The addition or removal of any graduation requirement in a major or minor requires that this form, accompanied by supporting documentation, be completed and approved as indicated below. Incomplete or incorrect forms will not be processed.

COLLEGE: College of Science

DEPARTMENT: Education and Interdisciplinary Studies

DEGREE LEVEL: B.S.

PROGRAM TITLE: Interdisciplinary Science (Military Science Option)

TO BE INITIATED WITH CATALOG YEAR 20_12 / 20_13

CHANGE REQUESTED FOR: ☒ major program ☐ minor program

Major/Minor Code: 7037

Date change to be initiated must be for a future academic year.

DESCRIPTION OF REQUESTED CHANGES: Attach a more detailed description and any supporting documentation

We will require that Interdisciplinary Science majors complete 6 credits of their Liberal Arts electives, and their Social Science elective to be in a foreign language. This will support Florida Tech’s Internationalization Initiative, as well as the ROTC Cultural Understanding and Language Proficiency Program.

This change was discussed with the Military Science Program, and they approve it.

Approvals: On completion of appropriate department approvals, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee, for approval below and forward to the Office of the Registrar

Date: 8/15/11

Chair, Graduate Council

Date

Chair, Undergraduate Curriculum Committee

Date

REGISTRAR'S USE ONLY

University Catalog

☐ Yes ☐ No Update completed Date Initials

CAPP/Degree Evaluation

☐ Yes ☐ No Update completed Date Initials

Catalog/Policy Mgmt. System

☐ Yes ☐ No Update completed Date Initials

DISTRIBUTION

Original – Registrar

Copy – Academic Unit
## INTERDISCIPLINARY SCIENCE

(not to be included if course is listed as "taken" in another category)

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(Minimum 44 Credits; 21cr at 3000/4000)

Subtotal: __________ cr

(requested change (6 cr. Language added))

## LIBERAL ARTS ELECTIVES

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(Minimum 12 Credits; 6cr at 3000/4000; 6 cr Foreign Language)

Subtotal: __________ cr
# INTERDISCIPLINARY SCIENCE

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Subtotal: ____________ cr

*current requirements (no language)*
The minor was approved by UGCC at 8/28/09 meeting with "EDS 2162 Survey of Human anatomy & Physiology" as a required class.

EDS 2162 was changed to BIO 2162, and then to BIO 1162, but never offered under any of those numbers. At a meeting 7/7/11 in CoS Dean's office, with Deans, Dept Head of Biology, and Dept Head of Education & Interdisciplinary Studies (DEIS), it was decided that the class should be offered by the Education & Interdisciplinary Studies department after all, and returned to the 2xxx level. DEIS has a broader mission than the old "sci/math ed" department, and includes the Interdisciplinary Science and the Sustainability programs. Since Human Anatomy is a science course and not an education course, the ISC (Interdisciplinary Science) prefix was determined to be more appropriate.

The only change to the requirements is to change the course number from EDS 2162/BIO 2162/BIO 1162 to ISC 2162.

Everything else remains the same as when the minor was originally approved.
Athletics Coaching Minor

Minor (20 cr hours) – for all majors

- EDS 1005 Introduction to Education (3)
- ISC 2162 Survey of Human Anatomy & Physiology (4)
- PED 2161 Care & Prevention of Athletic Injuries + Effects and Dangers of Drug Use (3)
- PED 2160 Coaching theory (3)
- Choose one of the following (3)
  - EDS 2060 Educational Psychology
  - PSY 2446 Sport Psychology
- Choose one of the following (3)
  - PED 3160 Theory and Practice of Coaching Basketball
  - PED 3161 Theory and Practice of Coaching Soccer
- Choose two Activity Skills classes (2)
  - PED 1070 Introduction to Team sports
  - PED 1046 Introduction to Weightlifting
  - PED 1060 Introduction to Tennis
  - PED 1080 Introduction to Golf
  - PED 1160 Intercollegiate Athletics (participates in a varsity team)
original approval for minor
Florida Institute of Technology

ADDNG A NEW MAJOR OR MINOR TO THE CURRICULUM

Please provide the following information when requesting a new major or minor: programs and options to be added to the curriculum.

A code will be assigned by the Office of the Registrar and a copy of this form will be mailed to the appropriate department.

COLLEGE: College of Science

DEPARTMENT: Science/Mathematics Education

SITE(S): Main

CAMPUSystem: Melbourne

PROGRAM TO BE ADDED: □ Major □ Minor

LEVEL: □ Bachelor of Arts (B.A.) □ Bachelor of Science (B.S.)

• Executive Master of Business Administration (EMBA)
• Master of Arts (M.A.)
• Master of Arts in Teaching (M.A.T.)
• Master of Business Administration (M.B.A.)
• Master of Education (M.Ed.)
• Master of Public Administration (M.P.A.)
• Master of Science (M.S.)
• Master of Science in Aviation (M.S.A.)
• Professional Master of Business Administration (PMBA)

PROGRAM TITLE: Restricted to 30 characters, including spaces

Coaching Minor

Athletic Coaching Minor

TERM TO BE INITIATED: Spring 2010

ADVISER FOR NEW PROGRAM: Debra & Dennis LÁSZLÓ BAKSAY

UPDATED: 7/12/11

Department Head/Program Chair

Date

Dean or Associate Dean

Date

Chair, Graduate Council

Date

OR

Chair, Undergraduate Curriculum Committee

Date

Provost

Date

Florida Institute of Technology • Office of the Registrar
150 West University Boulevard, Melbourne, FL 32901-6975 • (321) 674-7399 • Fax (321) 674-7827

D-202-5001
Athletic Coaching Minor

Minor (20 cr hrs) – for All majors

- EDS 1005 Introduction to Education (3)
- EDS 2162 Survey of Human Anatomy & Physiology (4)
- PED 2161 Care & prevention of athletic injuries + effects & dangers of drug use (3)
- PED 2160 Coaching theory (3)
- Choose one of the following (3)
  - EDS 2050 Educational Psychology
  - PSY 2446 Sport Psychology
- Choose one of the following (2)
  - PED 3160 Theory & practice of coaching Basketball
  - PED 3161 Theory & practice of coaching Soccer
- Choose two Activity Skills classes (2)
  - PED 1070 Introduction to Team Sports
  - PED 1046 Intro to Weight Lifting
  - PED 1060 Intro to Tennis
  - PED 1080 Intro to Golf
  - PED 1160 Intercollegiate Athletics (participates on a varsity team)

New courses are indicated in Red.
MEMORANDUM

To: Mark Archambault, Chair, Undergraduate Curriculum Committee
From: Debra S. Blons, Director of Teacher Education
Through: David E. Cook, Department Head, Science/Mathematics Education
Date: August 26, 2009
Re: Athletic Coaching Minor and New Courses

The Science/Mathematics Education Department, along with the Athletics Department, propose offering Florida Tech students an opportunity to obtain a minor in Athletic Coaching. This minor is appropriate for those students who plan to coach and/or are seeking a career in the fields of sports. This minor would involve adding six new courses. Retention and recruitment of students, especially Science/Mathematics Education majors, is the driving force behind this proposal.

Program Relevance

The Coaching Minor is consistent with the Florida Tech mission in that it would provide "personal and career growth opportunities" for all students on the Melbourne campus. Education students who successfully complete the Coaching Minor will be able to add the Florida Department of Education's Athletic Coaching Endorsement to their Florida Department of Education professional teaching certificate. This enables them to coach varsity sports upon hire, which makes them a more valuable candidate for hire. Athletic coaching certificates are also issued by the State of Florida to individuals who do not hold a valid Florida Teaching Certificate, but have completed the necessary requirements. These individuals can be paid to coach in the public schools and may coach community sports. Therefore, students from majors other than education would be able to earn the credentials to coach community and/or public school sports.

The courses proposed for the Athletic Coaching Minor are similar in nature to courses already offered at Florida Tech. The theory courses are athletic pedagogical courses not unlike with other pedagogy courses offered in the education department. The anatomy and physiology course is a hard science course and would be taken by biology education majors as well as appeal to students interested in health related courses.

The community outreach feature of the minor is consistent with the Science/Mathematics Education Department's mission in that it "serves the diverse educational needs and interests of the wider community of professional educators in science, mathematics, and related fields..." Members of the local community interested in coaching and/or other sports related careers, as well as those who already hold Florida teaching certificates would be able to obtain the Department of Education's Athletic Coaching Endorsement by completing 9 credits within the minor.
Program Demand

The demand for this program spans both local and national markets. Almost all public and private secondary schools have multiple sports programs for which they need coaches. Beginning August 2009, the state of Florida requires all sixth, seventh, and eighth-graders to take at least one semester of physical education each year. Previously, gym classes in middle school were optional. Unfortunately, the lawmakers passed this requirement for schools without funding it. Principals will be looking for academic teachers with credentials to help with the increased number of gym classes that must be offered.

The Athletic Coaching Minor will give the student a Coaching Endorsement as well as strengthen the marketability of the student's major program. Students that graduate from any of the eight Florida Tech State Approved Teacher Preparation Programs with the credentials for the Athletic Coaching Endorsement are at a great advantage to be hired. Principals are always seeking ways to reduce the number of employees, and secondary school principals covet teachers that carry certification in multiple areas – especially athletics.

Coaching is one way in which teachers can earn supplemental pay; therefore, it is popular among teachers. Once the Coaching Endorsement is on the professional teaching certificate, it remains; thereby allowing teachers to change schools, districts, and even states, and still be qualified to coach.

A survey of current education majors revealed the following:
- Juniors and seniors were most interested in obtaining only the 9 credits for the endorsement (the minor would not be possible at this stage of their program)
- Freshman and sophomores were most interested in obtaining the minor

Current education majors who are athletes commented that although the 9 credits may be all that the Florida Department of Education requires, they would want the other courses that make up the minor to be an "effective" coach. One student commented, "It is just good background information to know if you want to coach and work with teenagers."

Between the interest among athletes and education majors, we expect about 12 students to enroll in the related new courses the first year. That number should grow to around 20 as the word gets around and there is more publicity. There has already been an enormous amount of interest among current students with information traveling only by word-of-mouth: e-mail from students, calls from parents, and a student-generated petition with around 100 signatures on it.

Competition

Florida Tech's Athletic Coaching Minor is designed to provide both theoretical and practical experience in the field of coaching for those students who plan to coach and/or seek a career in the field of sports. Many other universities offer a Coaching Minor. Some of the universities in Florida include University of Central Florida, Jacksonville University, Florida Gulf Coast University, and Florida State University. Their programs contain similar courses to the proposed Florida Tech program, and their programs range in credit hours from 16 to 23. This is a popular program, especially for athletes - whose fields of study span many majors.

UCF's Coaching Minor, the only likely local competitor, consists only of physical education courses. Florida Tech's program will better prepare coaches to work in the public setting by introducing them to educational law and the Principles of Professional Conduct for the Education Profession in Florida. In addition, students will learn about human development and learning, as well as motivation and behavior strategies and techniques.
Academic Requirements/Considerations

The new Athletic Coaching Minor does not compete with any existing Florida Tech program, but rather complements all programs, especially the eight education majors. Program accreditation is not required by the Florida Department of Education, although it may be something to consider in the future.

The program will be assessed by the number of students it attracts and the students enrolled in the courses. It has already served as a retention tool for one student who had completed the paperwork to transfer to another university Fall 09 because of her desire for an athletic coaching endorsement, although she admitted loving Florida Tech. When she heard we might offer an Athletic Coaching Minor, she was very excited, tore up the paperwork and has enrolled for courses this Fall – even though she had already given up her athletic scholarship. She really wanted a biology education degree from Florida Tech, now she can have it.

Financial Resources/Uses

New Revenue

- Recruiting

Since it has never been in our recruiting arsenal, it is unknown at this time the true recruiting power the Athletic Coaching Minor will have for freshman. We do know that questions about the availability of such a program does surface in conversations with transfer students who are athletes. Students are recruited to Florida Tech because of the reputation we have in our Major programs. Minors are not usually hot recruiting tools, but we expect it may be the swing vote for students looking for ways to include their sports and fitness into a program of study while they are here pursuing a degree.

- Retention

$93,060 per student retained from freshman to sophomore year, based on 2009-2010 tuition and continued matriculation to graduation. Additional revenue would be realized from on-campus students, e.g. housing, etc.

Expenses

<table>
<thead>
<tr>
<th>New Courses</th>
<th>Minor Cost</th>
<th>Certificate Courses</th>
<th>New Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDS 2162 Survey of Anat. &amp; Physiology, lecture and lab (4)</td>
<td>2,800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PED 2161 Care and Prevention of Athletic Injuries (3)</td>
<td>2,100</td>
<td>PED 2161 Care and Prevention of Athletic Injuries (3)</td>
<td>2,100</td>
</tr>
<tr>
<td>PED 2160 Coaching Theory (3)</td>
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<td>PED 2160 Coaching Theory (3)</td>
<td>2,100</td>
</tr>
<tr>
<td>PED 3160 Theory &amp; Practice of Coaching Basketball (2)</td>
<td>1,400</td>
<td>PED 3160 Theory &amp; Practice of Coaching Basketball (2)</td>
<td>1,400</td>
</tr>
<tr>
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</tr>
<tr>
<td>PED 1160 Intercollegiate Athletics (1)</td>
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</tbody>
</table>

Total New Expenses for Minor: 6,800
Total New Expenses for Certificate: 7,000

*Documented participation on a varsity team
Net Revenue

Since one freshman to sophomore student has already been retained in transition from the 2009-2010 year just on the prospect of this minor being in place, the program has essentially been more than front-end funded. All future recruitments and retentions attributable to the availability of this program will contribute additional revenue to the university.

The additional courses will also serve to recruit and retain part-time and volunteer athletic coaches at Florida Tech. No assistantships or fellowships will be available in the program.

There will be six new courses needed to support this program:
- PED 2160 -- Coaching Theory
- PED 2161 -- Care and Prevention of Athletics Injuries
- EDS 2162 -- Survey of Human Anatomy and Physiology
- PED 1160 -- Intercollegiate Athletics
- PED 3160 -- Theory and Practice of Coaching Basketball
- PED 3161 -- Theory and Practice of Coaching Soccer

New Course Expense per FY (Startup and Continuation)

<table>
<thead>
<tr>
<th>FY</th>
<th>Semester</th>
<th>Course</th>
<th>Cost</th>
<th>Course</th>
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<td>'10</td>
<td>Spring '10</td>
<td>PED 2160</td>
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<td></td>
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<td>5,600</td>
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<tr>
<th>FY</th>
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<tr>
<td>'11</td>
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Two courses (EDS 2162 and PED 1160) will be offered through the Department of Science/Mathematics Education. PED 1160 will be taught by current faculty and EDS 2162 by an adjunct. The four remaining PED courses will be taught by adjunct faculty, who will most likely be drawn from the ranks of part-time or volunteer coaches currently working for the Athletic Department. Many of these part-time or volunteer coaches have expressed an interest in teaching these courses and have the credentials to meet SACs requirements. These courses will serve the entire student body, as students from any major can benefit from the Athletic Coaching Minor.

Advising for the Coaching Minor will come from the Science/Mathematics Education Department. The Certification Ombudsman (The Director of Teacher Education) is best suited to advise students from all majors about the requirements for coaching certification. There will be no additional support staff needed.
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COLLEGE  College of Science

DEGREE LEVEL  B.S.

DEPARTMENT  Education and Interdisciplinary Studies

PROGRAM TITLE  Interdisciplinary Science

TO BE INITIATED WITH CATALOG YEAR 20  1 2  1 3

CHANGE REQUESTED FOR  X  major program  □  minor program  7 0 3 5

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8/15/11

Chair, Graduate Council

Date

OR

Chair, Undergraduate Curriculum Committee

Date

8/15/11

Dean or Associate Dean

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CAPP / Degree Evaluation  □ Yes  □ No  Update completed  Date  Initials

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"current requirements (no language)"