### Purdue University

**Request for Addition, Expiration, or Revision of an Undergraduate Course**

**Department:** Manufacturing & Construction Engineering Technology

**Effective Session:** Fall 2014

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

<table>
<thead>
<tr>
<th>Purpose</th>
<th>1. New course with supporting documents</th>
<th>7. Change in course attributes (department head signature only)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. Add existing course offered at another campus</td>
<td>8. Change in instructional hours</td>
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<td>3. Expiration of a course</td>
<td>9. Change in course description</td>
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<td>4. Change in course number</td>
<td>10. Change in course requisites</td>
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<td></td>
<td>5. Change in course title</td>
<td>11. Change in semesters offered (department head signature only)</td>
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<td>6. Change in course credit/type</td>
<td>12. Transfer from one department to another</td>
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**Proposed:**

- Subject Abbreviation: CNET
- Course Number: 10200
- Long Title: Introduction to Sustainable Development
- Abbreviated title will be entered by the Office of the Registrar if omitted. (30 characters only)

**Terms Offered:**

- Fall
- Spring
- Summer

**Campuses Involved:**

- Ft. Wayne
- Indianapolis
- W. Lafayette

**Credit Type:**

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<th>Type</th>
<th>Fixed Credit:</th>
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<tbody>
<tr>
<td>Minimum Cr. Hrs.</td>
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<tr>
<td>(Check One)</td>
<td>Cr.</td>
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<tr>
<td>Maximum Cr. Hrs.</td>
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<tr>
<td>Equivalent Credit:</td>
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<td>No</td>
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</table>

**Course Attributes:**

- Pass/Not Pass Only
- Satisfactory/Unsatisfactory Only
- Repeatable
- Maximum Repeatable Credit:
- Credit by Examination
- Fees: [Coop, Lab]
- Rate Request

**Schedule Type:**

- Lecture 45 Mins Per Mgr. 2 Meetings Per Week
- Recitation
- Presentation
- Laboratory
- Lab Prep
- Studio
- Distance
- Clinic
- Experiential
- Research
- Ind. Study
- Pract/Observ

**Course Description:**

No Pre-requisites. This course provides an introduction to the interdisciplinary field of sustainable development, focusing on the three pillars of sustainability: environmental, economic, and social justice. The course offers a broad overview of the key challenges facing construction industry professionals including those involved in design, construction, material supply and fabrication, finance, policy development. Potential solutions to achieve sustainable development in the 21st century will be considered.

**Course Learning Outcomes:**

1. Produce texts that use appropriate formats, genre conventions, and documentation styles while controlling tone, syntax, grammar, and spelling.

2. Interpret information that has been presented in mathematical form (e.g., with functions, equations, graphs, diagrams, tables, words, geometric figures).

3. Distinguish between scientific and non-scientific evidence and explanations.

4. Identify examples of how social, behavioral, or historical knowledge informs and can shape personal, ethical, civic, or global decisions and responsibilities.

**Signatures:**

- Ft. Wayne Department Head: [Signature] 4/30/14
- Ft. Wayne School Dean: [Signature] 4/30/14
- Indianapolis Department Head: Date
- Indianapolis School Dean: Date
- North Central Faculty Senate Chair: Date
- Vice Chancellor for Academic Affairs: Date
- West Lafayette Department Head: Date
- West Lafayette College/School Dean: Date
- West Lafayette Registrar: Date

**Office of the Registrar**
CNET 10200, Introduction to Sustainable Development, 3 credits

Course Description:

This course provides an introduction to the interdisciplinary field of sustainable development, focusing on the three pillars of sustainability: environmental, economic, and social justice. The course offers a broad overview of the key challenges facing construction industry professionals including those involved in design, construction, material supply and fabrication, finance, policy development. Potential solutions to achieve sustainable development in the 21st century will be considered.

Course meetings: TBD

Instructor Information:

Prerequisite(s): None

Required Texts:

Various Readings and Resources provided by the instructor

Internet Access and Required Computer Programs:

Google
Google Earth
Google Maps
Google Panoramio
Microsoft Office Powerpoint

**Required Materials:**

- Digital Camera or Cell Phone with Camera

**Required Skills:**
- Web Browsing
- Word Processing
- Powerpoint (Cut and Paste images)
- Ability to take digital photographs and download them to a computer
- Ability to screen capture images and crop

**Course Outcomes:**

- **Content Mastery:**
  - Identify major challenges facing the planet earth and human society
  - Describe primary components of a sustainable construction system
  - Utilize sustainability principles for design and construction of the built environment
  - Evaluation of building based on sustainability standards such as LEED

- **Critical Thinking Skills**
  - Problem Solving through written and graphic analysis
  - Critical Analysis through observation and evaluation

- **Core Learning Skills**
  - Observational Skills
  - Written and Graphic Communication Skills
  - Manipulation and Organization of Information
  - Research and Documentation

**Course Features:**

1. **Individual and Team Learning**— individual course assignments allow for personal exploration of architecture and urban ideas. Group Discussions build a community of learning to share ideas and develop creative concepts.

2. **Screen Captured Videos and Internet Resources**— this allows unlimited repeating of lectures on specific topics and the Option to master and reflect on advanced topics. Videos may be paused to allow the student to master the concept before continuing to the next step.
3. **Experiential Learning** – allows you to “visit” urban sites of sustainable construction and architecture through online resources as well as personal observation of sites of your choice.

**Course Meetings and Assignments:**
This course is organized as a combination of classroom meetings and Internet lectures/videos/site visits.

**Class Meetings Attendance:**
Class participation is mandatory, and attendance will be taken through the classroom attendance and registry of online log-in and time spent on the Blackboard site. Class “meetings” will be organized on a classroom lecture and online discussion basis, with questions, comments, and discussion encouraged. If there is something you don’t understand, ask about it because there are surely others who may need the same clarification. A major portion of everyone’s learning will come from participation in the interactive discussion and peer comments. Your instructor as well as other students is counting on you, so plan on participating. In addition, this time can be used for sharing insights based on your own experience. Class “meetings” will also include activities designed to help you learn course material. Ultimately, how much you learn and remember from these courses is closely related to how much you can apply it to your own life. We urge you to make these connections as much as possible, and to share your insights with others.

**Research shows that students who miss a class for any reason during the first four weeks of class tend to do poorly in that class and in college, in general. Class participation does not ensure academic success, but it does enhance the probability of it!**

**Course Communication:**
Course Communication will be via the instructors IPFW email:  kubik@ipfw.edu
Please email the instructor immediately if there are problems accessing course materials such as difficulty submitting assignments, or broken links to course lectures or online course materials.

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<thead>
<tr>
<th>Projects</th>
<th>POINTS</th>
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<tbody>
<tr>
<td>15 Online Discussion or Project Entries. 10 points per entry</td>
<td>150</td>
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<tr>
<td>PowerPoint portfolio - 30 images</td>
<td>150</td>
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<tr>
<td>Materials Research Project</td>
<td>200</td>
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<tr>
<td>Sustainability Design Project</td>
<td>500</td>
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<td><strong>TOTAL</strong></td>
<td><strong>1000</strong></td>
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1. You will be expected to participate in the weekly online discussion throughout the semester. Your grade will depend on the number and quality of your entries. Quality is established by expressing your personal point of view or experience related to the topic, use of vocabulary, reference to topics or concepts presented.

2. During the course you will create a portfolio of 30 images illustrating concepts presented in the course. One or two images will be assigned for each course topic. Your images will be placed into a power point presentation. Your portfolio will be due four times during the semester – but it is expected that you will work on it continuously. Full details of requirements and the REQUIRED course power point template will be found in a content folder in Blackboard.

5. The final project will be based on a design of a sustainable structure.

Assignment Submission:
All assignments are to be submitted in Blackboard. Assignments are Word processing documents or scanned or digital photo jpeg files in a Power Point presentation. All assignments are to be submitted by the ascribed due dates. Late projects are penalized ten percent for each late day.

No projects will be accepted after 4:15 P.M. MONDAY, MAY 5, 2014
Final Project Presentations: Thursday May 8, 2014, 10:30 am

Grade Definition:

\[ A = 1000-901, \quad B = 900-801, \quad C = 800-701, \quad D = 700-601, \quad F = 600-0 \]

A. Highest passing grade: Superior performance significantly exceeding the basic course requirements. Mastery is exhibited of all phases and skills of the course. This grade should be awarded for truly exceptional performance.

B. Above average passing grade. Performance exceeding the basic course requirements. A comprehensive knowledge is exhibited of course material and above average skills have been developed.

C. Average passing grade. The grade is the performance standard expected of students. Reflects performance meeting the basic course requirements. An adequate knowledge of course material and skill level has been exhibited.

D. Lowest passing grade. Performance is below the standard of the course but not failing. A less than adequate knowledge of the basic course requirements has been attained and poor skills have been developed. Success in subsequent courses may be difficult. Advancement to some subsequent courses may be prohibited.
F. Not passing grade. Performance is below minimum competency in basic course requirements and skills. The ability to proceed with the academic program has not been demonstrated. Establishment of basic study skills, tutorial help or career counseling may be needed.

Incompletes:
A final grade of Incomplete will not be given. Grades will be determined on performance and work completed during the scheduled dates of the semester.

Cheating:
Cheating, plagiarism, submitting work not created by you, are all grounds for failure of the course with a grade of zero. Among other things, plagiarism is putting your own name on someone else’s work without acknowledging that you have done so. While you are encouraged you to discuss assignments among yourselves – including possible answers – we expect each student to do his/her own work when it comes to writing down the final answer or doing a paper and turning it in. Copying someone else’s work without attribution is not acceptable. Not only is it intellectually dishonest, but you ultimately cheat yourself out of your own educational experience because learning comes from the process.

We expect you to write your own papers and cite sources responsibly. If you are unclear about what constitutes plagiarism or have difficulty incorporating sources (someone else’s words) please consult with the IPFW Writing Center.

Community Expectations and Policies:

Mutual respect. Each person in this course has unique prior experiences and a unique viewpoint to share. This offers a great opportunity for us to learn from each other. Though disagreement and even conflict may occur, we expect your cooperation in maintaining an atmosphere of mutual respect. When participating in discussions, it is perfectly acceptable to have strong opinions – in fact we encourage you to do so. We also encourage you to discuss your own personal experience and relate it to that of others. In the process, however, we expect you to respect the basic intelligence and humanity of each of the other participants in the discussion. Disagreement is not necessarily a bad thing, as long as there is a commitment to mutual respect. Hateful and demeaning speech will not be tolerated. When using the web, please use appropriate Netiquette. A Guide to electronic class discussions will be found on Blackboard.

Civility. “Prominent among the values that define the academic community is civility, which includes mutual respect, fairness, and politeness. Membership in any community requires a concern for the common good for all who belong to that community. Each individual may possess different ideas, as well as different ways of communicating those ideas, particularly in a community as varied and diverse as a university. Because of these differences, respect and civility are integral to maintaining the quality of the academic
environment and free inquiry. Respect and civility should therefore be afforded to all individuals regardless of race, ethnicity, gender, age, sexual orientation, disability, religion, family status, socioeconomic level, educational background, veteran status, or position at the university.” (IPFW Civility Statement)

**Diversity and Nondiscrimination.** “IPFW is committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters tolerance, sensitivity, understanding, and mutual respect among its members; and encourages each individual to strive to reach his or her own potential. In pursuit of its goal of academic excellence, the university seeks to develop and nurture diversity. The university believes that diversity among its many members strengthens the institution, stimulates creativity, promotes the exchange of ideas, and enriches campus life. IPFW prohibits discrimination against any member of the university community on the basis of race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability, or status as a disabled or Vietnam-era veteran.”

Indiana University–Purdue University Fort Wayne is committed to creating an environment that enhances learning by recognizing the inherent worth of all individuals at the university. Diversity stimulates creativity, promotes the exchange of ideas, and enriches campus life. The term diversity encompasses differences of culture, background and experience among individuals and groups. Such differences include, but are not necessarily limited to, differences of race, ethnicity, color, gender, sexual orientation, class, age, and disabilities, as well as political and religious affiliation, and socioeconomic status. (IPFW Diversity Statement)

**Community and Academic Resources**

**Writing.** Writing will play an important role in each of these courses, as it is our view that the process of writing is a critical element of critical thinking, analysis, and learning. Writing reinforces knowledge and enables you to synthesize your ideas with those you gain from our discussions, your texts, and through research. You are also encouraged to rewrite your lecture notes, preferably as soon as possible after class. In addition, we will give you variety of short writing assignments, both in-class and take home. Some of these assignments will be evaluated for a grade, as noted in each individual syllabus. We encourage you to talk with us about your writing. A valuable source of help and support may be found in the Writing Center in Ketterl G19 (481-5740) where consultants who are fellow students can help you at any stage of the writing process. Call or stop by to make an appointment. Check out the Center website at [www.ipfw.edu/casa/writing/](http://www.ipfw.edu/casa/writing/) and call or stop by with questions.
Graphics. The recording and manipulation of graphic digital images will be an important component of this course. A valuable IPFW source of help and support may be found in Studio M, Walb Union 220, 260-481-0114. http://new.ipfw.edu/studiom/
The mission of Studio M is to provide state of the art multimedia resources, training and customized assistance for students to develop projects and presentations in connection to their course work.

Disabilities. If you have or acquire any sort of disability that may require accommodation, we urge you to discuss it with us (preferably after class or during office hours). We want to do everything that we can to help everyone who wants to succeed in this course. If you want to find out what special services and accommodations are available on campus, you are encouraged to contact Services for Students with Disabilities in Walb 118 (260 481-6657, voice/TDD). www.ipfw.edu/ssd/
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<td></td>
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<td><strong>Concepts</strong></td>
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<tr>
<td>1</td>
<td>1/14</td>
<td>Course Introduction —</td>
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<tr>
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<td>Life After People</td>
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<td>1/21</td>
<td>Energy &amp; Sustainability Frameworks</td>
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<td>3</td>
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<td>Pillar One: Global Issues</td>
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<td>Paradigm Shift I: Systems Thinking, C2C/Life cycle assessment</td>
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<td>Sustainability Rating Systems: LEED, Envision and Others</td>
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<td>12</td>
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<tr>
<td>13</td>
<td>4/8</td>
<td>Design: Generative Conversations, Charette, Mind Maps</td>
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