**REQUEST FOR ADDITION, EXPIRATION, OR REVISION OF AN UNDERGRADUATE COURSE**

**DEPARTMENT:** Agricultural and Biological Engineering  
**EFFECTIVE SESSION:** Fall

**INSTRUCTIONS:** Please check the items below which describe the purpose of this request.

- ☑ New course with supporting documents
- ☐ Add existing course offered at another campus
- ☐ Expiration of a course
- ☐ Change in course number
- ☐ Change in course title
- ☒ Change in course credit/ type
- ☐ Change in course attributes (department head signature only)
- ☐ Change in instructional hours
- ☐ Change in course description
- ☐ Change in course requisites
- ☐ Change in semesters offered (department head signature only)
- ☐ Transfer from one department to another

**PROPOSED**

<table>
<thead>
<tr>
<th>Subject Abbreviation</th>
<th>ABE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Number</td>
<td>48400</td>
</tr>
<tr>
<td>Long Title</td>
<td>Project Planning and Management</td>
</tr>
<tr>
<td>Short Title</td>
<td>Project Planning and Mgmt</td>
</tr>
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</table>

**EXISTING**

<table>
<thead>
<tr>
<th>Subject Abbreviation</th>
<th></th>
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<tbody>
<tr>
<td>Course Number</td>
<td></td>
</tr>
</tbody>
</table>

**TERMS OFFERED**

- ☑ Summer
- ☐ Fall
- ☐ Spring

**CAMPUS(ES) INVOLVED**

- ☑ Calumet
- ☐ Cont Ed
- ☐ Ft. Wayne
- ☒ Indianapolis
- ☐ N. Central
- ☐ Tech Statewide
- ☐ W. Lafayette

**CREDIT TYPE**

<table>
<thead>
<tr>
<th>1. Fixed Credit Cr. Hrs.</th>
<th>1</th>
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<tbody>
<tr>
<td>2. Variable Credit Range</td>
<td>Max Credit Hrs</td>
</tr>
<tr>
<td>Minimum Cr. Hrs (Check One)</td>
<td>To</td>
</tr>
<tr>
<td>Maximum Cr. Hrs</td>
<td></td>
</tr>
<tr>
<td>3. Equivalent Credit</td>
<td>Yes</td>
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**Course Type**

<table>
<thead>
<tr>
<th>1. Pass/Not Pass Only</th>
<th>6 Registration Approval Type</th>
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</thead>
<tbody>
<tr>
<td>2. Satisfactory/Unsatisfactory Only</td>
<td>Department</td>
</tr>
<tr>
<td>3. Repeatable</td>
<td>Instructor</td>
</tr>
<tr>
<td>4. Minimum Repeatability</td>
<td>8 Honors</td>
</tr>
<tr>
<td>5. Credit by Examination</td>
<td>9 Full Time Privilege</td>
</tr>
<tr>
<td>6. Fees</td>
<td>10 Off Campus Experience</td>
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**Schedule Type**

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Recitation</th>
<th>Presentation</th>
<th>Laboratory</th>
<th>Lab Prep</th>
<th>Studio</th>
<th>Distance</th>
<th>Clinic</th>
<th>Experiential</th>
<th>Research</th>
<th>Ind. Study</th>
<th>Prac/Observ</th>
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<tbody>
<tr>
<td>Minutes Per Week</td>
<td>1</td>
<td>1</td>
<td>16</td>
<td>100%</td>
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**COURSE DESCRIPTION**

Review of topics relevant to project planning and execution in industry, including technical communication, budgeting, team management, intellectual property rights, contracts and timelines. Students will select a Capstone project and assemble a project proposal within a team environment.

**Prerequisites:** ABE 32500 and ABE 33000

**COURSE LEARNING OUTCOMES**

Synthesize a project plan and proposal, including developing a budget and timeline. Communicate technical content to technical content to technical and non-technical audiences in a concise and informative manner. Enhance communication skills by presenting project proposal (written and oral) in a formal setting.

**Signature Blocks**

- Calumet Department Head
- Ft. Wayne Department Head
- Indianapolis Department Head
- North Central Faculty Senate Chair
- West Lafayette Department Head
- Calumet School Dean
- Fort Wayne School Dean
- Indianapolis School Dean
- Vice Chancellor for Academic Affairs
- West Lafayette Registrar

**Office of the Registrar**
TO: The Faculty of the College of Engineering
FROM: The Faculty of Agricultural and Biological Engineering
RE: New Course ABE 48400

The faculty of the Department of Agricultural and Biological Engineering has approved the following new course. This action is now submitted to the Engineering Faculty with a recommendation for approval.

ABE 48400  Project Planning and Management
Sem. 1, Class 1, Cr. 1.
Requisites, Restrictions, and Attributes: ABE 32500 and ABE 33000.

Description: Review of topics relevant to project planning and execution in industry, including technical communication, budgeting, team management, intellectual property rights, contracts and timelines. Students will select a Capstone project and assemble a project proposal within a team environment.

Reason: This change will extend the senior design experience to two semesters as suggested by students who completed the Department’s Agricultural Engineering Design courses. This course will prepare students to work on their senior design project in the spring semester by exposing them to facets of project management that they do not receive in the curricula. It will also allow them to develop a project plan for the Capstone project they are assigned. The course has been taught as a temporary offering since the fall of 2010. The results have been positive and the faculty would therefore like to officially make the change in approach to the capstone design experience.

Bernard A. Engel, Professor and Head
Agricultural and Biological Engineering Department

APPROVED FOR THE FACULTY OF THE SCHOOLS OF ENGINEERING
BY THE ENGINEERING CURRICULUM COMMITTEE

ECC Minutes
Date 7/30/2012
Chairman ECC R. Cypa
COURSE CONTACT INFORMATION:

Name: Dr. Bernard Engel
Phone Number: 494-1162
E-mail Address: engelb@purdue.edu
Campus Address: ABE 219

COURSE SUBJECT ABBREVIATION AND NUMBER: ABE 48400

COURSE TITLE: Project Planning and Management

COURSE CREDITS AND INSTRUCTIONAL TYPE: Sem. 1. Class 1, cr. 1.

COURSE DESCRIPTION: Review of topics relevant to project planning and execution in industry, including technical communication, budgeting, team management, intellectual property rights, contracts and timelines. Students will select a Capstone project and assemble a project proposal within a team environment.

A. Justification

This change will extend the senior design experience to two semesters as suggested by students who have completed ABE 48500 Agricultural Engineering Design. This course will prepare students to work on their senior design project in the spring semester by exposing them to facets of project management that they do not receive in the curricula. It will also allow them to develop a project plan for the Capstone project they are assigned. The course has been taught as a temporary offering since the fall of 2010. The results have been positive and the faculty would therefore like to officially make the change in approach to the capstone design experience.

Level of Course: 100% anticipated enrollment of upper division students (seniors).

B. Learning Outcomes and Method of Evaluation or Assessment

Learning outcomes:

- Synthesize a project plan and proposal, including developing a budget and timeline.
- Communicate technical content to technical and non-technical audiences in a concise and informative manner.
- Enhance communication skills by presenting project proposal (written and oral) in a formal setting.
Methods of evaluation or assessment:

Grades for this course will be based on the following:

- Project proposal: 60%
- Project presentation: 20%
- In-class participation and homework: 20%

\[\begin{align*}
A &= \geq 90 \\
B &= 80-89.5\% \\
C &= 70-79.5\% \\
D &= 60-69.5\% \\
F &= < 59.5\%
\end{align*}\]

C. **Pre- or Co-requisites:** ABE 32500 and ABE 33000

D. **Course Instructor(s):** Dr. Bernard Engel

E. **Course Outline of Topics/Syllabus:**

1. Introduction
2. Technical Writing
3. Design and Problem Solving Process
4. Quantitative decision making
5. Project scheduling and budgeting
6. Safety procedures when using departmental facilities and laboratories

F. **Reading List/Textbook:**

Lectures and presentations will be drawn from the literature or from personal experience and knowledge of the person making the presentation.

G. **Library Resources** (none)

H. **Example of a Course Syllabus**

**Instructors:**
- Dr. Bernie Engel
- 219 ABE
- engelb@purdue.edu
- Office phone: 765-494-1162

**Course description:**

**ABE 484 Project Planning & Management.** Review of topics relevant to project planning and execution in industry, including technical communication, budgeting, team management, intellectual property rights, contracts and timelines. Students will select a capstone project and assemble a project proposal within a team environment.

**Course website:** [http://engineering.purdue.edu/~engelb/capstone/](http://engineering.purdue.edu/~engelb/capstone/) (use abe for the login and password when prompted)
Optional Text:


**Meeting time:**

Lecture: M 4:30-5:20  
Location: ABE 204 & 205

Check course website for weekly schedule.

**Grading:**

- Project proposal: 60%
- Project presentation: 20%
- In-class participation/homework: 20%

**Grading Scale:**

- A ≥ 90%
- B 80 – 89.9%
- C 70-79.5%
- D 60-69.5%
- F < 59.5%

**Student learning outcomes:**

- Synthesize a project plan and proposal, including developing a budget and timeline.
- Communicate technical content to technical and non-technical audiences in a concise and informative manner.
- Enhance communication skills by presenting project proposal (written and oral) in a formal setting.

**Class polices:**

Students must attend every class and actively participate in class activities. If a student cannot attend class because of a family emergency or other legitimate reason, students must notify the instructor in advance and an alternative assignment will be given in place of class participation. Short writing assignments will be given periodically throughout the semester, which are due to the instructor by the end of the following class (or as specified). Deadlines for capstone project deliverables are indicated on the course website.

**Tentative Schedule:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/22</td>
<td>Course introduction</td>
</tr>
<tr>
<td>8/29</td>
<td>Technical writing</td>
</tr>
<tr>
<td>9/5</td>
<td>No class</td>
</tr>
<tr>
<td>9/12</td>
<td>Design/Problem solving process</td>
</tr>
<tr>
<td>9/19</td>
<td>Quantitative decision making; project descriptions available online</td>
</tr>
<tr>
<td>9/26</td>
<td>Project scheduling, budgeting</td>
</tr>
<tr>
<td>10/3</td>
<td>Safety – Scott Brand</td>
</tr>
<tr>
<td>10/7</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; draft of proposal due</td>
</tr>
<tr>
<td>10/28</td>
<td>Intellectual property; Final draft of proposal due</td>
</tr>
<tr>
<td>11/28</td>
<td>Project presentations</td>
</tr>
<tr>
<td>12/5</td>
<td>Responses to industry reviewers due</td>
</tr>
<tr>
<td>2/27/12</td>
<td>Mid-term presentations &amp; progress reports due</td>
</tr>
<tr>
<td>4/12/12 or 4/19/12</td>
<td>Poster presentations &amp; judging</td>
</tr>
<tr>
<td>4/27/12</td>
<td>Final report due</td>
</tr>
</tbody>
</table>