CGS Agenda Item: 12-03
Effective: Fall 2012

Eastern Illinois University

NEW/REVISED COURSE PROPOSAL FORMAT

(Approved by CAA on 9/29/11 and CGS on 10/18/11, Effective Fall 2011)

This format is to be used for all courses submitted to the Council on Academic Affairs and/or the Council on Graduate Studies.

Please check one: __x_ New course ___ Revised course

PART I: CATALOG DESCRIPTION:

1. **Course prefix and number, *such as ART 1000*:** MBA 5001
2. **Title (*may not exceed 30 characters, including spaces*):** Bus Oper Energy Facilities
3. **Long title, if any (*may not exceed 100 characters, including spaces*):** Business Operations in Sustainable Energy Facilities
4. **Class hours per week, lab hours per week, and credit [*e.g., (3-0-3)*]:** 3-0-3
5. **Term(s) to be offered:** ___ Fall ___ Spring ___ Summer _x__ On demand
6. **Initial term of offering:** _x__ Fall ___ Spring ___ Summer **Year:** _2012_____
7. **Course description:** Concepts and frameworks of business functions that are critical to the successful operation of sustainable energy facilities. Students will be introduced to the accounting, financial, supply chain, and other functions that support effective strategic and operational decision making in a sustainable energy facility.

8. **Registration restrictions:**
   a. **Equivalent Courses**
      - **Identify any equivalent courses** (e.g., cross-listed course, non-honors version of an honors course).
        - **NA**
      - Indicate whether coding should be added to Banner to restrict students from registering for the equivalent course(s) of this course. ___ Yes ___ No

   b. **Prerequisite(s)**
      - **Identify the prerequisite(s),** including required test scores, courses, grades in courses, and technical skills. Indicate whether any prerequisite course(s) MAY be taken concurrently with the proposed/revised course.
        - **Prerequisites: Admission to the MS in Sustainable Energy or the MBA programs**
      - Indicate whether coding should be added to Banner to prevent students from registering for this course if they haven't successfully completed the prerequisite course(s). **_x__** Yes ___ No

        If yes, identify the minimum grade requirement and any equivalent courses for each prerequisite course:

   c. **Who can waive the prerequisite(s)?**
      ___ No one ___ Chair ___ Instructor ___ Advisor _x__ Other (Please specify): Coordinator of Graduate Business Studies

   d. **Co-requisites** (course(s) which MUST be taken concurrently with this one):

e. Repeat status: _x__ Course may not be repeated.

___ Course may be repeated once with credit.

Please also specify the limit (if any) on hours which may be applied to a major or minor.

f. Degree, college, major(s), level, or class to which registration in the course is restricted, if any: **MS in Sustainable Energy or the MBA programs**

g. Degree, college, major(s), level, or class to be excluded from the course, if any:

9. Special course attributes [cultural diversity, general education (indicate component), honors, remedial, writing centered or writing intensive]

10. Grading methods (check all that apply): _x__ Standard letter ___ CR/NC ___ Audit ___ ABC/NC ("Standard letter"—i.e., ABCDF--is assumed to be the default grading method unless the course description indicates otherwise.)

Please check any special grading provision that applies to this course:

___ The grade for this course will not count in a student's grade point average.

___ The credit for this course will not count in hours towards graduation.

If the student already has credit for or is registered in an equivalent or mutually exclusive course, check any that apply:

___ The grade for this course will be removed from the student's grade point average if he/she already has credit for or is registered in _____ (insert course prefix and number).

___ Credit hours for this course will be removed from a student's hours towards graduation if he/she already has credit for or is registered in _____ (insert course prefix and number).

11. Instructional delivery method: (Check all that apply.)

_x__ lecture ___ lab ___ lecture/lab combined ___ independent study/research

___ internship ___ performance ___ practicum or clinical ___ study abroad

___ Internet ___ hybrid ___ other (Please specify)

PART II: ASSURANCE OF STUDENT LEARNING

1. List the student learning objectives of this course:

1. Develop an understanding of the unique characteristics of the financing process in the energy industry
2. Determine project cash flows as applied to capital budgeting
3. Design strategic cost management and control systems for a sustainable energy facility
4. Develop an understanding of the concept and practice of triple bottom line reporting
5. Develop an understanding of how to effectively manage the supply chain and logistics of the distribution network
6. Develop an understanding of the uniqueness of procuring, sourcing and managing raw materials associated with a sustainable energy facility
7. Conduct life cycle and cost/benefit analyses
8. Conduct operational risk analyses, including risk reduction measures
9. Use spreadsheets to assist in financial decision making
10. Apply operations strategy in decision making
11. Negotiate procurement contract
12. Conduct a research project focused on a current business issue in the energy industry
13. Present results of research project

a. If this is a general education course, indicate which objectives are designed to help students achieve one or more of the following goals of general education and university-wide assessment:

- **EIU graduates will write and speak effectively.**
- **EIU graduates will think critically.**
- **EIU graduates will function as responsible citizens.**

b. If this is a graduate-level course, indicate which objectives are designed to help students achieve established goals for learning at the graduate level:

- **Depth of content knowledge**
- Develop an understanding of the unique characteristics of the financing process in the energy industry
- Determine project cash flows as applied to capital budgeting
- Design strategic cost management and control systems for a sustainable energy facility
- Develop an understanding of the concept and practice of triple bottom line reporting
- Develop an understanding of how to effectively manage the supply chain and logistics of the distribution network
- Develop an understanding of the uniqueness of procuring, sourcing and managing raw materials associated with a sustainable energy facility

- **Effective critical thinking and problem solving**
- Conduct life cycle and cost/benefit analyses
- Conduct operational risk analyses, including risk reduction measures
- Use spreadsheets to assist in financial decision making

- **Effective oral and written communication**
- Apply operations strategy in decision making
- Negotiate procurement contract

- **Advanced scholarship through research or creative activity**
- Conduct a research project focused on a current business issue in the energy industry
- Present results of research project

2. **Identify the assignments/activities the instructor will use to determine how well students attained the learning objectives:**

3. **Explain how the instructor will determine students' grades for the course:**

Mid-term exam 25%
Final exam 25%
Assignments 10%
Written project and presentation (could be based on a case) 40%

Learning Objective	Assignments	Midterm and Final Exams	Written project & presentation
Develop an understanding of the unique characteristics of the financing process in the energy industry		X	
Determine project cash flows as applied to capital budgeting	X	X	
Design strategic cost management and control systems for a sustainable energy facility	X	X	
Develop an understanding the concept and practice of triple bottom line reporting		X	
Develop an understanding of how to effectively manage the supply chain and logistics of the distribution network	X	X	
Develop an understanding of the uniqueness of procuring, sourcing and managing raw materials associated with a sustainable energy facility	X	X	
Conduct life cycle and cost/benefit analyses	X	X	
Conduct operational risk analyses, including risk reduction measures	X	X	
Use spreadsheets to assist in financial decision making	X	X	
Apply operations strategy in decision making	X	X	
Negotiate procurement contract	X	X	
Conduct a research project focused on a current business issue in the energy industry			X
Present results of research project			X

4. **For technology-delivered and other nontraditional-delivered courses/sections, address the following:**
    a. **Describe how the format/technology will be used to support and assess students' achievement of the specified learning objectives:**
    b. **Describe how the integrity of student work will be assured:**
    c. **Describe provisions for and requirements of instructor-student and student-student interaction, including the kinds of technologies that will be used to support the interaction (e.g., e-mail, web-based discussions, computer conferences, etc.):**

5. **For courses numbered 4750-4999, specify additional or more stringent requirements for students enrolling for graduate credit. These include:**
    a. **course objectives;**
    b. **projects that require application and analysis of the course content; and**
    c. **separate methods of evaluation for undergraduate and graduate students.**

6. **If applicable, indicate whether this course is writing-active, writing-intensive, or writing-centered, and describe how the course satisfies the criteria for the type of writing course identified. (See Appendix *.)**

PART III: OUTLINE OF THE COURSE

Provide a week-by-week outline of the course's content. Specify units of time (e.g., for a 3-0-3 course, 45 fifty-minute class periods over 15 weeks) for each major topic in the outline. Provide clear and sufficient details about content and procedures so that possible questions of overlap with other courses can be addressed. For technology-delivered or other nontraditional-delivered courses/sections, explain how the course content "units" are sufficiently equivalent to the traditional on-campus semester hour units of time described above.

Week	Topics Covered
1	Characteristics of sustainable energy facilities from a management perspective
2	Supply Chain in the Energy Industry - Suppliers, Procurement, Negotiations and Integration
3, 4	Supply Chain in the Energy Industry - In-house Operations, , Performance Metrics, Inventory Control, Quality and Integration
5,6	Supply Chain in the Energy Industry – Distribution network, Customers, Service and Integration
7	Midterm Exam
8, 9	Capital Budgeting
10	Financing methods for clean energy investments
11	Strategic cost management and control systems – ABC costing
12	Strategic cost management and control systems – Balanced Scorecard and beyond
13	Financial accounting principles and financial statements
14	Introduction to Triple-Bottom-Line reporting
15	Project Presentations
16	Final Exam

PART IV: PURPOSE AND NEED

1. **Explain the department's rationale for developing and proposing the course.**

    a. **If this is a general education course, you also must indicate the segment of the general education program into which it will be placed, and describe how the course meets the requirements of that segment.**
    b. **If the course or some sections of the course may be technology delivered, explain why.**

The course is being proposed as part of the interdisciplinary Master of Science in Sustainable Energy program. Including a required business course as part of this interdisciplinary program is critical to the knowledge content and skill set that is expected for a successful graduate of this program.

2. **Justify the level of the course and any course prerequisites, co-requisites, or registration restrictions.**

The proposed MS in Sustainable Energy Program is at the graduate level; therefore, the business course is being proposed at that level. The School of Business will also allow this course to count as an elective to meet the requirements of the MBA program.

3. **If the course is similar to an existing course or courses, justify its development and offering.**

    a. **If the contents substantially duplicate those of an existing course, the new proposal should be discussed with the appropriate chairpersons, deans, or curriculum committees and their responses noted in the proposal.**

The content does not duplicate the content of any existing course.

    b. **Cite course(s) to be deleted if the new course is approved. If no deletions are planned, note the exceptional need to be met or the curricular gap to be filled.**

There will be no courses deleted if this proposed is approved. The course is an essential component of the proposed MS in Sustainable Energy Program.

4. **Impact on Program(s):**

    a. **For undergraduate programs, specify whether this course will be required for a major or minor or used as an approved elective.**
    b. **For graduate programs, specify whether this course will be a core requirement for all candidates in a degree or certificate program or an approved elective.**

The proposed course will be a required course in the proposed MS in sustainable Energy Program.

If the proposed course changes a major, minor, or certificate program in or outside of the department, you must submit a separate proposal requesting that change along with the course proposal. Provide a copy of the existing program in the current catalog with the requested changes noted.

PART V: IMPLEMENTATION

1. **Faculty member(s) to whom the course may be assigned:**

Dr. Richard Wang, Dr. John Willems, and other qualified faculty. This course may be taught using a team-taught approach, for example with one faculty member from the accounting discipline and another faculty member from the operations/supply chain discipline.

If this is a graduate course and the department does not currently offer a graduate program, it must document that it employs faculty qualified to teach graduate courses.

2. **Additional costs to students:**

Include those for supplemental packets, hardware/software, or any other additional instructional, technical, or technological requirements. (Course fees must be approved by the President's Council.)

N/A

3. **Text and supplementary materials to be used (Include publication dates):** There is no textbook that will meet the objectives of this proposed course because the area is so new. We will use custom publications and current literature to support the classroom instruction.

PART VI: COMMUNITY COLLEGE TRANSFER

If the proposed course is a 1000- or 2000-level course, state either, "A community college course may be judged equivalent to this course" OR "A community college course will not be judged equivalent to this course." A community college course will not be judged equivalent to a 3000- or 4000-level course but may be accepted as a substitute; however, upper-division credit will not be awarded.

N/A

PART VII: APPROVALS

Date approved by the department or school: 12/1/11

Date approved by the college curriculum committee: 1/18/12
Date approved by the Honors Council ***(if this is an honors course):***

Date approved by CAA: CGS:

*In **writing-active courses**, frequent, brief writing activities and assignments are required. Such activities -- some of which are to be graded – might include five-minute in-class writing assignments, journal keeping, lab reports, essay examinations, short papers, longer papers, or a variety of other writing-to-learn activities of the instructor's invention. Writing assignments and activities in writing-active courses are designed primarily to assist students in mastering course content, secondarily to strengthen students' writing skills. In **writing-intensive courses**, several writing assignments and writing activities are required. These assignments and activities, which are to be spread over the course of the semester, serve the dual purpose of strengthening writing skills and deepening understanding of course content. At least one writing assignment is to be revised by the student after it has been read and commented on by the instructor. In writing-intensive courses, students' writing should constitute no less than 35% of the final course grade. In **writing-centered courses** (English 1001G, English 1002G, and their honors equivalents), students learn the principles and the process of writing in all of its stages, from inception to completion. The quality of students' writing is the principal determinant of the course grade. The minimum writing requirement is 20 pages (5,000 words).