UNIVERSITY OF RHODE ISLAND

The Graduate School

CURRICULAR REPORT FROM THE GRADUATE COUNCIL TO THE FACULTY SENATE: REPORT NO. 2003-2004-7

At meeting No. 395 held April 23, 2004, the Graduate Council considered and approved the following curricular matters which are now submitted to the Faculty Senate for information or confirmation as indicated.*

- I. Matters Requiring Confirmation by Faculty Senate
- A. College of Human Science and Services
- 1. School of Education
- a. Changes:

EDC 568 Teaching Diverse Learners in a Standards Based Classroom & endash; change title, description and prerequisite to read:

Differentiation of Instruction (3)

Strategies for differentiating instruction to meet diverse student needs in a heterogeneous classroom are addressed. Development of lessons using integrated differentiated instruction and assessment strategies is required. (Lec. 3) Pre: 400 or 424 or 448 or 569 or permission of instructor

EDC 569 Best Practices in the Middle Level Classroom & endash; change description and prerequisite to read:

Examination of state and school improvement data at the middle level to improve curriculum, instruction, and assessment practices. Action research is performed with an emphasis on designs, processes, and models. Pre: Graduate standing or permission of instructor

- B. College of Arts and Sciences
- 1. Department of Biological Sciences
- a. Changes:

BIO 591, 592 Biological Problems & endash; change title, credits, description and prerequisite to read:

Independent Biological Research (1-6)

Individualized laboratory, field or literature research projects. May be repeated for a total of 6 credits. S/U Pre: Graduate standing required, permission of instructor

BIO 593 Special Topics in Botany & endash; change title, credits and description to read:

BIO 593, 594 Special Topics in Biological Sciences (1-6)

Selected areas pertinent to needs of individuals or small groups. Class, seminar or tutorial. Topics may include the following: biomechanics, cell biology, ecological morphology, functional morphology, ichthyology, molecular biology, morphology and mechanics, physiology, plant cell development and zoology. May be repeated for a total of 6 credits.

b. Add (New):

BIO 513 Functional Morphology (3)

Advanced study of the evolution and biological role of organismal structure with critical evaluation of recent research in functional morphology with an emphasis on vertebrates. (Lec. 3) Pre: 304 or 366 recommended. Graduate standing

- 2. Graduate School of Library and Information Studies
- a. Add (New):

LSC 517 Community Relations for Libraries (3)

Includes public relations, advocacy, determining community needs, identifying potential partners, building partnerships, developing a community relations plan, and envisioning the library's future. Incorporates programs and strategies of core professional organizations. (Lec. 3) Pre: 502 or permission of instructor

b. Changes:

LSC 524 Library Instruction: Philosophy, Methodology, and Materials & endash; change title and description to read:

LSC 524 Teaching About Information: Philosophy and Methodology (3)

An introduction to all aspects of instructing a diverse clientele in the effective use of information in all forms. Philosophy, cognitive aspects, methodologies, media, and the administration, coordination, and evaluation of Information Literacy Instruction will be considered. LSC 539 Business Reference & endash; change title and description to read:

Business Information (3)

An introduction to many aspects of business information services, as well as to business information in all formats. This course will emphasize services in business libraries and information centers, and the fields of corporate intelligence and knowledge management will also be considered and discussed.

LSC 540 Library Materials in the Humanities & endash; change title, description and prerequisite to read:

Humanities Information and Materials (3)

Information needs and services of all areas of the humanities. Unique aspects of library services and materials in all formats will be considered. Pre: 504

LSC 541 Library Materials in the Social Sciences & endash; change title, description and prerequisite to read:

Social Science Information (3) Information needs and services in all areas of the social sciences and the professions, including information in all formats. Pre: 504

LSC 597 Selected Topics & endash; change number of credits and description to read:

(1-3) Selected topics of current and special interest in library and information studies not covered in existing course offerings. Topics and number of credit hours announced prior to each offering. May be repeated with different topics (Lec. 1-3)

C. Graduate School of Oceanography

1. Add (New):

OCG 535 Climate, Radiation, Gases and Aerosols (3) Role of short- and long-wave radiation in climate. Occurrence and consequences of natural and enhanced concentrations of radiatively-active gases. Role of aerosols and associated forcings and feedbacks. (Lec. 3) Pre: PHY 205 or 214, CHM 192 or permission of instructor.

D. College of Pharmacy

1. Add (New):

PHC 502 Drug Development (3)

Scientific and regulatory aspects of drug development from discovery to market, exemplified by URI research (Lec. 3) Pre: Graduate standing in Pharmacy

2. Changes:

Merge the graduate programs in Applied Pharmaceutical Sciences, Medicinal Chemistry, Pharmacognosy and Pharmacology & Toxicology. The new College graduate program will continue to grant degrees in Pharmaceutical Sciences.

Change specializations, admissions and program requirements as follows:

Specializations

Medicinal Chemistry and Pharmacognosy: Molecular mechanisms of chemical carcinogenesis; combinatorial chemistry; solid-phase peptide synthesis; screening, isolation and structure elucidation of physiologically-active natural products; biosynthesis of microbial and plant natural products; herbal medicine.

Pharmaceutics and Pharmacokinetics: Design, development, production, evaluation and regulatory approval of pharmaceutical and self care products as well as pharmacokinetic and pharmacodynamic studies using virtual, clinical, and preclinical data, often with an emphasis on population approaches.

Pharmacoepidemiology and Pharmacoeconomics: Health and economic outcomes research pertaining to pharmacotherapy as used in human populations. Specializations include medication adherence, decision and cost-effectiveness analyses, post-marketing surveillance, epidemiologic methods, and quality improvement and measurement.

Pharmacology and Toxicology: Research projects explore the mechanisms involved in various disease states and their pharmacological intervention, and mechanisms of toxicity of various environmental agents. On-going topics include the effects of hormonal imbalances and antihypertensive agents on cardiac function and metabolism in hypertension, diagnosis and treatment of arthritis, effect of septic shock on drug metabolism, developmental neurotoxicity of environmental agents, hepatotoxicity and nephrotoxicity of heavy metals, interindividual variation in metabolism of heterocyclic amine carcinogens, regulation and genetic heterogeneity of enzymes involved in drug and xenobiotic metabolism, calcium— and non-calcium mediated pathways of cell death, and the development of inhibitors to cell signaling events.

Master of Science

Admission requirements: GRE and Pharm.D. or bachelor's degree in pharmacy, chemistry, biological sciences or allied sciences; TOEFL (for non-English speaking countries).

Program requirements: successful completion of 30 credits of graduate study, including PHC 502*, 2 seminar credits, 6-9 thesis research credits, thesis.

For specialization in medicinal chemistry and pharmacognosy, ACS placement exam (organic) to determine specific program requirements; two credits of BMS 521 or 522; BMS 525; and either BMS 530 or BMS 535; six credits selected from CHM 427, CHM 521, CHM 522, BCH 581, and BMS 551.

For specialization in pharmaceutics and pharmacokinetics, BMS 525, STA 409, 411, or equivalent; six- nine credits of 500 or 600 level APS or BMS courses; three-six credits of electives upon approval of the graduate program committee.

For specialization in pharmacoepidemiology and pharmacoeconomics, two credits of APS 693 or 694; and APS 540, 550, 580.

For specialization in pharmacology and toxicology, two credits of BMS 521 or 522; BMS 525 and BCH 581; one course of either BMS 530, 535 or 585; and two to three courses from BMS 544, 546, 572, 585, 641, 644, BCH 582, in consultation with student's major professor.

Doctor of Philosophy (Pharmaceutical Sciences)

Admission requirements: GRE and master's degree in pharmacy, chemistry, biological sciences or allied sciences, or bachelor's degree in one of these areas with evidence of superior ability. Qualifying examination is required for candidates accepted

without the master's degree. Qualified students may be admitted directly to the Ph.D. program.

Program requirements: successful completion of 72 credits of graduate study, including up to 24 research credits, PHC 502*, written and oral comprehensive examination, dissertation. Students are expected to attend and participate in the departmental seminars during their entire tenure in the Ph.D. program, for a maximum of three credits assigned to the core credit requirement.

For specialization in medicinal chemistry and pharmacognosy, ACS placement exam (organic) to determine specific program requirements; courses required for master's degree plus one additional credit from BMS 521 or 522.

For specialization in pharmaceutics and pharmacokinetics, M.S. core requirements, plus APS 693, 694, twelve credits of 500 or 600 level APS or BMS courses and twelve credits of concentration courses. Suggested concentration courses may include analytical chemistry, immunology, human genetics, statistics, or microbiology upon approval of the graduate program committee

For specialization in pharmacoepidemiology and pharmacoeconomics, courses required for master's degree plus one additional credit from APS 693 or 694, and nine credits of concentration courses. Suggested concentrations include health services research, outcomes research, decision analysis, medication adherence, epidemiologic methods and others. Tutorials may be arranged in areas of special interest to the student. Students are also required to serve as teaching assistants in a related APS course for a semester.

For specialization in pharmacology and toxicology, courses required for master's degree plus one additional credit from BMS 523 or 524; BMS 530, 535; two additional graduate-level courses from BMS or BCH 582.

Joint Doctor of Pharmacy / Master of Business Administration Program

The University of Rhode Island Colleges of Pharmacy and Business Administration offer a joint program that allows students the opportunity to develop management and administrative skills as they study for the Doctor of Pharmacy (Pharm.D.) degree. This program graduates highly-qualified individuals to assume leadership and management roles in the health care industry. A unique combination of didactic management and pharmacy coursework, coupled with innovative practicum experiences, provide students with an exceptional knowledge base of theoretical and applied information. The joint program requires the student to complete a total of 224 credits.

Students enrolled in the Doctor of Pharmacy program are eligible to apply for admission to the joint program after their second professional year (by July 15). The following are required at that time:

GMAT

Statement of Purpose

Resume

Letters of Recommendation (2)

TOEFL (for natives of non-English speaking countries)

Change the following course numbers

From:	То:
PHP/BMS 510	PHP/BPS 510
PHP/APS 515	PHP/BPS 515
PHP/APS 516	PHP/BPS 516
PHP/BMS 518	PHP/BPS 518
PHP/BMS 519	PHP/BPS 519
BMS 520	BPS 520
BMS 521	BPS 521
BMS 522	BPS 522
BMS 525	BPS 525
BMS 530	BPS 530
BMS 533	BPS 533
BMS 535	BPS 535
APS 571	BPS 536
BMS 544	BPS 544
BMS 545	BPS 545
BMS 546	BPS 546
BMS 551	BPS 551
APS 530	BPS 560
APS 531	BPS 561
APS 532	BPS 562
APS 535	BPS 565
BMS 572	BPS 572
BMS 597, 598	BPS 597, 598
APS 599	PHP 599
APS 621	BPS 621

APS 622	BPS 622
APS 623	BPS 623
APS 631	BPS 625
APS 633	BPS 626
BMS 633	BPS 633
BMS 635, 636	BPS 635, 636
BMS 641	BPS 641
BMS 642	BPS 642
BMS 644	BPS 644
APS 660	BPS 660
APS 670	BPS 670
BMS 691	BPS 691
APS 693, 694	BPS 693, 694
BMS 697, 698	BPS 697, 698
APS/BMS 699	BPS/PHP 699
APS 503	PHP 503
APS 504	PHP 504
APS 540	PHP 540
APS 550	PHP 550
APS 570	PHP 570
APS 580	PHP 580
APS 640	PHP 640
APS 680	PHP 680
APS 693, 694	PHP 693, 694
APS 697, 698	PHP 697, 698*
APS 699	PHP 699

^{*} editorial correction 12/15/04

3. Deletions:

APS 533 Behavioral Skills in Pharmacy

APS 651, 652 Health Care Systems I, II

E. Colleges of Arts & Sciences, Environmental and Life Sciences, and the Library

1. Crosslist:

BIO 508 (BCH/MIC/AFS/AVS/NRS/PLS/LIB) Seminar in Biological Literature (1)