Florida Tech
School of Management

Inter-Office Memorandum

TO:          Undergraduate Curriculum Committee

THROUGH:     Dr. Barbara G. Pierce, Associate Dean, School of Management

FROM:        LuAnn Bean, Professor, School of Management

DATE:        August 16, 2004

SUBJECT:     BUS 2602 – Environmental Law & Forensic Studies
             BUS 4212 – Environmental Auditing

This memorandum, along with the attached material, seeks the Undergraduate Curriculum Committee’s approval for two new undergraduate electives.

The proposed undergraduate electives would be BUS 2602 – Environmental Law & Forensic Studies and BUS 4212 – Environmental Auditing. These courses should be offered for several reasons as listed below:

1. Both Environmental Law & Forensic Studies and Environmental Auditing provide important electives for a number of undergraduate majors offered by the University and are consistent with the Florida Tech mission. In particular, the courses provide timely instruction for majors in the existing Accounting and Business & Environmental Studies Programs.

2. In today’s global economy, an understanding of environmental law/consulting and environmental auditing has gained prominence as businesses recognize the need to hire professionals with relevant credentials and certifications in environmental, health, and safety auditing. Course content for both of the proposed courses are well-accepted and available in other universities with an environmental management systems or environmental auditing focus. These courses would provide valuable information to students with majors in accounting, business and environmental studies, engineering, and the sciences, who are interested in pursuing professional credentials in this area.
In preparation of managerial understanding of the political, social, financial, and global consequences of environmental business decision-making, the proposed Environmental Law & Forensic Studies and Environmental Auditing courses introduce students to both the U.S. legal system and the framework of environmental policy that is implemented through laws and the courts and present environmental auditing as a tool to improve environmental performance, advance international standards initiatives, and implement voluntary corporate environmental reporting. Both courses highlight issues important to the forensics of consulting including quantification of environmental liabilities, identification of other contributing and responsible parties, a focus on comprehensive and legally defensible data, reporting issues, ethics, and due diligence of management professionals.

3. There is a desire by current undergraduate students interested in management, but also the environment, to select a career path that allows a wide range of professional opportunities, including environmentally related outlets. The current curriculum covers environmental law and environmental auditing only very briefly—in BUS 2501 (Legal and Social Environment of Business), where an occasional environmental judgment case is used as an example or in BUS 4211 (Internal Audit), where environmental auditing is mentioned as an area of audit specialization. In both cases, time does not allow for expansion of these important topics. However, both are important or potentially important for many of the students who either choose to come to Florida Tech to pursue management or consulting careers in environmental management systems or are looking for a professional field with significant ties to environmental issues and opportunity potential.

The attachments that follow present the syllabus, description, and completed new course forms.

Please do not hesitate to contact me if there are any questions.

Thank you.
Florida Institute of Technology

ADDING A NEW COURSE TO THE CURRICULUM

This course is available for student registration only after the approval process has been completed.

Subject BUS
Course No. 2602
Credit Hours 3
Term to be added to the file Spring 2005
Alpha Prefix (e.g., CSE) Number Choice (e.g., 1301)
(e.g., Fall 2003)

Class Hours 3 / week Lecture Hours ______ Lab Hours ______ Contact Hours (CEU only) ______
Department School of Management
(e.g., Computer Sciences) Schedule Type Lecture
(e.g., lecture, lab or special project)

College/School
(Please check appropriate box) College of Engineering-01
□ College of Science and Liberal Arts (science)-20
□ College of Science and Liberal Arts (liberal arts)-21
School of Aeronautics-03 SEG-90
School of Management-22
School of Psychology-05

Computer Title (restricted to 25 spaces, including blanks) Environ Law/Forensic Stud

Catalog Title Environmental Law & Forensic Studies

Catalog Description of Course (limited to 350 characters, including spaces)
This course introduces the U.S. legal and environmental policy framework implemented through laws and the courts. Consulting forensics about environmental liabilities, responsible parties, international issues, and legally defensible data are presented in cases about air/water pollution, toxic substance regulation, and resource management.

In addition, you may attach a course syllabus and/or more detailed description.

Restrictions □ Prerequisite (course number) □ Corequisite (course number)
□ Prerequisite (course number) □ Corequisite (course number)
□ Prerequisite (course number) □ Corequisite (course number)
Grades to be issued A, B, C, D, F
S, U
P, F
Other

Additional Restriction (e.g., major, class level, department head approval)

If this course replaces a course currently offered in BANNER, please indicate old course information
Subject Alpha Prefix (e.g., CSE) Course No. (e.g., 1301)

APPROVALS
Upon completion of appropriate department approvals, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee for approval below and forward to Catalog Coordinator.

Original Chair, Graduate Council Date
Department Head Program Chair
Dean of Associate Dean
Date
Date

CATALOG COORDINATOR REGISTRAR'S USE ONLY
Catalog Coordinator Date
SCACRE SCACET SCAPRED SCABASE
SCAREG Operator Init Date

Florida Institute of Technology • Office of the Registrar
150 West University Boulevard, Melbourne, FL 32901-6975 • (321) 674-8176 • Fax (321) 674-7827
RG-3076018
Florida Institute of Technology

ADDDING A NEW COURSE TO THE CURRICULUM

This course is available for student registration only after the approval process has been completed.

Subject: BUS

Course No: 4212

Credit Hours: 3

Term to be added to the file: Spring 2005

Class Hours: 3 / week

Lecture Hours: _______ Lab Hours: _______ Contact Hours (CEU only): _______

Department: School of Management

(e.g., Computer Science)

Schedule Type: Lecture

(e.g., lecture, lab or special project)

College/School:

☐ College of Engineering-01
☐ College of Science and Liberal Arts (science)-20
☐ College of Science and Liberal Arts (liberal arts)-21
☐ School of Aeronautics-03
☐ SEGS-90
☐ School of Management-22
☐ School of Psychology-05

Computer Title (restricted to 25 spaces, including blanks): Environmental Auditing

Catalog Title: Environmental Auditing

Catalog Description of Course (limited to 350 characters, including spaces):

Overview of the roles of internal audit and risk assessment as tools to improve environmental performance and management systems, with focus on ISO 14001, regulatory compliance, exposures and liability, environmental due diligence, audit process and technology specific to environmental auditing, reporting, and ethics.

In addition, you may attach a course syllabus and/or a more detailed description.

Restrictions:

☐ Prerequisite: BUS 4211

☐ Corequisite: BUS 4211

Grades to be issued:

□ A, B, C, D, F
□ S, U
□ P, F
□ Other

Additional Restrictions:

and permission of instructor

(e.g., major, class level, department head approval)

If this course replaces a course currently offered in BANNER, please indicate old course information

Subject: Alpha Prefix (e.g., CSE) ___________ Course No. (e.g., 1301) ___________

APPROVALS

Upon completion of appropriate department approvals, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee for approval below and forward to Catalog Coordinator.

Original Date: 8/20/04

Chair, Graduate Council Date: 9/12/04

Chair, Undergraduate Curriculum Committee Date: 9/20/04

CATALOG COORDINATOR Date: 9/20/04

REGISTRAR'S USE ONLY

SCACRSE ___________ SCACETL ___________ SCAPREQ ___________ SCABASE ___________

SCARRES ___________ Operator Init ___________ Date ___________

DISTRIBUTION:

Original—Registrar

Copy—Academic Unit/SEDS

Florida Institute of Technology • Office of the Registrar

150 West University Boulevard, Melbourne, FL 32901-6575 • (321) 674-8130 • Fax (321) 674-7827

RG:07-6018
Catalog Description:

BUS-2602 ENVIRONMENTAL LAW & FORENSIC STUDIES (3 credits). This course introduces the U.S. legal and environmental policy framework implemented through laws and the courts. Consulting forensics about environmental liabilities, responsible parties, international issues, and legally defensible data are presented in cases about air/water pollution, toxic substance regulation, and resource management.
BUS 2602 - Environmental Law & Forensic Studies Syllabus

Course Credit Hours: 3

Prerequisites/Corequisites: None

Course Description: This course introduces the student to both the U.S. legal system and the framework of environmental policy that is implemented through laws and the courts. Emphasis is focused on current local, national and international events and topics, including a detailed view of congressional and state legislative activity. Topics include the American legal system, case law, philosophical bases for environmental law & policy, history of environmental concern in the US and the world, mechanisms of environmental regulation, substance oriented regulation (FIFRA, RCRA, CERCLA), media-specific regulation (air, water), resource management (including an introduction to land use) and international environmental law. Cases will highlight issues important to forensics of consulting including quantification of environmental liabilities, identification of other contributing and responsible parties, and a focus on comprehensive and legally defensible data.

Student Learning Outcomes: Students will develop a broad understanding of current local, state, and federal environmental laws. Students will discuss specific case studies that illustrate the basic environmental law principles and potential remedies. Students will present an environmental law topic and lead the class discussion of this topic. Students will develop an appreciation for the strengths and weaknesses of environmental rules and regulations, and the effects that these rules and regulations may have on their personal attitudes and values.

Topics Covered: The legal system, federal and state courts, civil litigation, administrative law, tort law, environmental assessments, NEPA, air pollution, water pollution, toxic substances, waste management, CERCLA, energy, public lands, wetlands, and international environmental law.

Texts:
Required: Kubasek and Silverman, *Environmental Law, 4th Edition*
Required: Findley and Farber, *Environmental Law in a Nutshell, 6th Edition*

Grading/Evaluation System: Mid-Term Exam 40%
Final Exam 40%
Presentation 20%
<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Course Overview/Introduction/Legal System</td>
</tr>
<tr>
<td>Week 2</td>
<td>Federal Court/State Court/Civil Litigation/Administrative Law</td>
</tr>
<tr>
<td>Week 3</td>
<td>Environmental Regulation/Tort Law</td>
</tr>
<tr>
<td>Week 4</td>
<td>Environmental Assessments/National Environmental Policy Act</td>
</tr>
<tr>
<td>Week 5</td>
<td>Air Pollution/Ozone</td>
</tr>
<tr>
<td>Week 6</td>
<td>Water Pollution/Stormwater</td>
</tr>
<tr>
<td>Week 7</td>
<td>Forensics of Consulting</td>
</tr>
<tr>
<td>Week 8</td>
<td><strong>First Exam</strong>/Toxic Substances</td>
</tr>
<tr>
<td>Week 9</td>
<td>Waste Management/CERCLA/Emergency Response</td>
</tr>
<tr>
<td>Week 10</td>
<td>Energy/Power</td>
</tr>
<tr>
<td>Week 11</td>
<td>Public Lands/Natural Resources</td>
</tr>
<tr>
<td>Week 12</td>
<td>Wetlands/Threatened and Endangered Species</td>
</tr>
<tr>
<td>Week 13</td>
<td>International Environmental Law</td>
</tr>
<tr>
<td>Week 14</td>
<td>Forensic Cases on Quantification of Environmental liabilities and</td>
</tr>
<tr>
<td></td>
<td>comprehensive and legally defensible data.</td>
</tr>
<tr>
<td>Week 15</td>
<td><strong>Final Exam</strong></td>
</tr>
</tbody>
</table>
Catalog Description:

BUS 4212 ENVIRONMENTAL AUDITING (3 credits). Overview of the roles of internal audit and risk assessment as tools to improve environmental performance and management systems, with focus on ISO 14001, regulatory compliance, exposures and liability, environmental due diligence, audit process and technology specific to environmental auditing, reporting, and ethics. *(Prerequisite or Corequisite: BUS 4211 or BUS 2211, BUS 2212 and permission of instructor).*
BUS-4212 - Environmental Auditing

Course Credit Hours: 3
Prerequisites/Corequisites: BUS 4211 - Internal Audit or BUS 2211 & BUS 2212 & permission of instructor

Course Description
This course covers: (1) environmental auditing as a tool to improve environmental performance; (2) the definition of an audit and the many different types of environmental audits; (3) environmental regulatory requirements; (4) environmental due diligence and pre-audit activities; (5) the audit process specific to environmental auditing and on-site activities; (6) auditing techniques and skills; (7) audit tools and technology; and (8) reporting and post audit activities.

Course Requirements

<table>
<thead>
<tr>
<th>Activity</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four 2-3 page summaries (15 pts. each)</td>
<td>60</td>
</tr>
<tr>
<td>2 Exams</td>
<td>400</td>
</tr>
<tr>
<td>One final project paper</td>
<td>100</td>
</tr>
<tr>
<td>Class participation/quizzes*</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>510</td>
</tr>
</tbody>
</table>

Final Project Paper
This project must be an examination of the impetus: law, market/public opinion, technology, other, or a combination of all, that drive corporate environmental change. An exhaustive case study of a specific company or product is preferred.

The project proposal is to include the following:
- no more than five sentences describing the change or audit risk.
- four supporting references (preferably two from assigned reading and two from additional research)
- A summary of why this topic is important for environmental auditors.

Possible paper topics:
- Issues surrounding an SEC disclosures for a Superfund or other environmental liability by a company in a merger. Examine the pros and cons.
- Green reports for companies that have not yet released such reports.
- Internal audits as a product development mechanism.
- ISO compliance and corporate structure.
- Civil or criminal liability containment.
- Audit Protocols for Industrial Security

REQUIRED TEXTS: Cahill, L.B., et al., Environmental Audits (7th Edition)
Greeno, J.L., et al., Environmental Auditing: Fundamentals and Techniques
Tentative Class Schedule

Week 1
Introduction to Environmental Auditing - Environmental Audits as internal management tools

Week 2
Ethics and Standards of Conduct for Auditors
Obligations that auditors bear for the exercise of honesty, objectivity and diligence in the performance of their duties. Key topics include:
* Conflict of interest
* Independence and objectivity of auditors
* Due professional care
* Material facts and disclosures
* Auditor proficiency

Environmental Auditor's Personal Attributes and Skills:
* Environmental auditing skills including: interviewing, verifying, sampling, report writing, oral and written expression, listening, tact and diplomacy, language tips, personal organization, judgment, sensitivity to local culture and conventions
* Performance through verbal and physical behavior; Verbal: questions, paraphrasing; Physical: eye contact, etc.; Presentations
* Due professional care and confidentiality
* Certification

Weeks 3-6
Audit Program Design and Management - Key elements in the design and implementation of EHS auditor programs such as:
* Audit program objectives and scope
* Audit program implementation
* Protocols, checklists and guides
* Frequency of auditors and selection of sites
* Quality assurance provisions
* Auditor staffing and training
* Protection of the confidentiality of findings
* Communicating audit results

Internal Controls - Understanding systems and controls in place at audited facilities to ensure compliance with regulatory criteria. Typical controls include:
* Identification of applicable compliance areas
* Responsibility/accountability for compliance
* Training/competence of personnel
* Availability of formal procedures for compliance
* Quality assurance procedures
* Environmental Risk Management

Week 7
Review and Exam 1

Weeks 8-11
Techniques of Environmental Auditing
* Pre-Audit Activities & On-Site Activities: Understanding management systems
* Audit Procedures and Processes, including field work, working paper, findings, and reporting
Week 12

ISO 14000 Standards and Environmental Auditors

Weeks 13-14

Special Auditing Topics including
- Links with Quality Auditing
- Transaction Triggered Audits
- Current Regulatory Issues
- Voluntary Cleanup Programs

Week 15

Final Exam
Project Due