introduction to vibrational transitions, optical properties of materials, and laws of radiation absorption and emission (including why they are not always obeyed in practice); detailed discussion of instrumentation used for mid-infrared, near infrared, and Raman spectrometry; illustration of transmission spectrometry with examples including microscopy and spectral imaging, open-path monitoring, and spectroscopy of aqueous solutions and hyphenated techniques; introduction of time- and phase-resolved measurements; detailed coverage of specular reflection, reflection-absorption of thin films, diffuse reflection, attenuated total reflection spectrometry, and remote measurements through optical fibers; discussion of application of near infrared spectroscopy to agricultural commodity analysis and process monitoring. Prereq: Chem 454, 455 or perm. (Alt/yrs)

Chem **553 Separation Theory and Chromatography** (2-3 cr, max 3). See Chem J453/J553.

Chem **558 Electrochemistry** (2-3 cr, max 3). Fundamental concepts of electrochemistry, including the principles of redox processes; in-depth treatment of electroanalytical techniques, especially voltammetric and potentiometric methods; advanced treatment of selected topics, including ultramicro and in vivo electrochemical techniques. Prereq: Chem 454, or 455, or perm. (Alt/yrs)

Chem **567 Inorganic Spectroscopy** (2-3 cr, max 3). See Chem J467/J567.

Chem **ID568 Organometallic Chemistry** (2-3 cr, max 3). See Chem J468/ID-J568.

Chem **569 Fluorine Chemistry** (2-3 cr, max 3). Brief history of fluorine beginning with its isolation in 1886 through current areas of interest in fluorochemicals; in-depth study of modern synthetic methods of fluorinated compounds and their potential applications today and in the future. Prereq: Chem 463, 466, or perm. (Alt/yrs)

Electrical and Computer Engineering

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

ECE **557 Biological Signal Processing** (3 cr). See NEUR 521.~~Introduction to mathematical and computational modeling of signal processing mechanisms in biological organisms. The course is designed to serve an interdisciplinary audience of students from biological sciences, psychology, and engineering. Neurons and neuro models. Networks of neurons. Plasticity and learning models. Introduction to computational neuroscience. Recommended Preparation: Introductory course in linear algebra. Familiarity with at least one programming language. Prereq: Math 160 or 170, and perm. (Spring only, alt/yrs)~~

Neuroscience

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

Neur **ID521 Biological Signal Processing** (3 cr). Same as ECE 557. Introduction to computational neuroscience. Neurons and neuron models, basic signaling mechanisms of neurons, networks of neurons, learning models, learning model algorithms, weight-based memory models. The Hodgkin-Huxley model. A principal emphasis in this course is the development of quantitative models and analysis of neural systems. A term project is required. Recommended preparation: introductory course in linear algebra. Familiarity with at least one programming language. Prereq: Math 160 or 170 and perm. (Spring only, alt/yrs).

Psychology and Communication Studies

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

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

Comm 101 Fundamentals of Speech (2 cr)
Comm 111 Introduction to Communication Studies (3 cr)
Comm 233 Interpersonal Communication (3 cr)
Comm 235 Organizational Communication (3 cr)
Comm 455 Communication Research Methods (3 cr)
Stat 251 Statistical Methods (3 cr)
Twenty-four (24) credits selected, with faculty advisor's guidance, ~~from the following upper division courses. Courses recommended to fulfill these requirements include:~~the following upper division courses are recommended to fulfill these requirements:

- Comm 331 Conflict Management (3 cr)
- Comm 332 Small Group Communication (3 cr)
- Comm 335 Intercultural Communication (3 cr)
- Comm 347 Persuasion (3 cr)
- Comm 403 Workshop (cr arr)
- Comm 404 Special Topics (cr arr)
- Comm 431 Professional Presentation Techniques (3 cr)
- Comm 432 Gender and Communication (3 cr)
- Comm 433 Advanced Organizational Communication (3 cr)
- Comm 446 History of Communication Studies (3 cr)
- Comm 491 Communication and Aging (3 cr)
- Comm 498 (s) Internship (1-3 cr, max 3)
- Comm 499 (s) Directed Study (cr arr)
- Psyc 310 Psychology of Personality (3 cr)

Psyc 320 Social Psychology (3 cr)
Psyc 416 Industrial/Organizational Psychology (3 cr)

Sociology, Anthropology and Justice Studies

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

JS **498** (s) **Internship in Criminal Justice** (1-6 cr, ~~max 6~~max arr). Directed internship in designated criminal justice agency or institution. Graded P/F. Prereq: perm.

Soc **498** (s) **Internship** (1-6 cr, ~~max 6~~max arr). Supervised professional field experience in human service organizations. Graded P/F. Prereq: departmental major and perm.

COURSES TO BE MADE DORMANT [**Effective**: Summer 2006]
If it is determined by the Registrar's Catalog Editor that a course has not been offered in the last four years, he/she will initiate the process to make the course dormant.

Adult, Counselor and Technology Education
CASP 579 Lifestyle Diversity

Agricultural Economics and Rural Sociology
AGEC 430 Finan Agribus Firms
AGEC 435 Natural Resource Law

Agricultural and Extension Education
AGED 211 Ag Ed Skills

Animal and Veterinary Science
AVS 174 Beef Cow Calf Mgt Lab
AVS 176 Sheep Management Lab
AVS 366 Equine Science & Management

Biological and Agricultural Engineering
ASM 413 Human/Mach Risk Mgmt

Business
BUS 478 Sem In Operations Mgt
BUS 501 Seminar
BUS 582 International Marketing Mgmt
BUS 597 Practicum
BUS 598 Internship

Chemical Engineering
CHE 545 Mass Transfer Oper I
CHE 546 Mass Transfer Ops II

Civil Engineering
CE 420 Fluid Dynamics
CE 524 Water Resources Planning

Computer Science
CS 214 Bckgrd Stdy:Data Structures
CS 371 Expert Systems
CS 386 Derivational Programming
CS 435 Found Mod Progr Meth
CS 485 Software Process Mgmt
CS 496 Computational Complexity
CS 521 Comp Network Design
CS 535 Found Mod Progr Meth
CS 596 Computational Complexity

Environmental Engineering
ENVE 451 Environmntl Mgmt/Design
ENVE 452 Environmntl Mgmt/Design
ENVE 534 Envrnmntl Engr Unit Processes
ENVE 543 Water Quality Managment
ENVE 575 Air Pollution Control

Fish and Wildlife Resources
FISH 401 Practicum In Tutoring
FISH 470 Interdisc Nat Res Plng
FISH 512 Aquatic Pollutn Ecolgy
WLF 401 Practicum In Tutoring

WLF 470 Interdisc Nat Res Plng
WLF 493 Environmental Law
WLF 542 Waterfowl Mgmt
WLF 588 Adv Topics Wildlife

Food Science and Toxicology
FST 427 Trans Elec Microscopy
FST 440 Biol Elec Microscopy
FST 510 Adv Food Chemistry

Forest Products
FORP 336 Intro Pulp/Paper Indus
FORP 401 Practicum In Tutoring
FORP 437 Wood As Structural Material
FORP 455 Construction Scheduling
FORP 497 Senior Thesis
FORP 541 Issues in Renew Nat Res Indus

Forest Resources
FOR 401 Practicum In Tutoring
FOR 477 Integr For Mgmt Models
FOR 581 Integrated For Resource Econ
FOR 589 Water Resources Sem

Health, Physical Education, Recreation and Dance
H&S 355 Acc Cntrl/Prev/Hum Eco
PEP 311 Strength Training
PEP 411 Adv Strength Training
REC 522 Admin Perspectives
REC 582 Recreation Law/Risk Mgmt
REC 593 Management of Leisure Services

Natural Resources
NR 401 Practicum in Tutoring

Plant, Soil, and Entomological Sciences
ENT 348 Forest Entomology
ENT 448 Medical Entomology
ENT 451 Appl Biol Cntrl:Weeds
ENT 480 Urban Entomology
ENT 543 Predator-Prey Dynamics
ENT 550 Insect Physiology
ENT 556 Insctds:Toxic/Mode-Act
ENT 557 Herbicide:Toxic/Mode of Action
ENT 558 Pesticide Topics
ENT 583 Physio Intrct/Pred-Pre
ENT 595 INTERN:Noncropland Wd Bio Cntl
PLSC 420 Potato Phys&Prod Tech
PLSC 422 Gen/Molc Asp Plnt Repr
PLSC 469 Seed Production
PLSC 508 Adv Crop Physiology I
PLSC 522 Gen/Molc Asp Plnt Repr
PLSC 557 Herbic:Toxic-Mode/Actn
PLSC 558 Pesticide Topics
PLSC 570 Potato Phys&Prod Tech
PLSC 571 Plant Molec Genetics
SOIL 541 Soil-Plant-Microbial Interactn
SOIL 551 Advanced Pedology

Rangeland Ecology and Managemant
RNGE 354 Wildland Veget Mgmt/Restoratn
RNGE 401 Practicum in Tutoring
RNGE 493 Environmental Law
RNGE 525 Exp Plant Ecol
RNGE 541 Issues of Renew Nat Res Indus
RNGE 552 Restoration Ecology
RNGE 570 World Biomes

Teaching, Learning and Leadership
EDSP 561 Erly Chdhd Sp Ed Instr
EDSP 562 Collaboration/Teaming
EDTE 422 Early Chldhd/Kndrgn Ed
EDTE 507 Suprvsn of Instruction
EDTE 521 Adv Language Arts
EDTE 522 Early Chldhd/Kndrgn Ed

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FOR THE FACULTY'S INFORMATION

Correction to General Curriculum Report 235:

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

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

   ASM **ID&WS331 Electric Power Systems for Agriculture** (3 cr). WSU AgTM ~~331~~330. Basic circuits; wiring and the code; motors and controls; heating, lighting, and power. Two lec and one 3-hr lab a wk.

   ASM **WS413 Human and Machinery Risk Management** (3 cr). WSU AgTM ~~413~~412.

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

   PlSc **WS-J420/WS-J570 Potato Physiology and Production Technology** (2 cr). WSU Hort 420/520. (Alt/yrs)

   PlSc **WS469 Seed Production** (3 cr). WSU CropS/Hort 469. Crops indigenous to the Northwest; seedhouse operations and seed regulation. Prereq: perm. (Alt/yrs)

   PlSc **WS570 Potato Physiology and Production Technology** (2 cr). See PlSc J420/J570.

Other Informational Changes:

1. Addition of two new USAC Island Programs [**Effective**: Summer 2006]

   - Viterbo, Italy
   - Galway, Ireland