The following curriculum information is presented to the University Community for its consideration. In accordance with the procedures of the University Curriculum Committee, objections to all proposed new courses, programs, or program/course modifications should be communicated, in writing, within two weeks of the publication date of this bulletin, to Professor Rosalie Hallbauer (Curriculum Committee), Leonard Bliss (Graduate Council), or Professor Gerardo Aladro (Undergraduate Council).

HEARING NOTICES

NAME: PROPOSAL FOR A NEW TRACK IN HEALTH, PHYSICAL EDUCATION AND RECREATION
COLLEGE: EDUCATION
DATE: Friday, January 17, 2003
TIME: 10:00 AM
PLACE: DM 441 (UP), LIB 155 (UP)
CONTACT: Debra Trigoboff, College of Education (Joint Hearing: Curriculum Committee and Undergraduate Council)

COLLEGE OF ARTS & SCIENCES - REQUEST FOR ADDITION OF DEGREE DESIGNATION UNDER EXISTING BACCALAUREATE MAJOR: BS DEGREE IN INFORMATION TECHNOLOGY AS A STAND-ALONE MAJOR

Proposed Additional Baccalaureate Degree Designation (e.g., BA, BS, BFA): BS
Effective Date: Fall 2003

Florida International University is authorized to offer the existing baccalaureate degree noted above. This request is to add another degree designation under the authorized program. Offering this additional degree designation will require no new resources.

Briefly describe the need for an additional degree designation. This alternate implementation aims at giving considerable expertise in a different field to students whose primary focus is in IT whereas the second degree implementation gives considerable IT expertise to students whose primary focus is in another field (the primary major.) The standalone IT degree achieves this goal by requiring all students to obtain a minor in another program within the university. Both approaches are based on the general agreement in the IT community that to be more effective, IT practitioners must have a good understanding of the field they are serving.

Briefly describe how the proposed curriculum differs from the existing curriculum and attach a list of the coursework necessary for this program. NOTE: Common Pre-requisites must remain the same. The existing curriculum is offered as a second major and as such consists of 30 credit hours. The proposed curriculum will be offered as a stand-alone major consisting of 60 credit hour. The prerequisites and the required courses for both implementations are the almost the same (the stand-alone implementation requires an additional technical report writing course.) However, the structure of the elective courses is different -- the stand-alone implementation requires more electives and a minor in a different field.

Common Prerequisites:
1. COP 2250 Programming in Java
2. A 3 credit hour course in Psychology
3. CGS 2060/CGS 2100
4. Pre Calculus
5. MAD 1100 -- Mathematical Foundation of IT
6. CGS 3092 -- Professional Ethics and Social Issues in Computer Science

BS in IT program
(Stand-Alone Major)
Rationale: Applicants to the Master of Social Work program have a variety of undergraduate backgrounds. Generally, however, they fall into distinct groupings. First, are the undergraduates who have a general arts and sciences background with a four-year undergraduate degree in psychology, sociology, political science or other related fields. The second category includes those graduates of a four-year Bachelor of Social Work degree.

Four-year undergraduate applicants from the general studies BA population tend to be mature students, many of whom have or are presently employed in applied social work positions. While these students do not have the academic social work course experience, they do have substantive social science foundational knowledge to enter the first year of the graduate program. Achievement of a GPA of 3.0 or better has generally been a predictor of success in the MSW program. Where students have done well on the GRE, as a predictor of success in social work, undergraduate education with this population, the GRE does not emerge as a strong indicator of success.

Graduates of these programs are generally assumed to have made a career decision and are returning for advanced (graduate) professional education in social work. In some European countries, such students are given various levels of advanced standing status within graduate social work programs. With few exceptions, these students have taken at least 20 courses in social work and if they have achieved at least a 3.0 GPA in those courses there is a strong probability of success in the MSW program. Further, although it is not an admissions criterion, these students are most likely to be employed or have been employed in social work prior to seeking advanced social work education. In other words, these applicants are in a position to provide a range of admissions information in support of their application.

The use of the GRE in social work admissions decisions has long been a matter of debate. One of the areas of concern within social work has been the possible disadvantage to minority populations. The School of Social Work is particularly sensitive to this debate and its possible implications to our applicant population. In excess of 75% of our applicants are from Hispanic, Black, and African American populations. Applicant population reflects the composition of our community at large and assists with the need for graduates from these ethnic and racial backgrounds. The School of Social Work must use admissions criteria that would not risk inhibiting these potential applicants.

Summary:

The School of Social Work does not see the GRE as a helpful criterion in the admissions procedure at this time. This proposal to request an exemption from the use of the GRE in social work graduate admissions received the support of the faculty within the school at the faculty meeting of November 7, 2002.

***************

JURIS DOCTOR/MASTER OF SOCIAL WORK - JOINT DEGREE PROGRAM - FACULTY CONTACT: SCOTT NORBERG

The faculties of the College of Law and the School of Social Work at Florida International University have approved a joint degree program culminating in both a Juris Doctor degree, awarded by the College of Law, and a Master of Social Work degree, awarded by the School of Social Work. Under the joint degree program, a student can obtain both degrees in significantly less time than it would take to obtain both degrees pursued consecutively. Essential criteria relating to the joint degree program are as follows:

Candidates for the program must meet the entrance requirements for and be accepted by both the College of Law and the School of Social Work. Both schools must be informed by the student at the time of application to the second school that the student intends to pursue the joint degree.

1. A student must satisfy the curriculum requirements for each degree before either degree is awarded. The School of Social Work will allow 9 credit hours of approved law courses to be credited toward both the M.S.W. and J.D. degrees. These 9 credit hours of law classes will be in lieu of Social Work electives and must be selected from an approved list of law classes. Reciprocally, law students may receive 9 hours of credit toward the satisfaction of the J.D. degree for courses taken in the M.S.W. curriculum upon completion of the M.S.W. degree curriculum with a grade point average of 3.0 or higher.
ARTS AND SCIENCES, CONTINUED:

MODERN LANGUAGES:

**JPN 3XXX**
- **Advanced Japanese I**
  - Continuation of Intermediate JPN II which provides the beginning level of advanced training in the acquisition and application of the language skills. Prerequisites: JPN I, II, JPN Intermediate I and II.

**SICS:**

**AST 3XXX**
- **Observational Astronomy**
  - Observational Astronomical techniques from radio to x-rays including CCD Imaging, Photometry, and Spectroscopy.

**AST 3XXX**
- **Observational Astronomy Lab**
  - The lab component associated with Observational Astronomy. Covers acquisition, reduction and interpretation of astronomical data using telescopes and computers.

**PHY 4XXX**
- **Nuclear and Particle Physics**
  - Basics of Nuclear and Particle Physics, Nuclear forces, quark-gluon structure of hadrons, deep-inelastic scattering, qcd nuclear and particle astrophysics, formation of quark-gluon plasma.

**PHY 6XXX**
- **Advanced Nuclear and Particle Physics**
  - Nuclear and Particle Physics, nuclear forces, reactions and kinematics, deep inelastic scattering, partons QCD, nucleon and particle astrophysics, quark gluon plasma. Prerequisites: PHY 4604.

**STATISTICS:**

**STA 6XXX**
- **Statistics for Environmental Sciences**
  - Environmental Quality Data, Binomial, Poisson, Normal, Lognormal, and Extreme value distributions. Prediction and Tolerance Intervals, Hypothesis testing of Environmental Quality Data, Risk Assessment, Regression, Spatial Statistics. Prerequisites: STA 2122, STA 6166, STA 3145 or the equivalent.

COLLEGE OF EDUCATION: NEW COURSE REQUEST LISTED BY DEPARTMENT:

CURRICULUM AND INSTRUCTION:

**RED 5147 Developmental Reading**
- Principles, procedures, organization and current practices in the developmental reading program. Overview of instructional practices.

EDUCATION LEADERSHIP AND POLICY STUDIES:

**EDH 6XXX**
- **Introduction to Student Affairs Administration**
  - Overview of student affairs administration through a review of its history, theoretical foundations, functional areas, legal concerns, administrative structure and current and future issues.

**EDH 6XXX**
- **Organization and Administration of Student Affairs**
  - Exploration of organizational and administrative issues in Student Affairs including relationships to other executive areas and interrelationships of units, research, leadership and case studies.

EDUCATION AND PSYCHOLOGICAL STUDIES:

**EDP 7XXX**
- **Educational Psychology in cross-cultural contexts**
  - Prerequisites: EDP 7054

**EDP 7XXX**
- **Psychological problem solving in education**
  - Discussion of psychological problem solving literature and development of problem solving tasks grounded in the educational psychology literature. Prerequisites: EDP 6301

**EDF 7483**
- **Seminar in Mixed Methodology**
  - Utilization of mixed (Qualitative and Quantitative) methods in research, including critical evaluation of worldviews, typology, research questions, data collection/analysis, and meta interferences.

**EDF 7492**
- **Educational Program Evaluation**
  - Design, development and implementation of program evaluation studies in education, interpretation and dissemination of the findings. Prerequisites EDF 6475, EDF 6481, EDF 6486

**EDP 7980**
- **Doctoral Dissertation in Educational Research and Measurement**
  - Research for doctoral dissertation students approved for candidacy in Educational Research and Measurement and in Educational Psychology.
**COLLEGE OF EDUCATION, CONTINUED**

**HEALTH, PHYSICAL EDUCATION AND RECREATION**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PET 4XXX</td>
<td><strong>Advanced Exercise Physiology</strong></td>
<td>3</td>
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<tr>
<td></td>
<td>Provides a detailed examination of the acute and chronic responses to exercise and training. Particular attention is given to responses at the systems and cellular levels. Prerequisites: PET 3351</td>
<td></td>
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<tr>
<td>PET 4XXX</td>
<td><strong>Medical conditions in Athletic Training</strong></td>
<td>3</td>
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<tr>
<td></td>
<td>Students will demonstrate knowledge of the medical conditions that can affect athletes, and learn about the proper techniques to recognize, care and treat the athlete who has medical conditions.</td>
<td></td>
</tr>
<tr>
<td>PET 5XXX</td>
<td><strong>Advanced Exercise Physiology</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Provides a detailed examination of the acute and chronic responses to exercise and training. Particular attention is given to responses at the systems and cellular levels. Prerequisites: PET 3351</td>
<td></td>
</tr>
<tr>
<td>PET 5XXX</td>
<td><strong>Exercise, Diet and Weight Management</strong></td>
<td>3</td>
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<td></td>
<td>The class prepares students to compare the effectiveness of exercise and several popular diets on weight control and body composition.</td>
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**COLLEGE OF ENGINEERING:**

**NEW COURSE REQUEST LISTED BY DEPARTMENT:**

**INDUSTRIAL AND SYSTEMS ENGINEERING:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EIN 6XXX</td>
<td><strong>Advanced Human-Machine Interaction Design</strong></td>
<td>3</td>
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<tr>
<td></td>
<td>The application of human factors analysis and design methods to complex system interaction. Interface design for technological systems in workplace and consumer domains. Prerequisites: EIN 4243 or equivalent.</td>
<td></td>
</tr>
<tr>
<td>EIN 6XXX</td>
<td><strong>Industrial and Systems Engineering Internship</strong></td>
<td>1</td>
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<tr>
<td></td>
<td>To provide graduate students with work experience under approved industrial supervision.</td>
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<tr>
<td>EIN 6XXX</td>
<td><strong>Technology Entrepreneurship</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Entrepreneurial process, evaluation of technology, startup operations and strategy, business plans and venture capital, intellectual property and rights, growth and technology management</td>
<td></td>
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<tr>
<td>EIN 6XXX</td>
<td><strong>Technology Policies and Strategies</strong></td>
<td>3</td>
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<tr>
<td></td>
<td>Strategies and policies for managing all aspects of technology. Includes value chain integration, intellectual property, and internal processes and systems.</td>
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</table>
**Proposed BA program**

**Lower Division common prerequisites**

- No change - not permitted by Oversight Board

**Other courses required for the degree**

- GLY 1105 Historical Geology
- GLY 1106, Historical Geology Lab
- GLY 1101 History of Lab
- GLY 1101 History of Lab

**Upper Division**

1. **OCB 4XXX**
   - Marine Microbial Ecology
   - Diversity, ecology and physiology of marine microorganisms, bacteria and protozoa, their role in marine food webs and the biogeochemical cycling of carbon and nutrients, and the significance of microbial food webs for marine productivity. Prerequisites: BSC1010; BSC1011; OCB3043.

2. **OCB 6XXX**
   - Advanced Marine Microbial Ecology
   - Diversity, ecology and physiology of marine microorganisms, bacteria and protozoa, their role in marine food webs and the biogeochemical cycling of carbon and nutrients, and the significance of microbial food webs for marine productivity. Prerequisites: OCB3043 or equivalent.

3. **PCB 4806**
   - Endocrinology Laboratory
   - Laboratory: A series of Lab exercises and experiments designed to supplement lecture material in PCB 4806, coordinated with that content. Prerequisites: General Biology I and II, Permission of the instructor.

4. **PCB 5XXX**
   - Immunophysiology
   - Physiological and Endocrine Regulation of the Vertebrate Immune System. Prerequisites: Immunology PCB 4233

5. **ZOO 3XXX**
   - Forensic Osteology
   - A detailed examination of the human skeleton revealing such individual traits as sex, age, height, and race in order to assist law enforcement investigators in forensic identifications.
All students must take the following required courses:

1. IT Core Courses (21 credits)
2. CGS 3425 – Web-Based Programming
3. CGS 3260 – Microcomputer Organization
4. CGS 3760 – Computer Operating Systems
5. CGS 4283 – Applied Computer Networking
6. CGS 4825 – Web Site Construction and Management
7. ENC 3211 – Report & Technical Writing

All students must obtain a minor in another discipline (15 credits)

IT Electives 15 credits

Students must select two areas of concentration. Students must take at least two courses in each of the selected concentration areas (4 courses). The fifth course might be selected from any available area of concentration.

- System Administration
- Applied Network Administration
- Application Development
- Databases

Free electives (9 credits)

Total credit hours: 60 credits

CELEGE OF ARTS & SCIENCES: REQUEST FOR ADDITION OF MINOR DEGREE DESIGNATION UNDER EXISTING BACCALAUREATE: PROPOSAL FOR MINOR IN ASTRONOMY

FIU is authorized to offer the baccalaureate degree in Physics, CIP Code 1902, and has been doing so as the B.S. in Physics. The current B.S. program includes a Minor in Physics. We request the addition of a Minor in Astronomy. This minor program requires no additional resources; simply offers more opportunities for students and will increase enrollment in several existing courses.

The physics Minor in Astronomy is designed to meet the needs of the following categories of students:
1. Students looking to prepare themselves for graduate studies in astronomy/astrophysics.
2. Students looking to add flexibility to their major in the College of Liberal Arts and Sciences.
3. Students who wish to enter science/mathematics education. The ubiquitous need for teachers in these critical fields continues. The addition of a Minor in Astronomy to another Science BS/BA degree will enhance students’ preparedness to teach at the high school level.

This minor program is designed for students who desire additional capabilities in astronomy. The program offers enhanced preparation for graduate studies in astronomy and astrophysics. It is also aimed at students interested in careers in science education, science centers, museums, and planetaria.

Required Courses (21 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PHY 2048</td>
<td>Physics with Calculus I</td>
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</tr>
<tr>
<td>PHY 2048L</td>
<td>Physics with Calculus Lab I</td>
<td>1</td>
</tr>
<tr>
<td>PHY 2049</td>
<td>Physics with Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHY 2049L</td>
<td>Physics with Calculus Lab II</td>
<td>1</td>
</tr>
<tr>
<td>PHY 3123</td>
<td>Modern Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHY 3123L</td>
<td>Modern Physics Lab I</td>
<td>1</td>
</tr>
<tr>
<td>AST 3213</td>
<td>Modern Astrophysics</td>
<td>3</td>
</tr>
<tr>
<td>AST 3XXX*</td>
<td>Observational Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>AST 3XXXL*</td>
<td>Observational Astronomy Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

Total: 21

New courses submitted Nov. 2002 and to be approved.

GRADUATE ADMISSIONS STANDARDS - SCHOOL OF SOCIAL WORK - COLLEGE OF HEALTH AND URBAN AFFAIRS

Admissions Requirements: Applicants to the Master of Social Work (MSW) program in the School of Social Work are required to meet the minimum standards set forth by the Florida Department of Education and the graduate social work program. All applicants must achieve a 3.0 GPA in all upper level courses. In addition, applicants must write a personal narrative describing certain areas of their personal background relative to their goals in achieving a social work degree. Three letters of reference are also required from academics and/or previous employers. The School of Social Work Admissions Committee reviews the applications in relation to each of these requirements and the candidate’s suitability to enter the professional program. The GRE has been required but rarely used in the decision making process.