COURSE CHANGE FORM

Complete 1a – 1f & 2a – 2c. Fill out the remainder of the form as applicable for items being changed.

1.	Genera	l Information.						
a.	Submitted by the College of: Engineering Today's Date: 1-31-2011							
b.	Department/Division: Civil Engineering							
c.	Is there a change in "ownership" of the course?					NO 🖂		
	If YES,	what college/depa	artment will offer the	course instead?				
d.	What t	ype of change is b	eing proposed?	Major 🔲 N	/linor (place cursor	here for minor cha	ange defi	nition)
e.	Contac	t Person Name:	Timothy R.B. Tayl	or Email:	taylor@engr.uky u	.ed Phone:	323-3	8680
f.	Reques	ted Effective Date	e: Semester Fo	ollowing Approval	OR Specifi	c Term ² :		
2.	Design	ation and Descrip	tion of Proposed Co	urse.				
a.	Current Prefix and Number: CE-303 Proposed Prefix & Number: No Change							
b.	Full Title: Introduction to Construction Engineering Proposed Title: No Change							
c.	Current Transcript Title (if full title is more than 40 characters): Intro to Construct Engr							
c.	Propos	ed Transcript Title	(if full title is more t	han 40 characters)	: No Change			
d.	Current Cross-listing: N/A OR Currently ³ Cross-listed with (Prefix & Number):							
	Proposed – ADD ³ Cross-listing (Prefix & Number):							
	Proposed – REMOVE ^{3, 4} Cross-listing (Prefix & Number):							
e.		s must be describ for each meeting	ed by <u>at least one</u> of pattern type.	the meeting patto	erns below. Includ	e number of a	ctual co	ntact
Curr	ent:	<u>3</u> Lecture	2 Laboratory ⁵	Recit	ation	Discussion	In	dep. Study
		Clinical	Colloquium	Pract	icum	Research	Re	esidency
Seminar Studio Other – Please explain:								
Prop	oosed:	<u>3</u> Lecture	$\underline{0}$ Laboratory	Recito	ntion	Discussion	Inc	dep. Study
		Clinical	Colloquium	Pract	icum	Research	Re	sidency
	Seminar Studio Other – Please explain:							
f.	f. Current Grading System:							
	Propos	ed Grading Systen	n: 🔀 Letter (A, B	, C, etc.)	Pass/Fail			
g.	Curren	t number of credi	it hours: $\underline{4}$	Proposed nu	mber of credit hou	rs: <u>3</u>		

¹ See comment description regarding minor course change. *Minor changes are sent directly from dean's office to Senate Council Chair*. If Chair deems the change as "not minor," the form will be sent to appropriate academic Council for normal processing and contact person is informed.

² Courses are typically made effective for the semester following approval. No course will be made effective until all approvals are received.

³ Signature of the chair of the cross-listing department is required on the Signature Routing Log.

⁴ Removing a cross-listing does not drop the other course – it merely unlinks the two courses.

⁵ Generally, undergrad courses are developed such that one semester hr of credit represents 1 hr of classroom meeting per wk for a semester, exclusive of any lab meeting. Lab meeting generally represents at least two hrs per wk for a semester for 1 credit hour. (See *SR* 5.2.1.)

COURSE CHANGE FORM

h.	Currently, is this course repeatable for additional credit?			NO 🖂		
	Proposed to be repeatable for additional credit?			NO 🖂		
	If YES: Maximum number of credit hours:					
	If YES: Will this course allow multiple registrations during the same semester?			NO 🗌		
i.	The study of the planning, administration, management, and cost of construction projects and an introduction to the methodology utilized in executing specific designs. Emphasis is placed on the organization of construction firms, development of construction documents, interpretation and analysis of engineering plans and specifications, theory of engineering economics, estimating and quantity take-off, contractual and management systems, scheduling, project administration, and inspection of construction operations. Lecture, three hours; laboratory, two hours perweek.			utilized in zation of tions, theory contractual, and		
	The study of the planning, administration, management, and cost of construction projects and an introduction to the methodology utilized in executing specific designs. Emphasis is placed on the organization of construction for Bulletin: Proposed Course Description for Bulletin: construction firms, development of construction documents, theory of engineering economics, estimating and quantity take-off, contractual and management systems, scheduling, project administration, and inspection of construction operations.			utilized in zation of heory of tractual and		
j.	Current Prerequisites, if any: CE106 and Engineering Standing					
	Proposed Prerequisites, if any: <u>No Change</u>					
k.	Current Distance Learning(DL) Status: N/A Already approved for DL* Please Add ⁶ Please Drop					
	*If already approved for DL, the Distance Learning Form must also be submitted <u>unless</u> the department affirms (by checking this box) that the proposed changes do not affect DL delivery.					
ı.	Current Supplementary Teaching Component, if any: Community-Based Experience Service Learning Both					
	Proposed Supplementary Teaching Component: Community-Based Experience Service Learning Both					
3.	Currently, is this course taught off camp	us?	YES	NO 🖂		
	Proposed to be taught off campus?	1	YES	NO 🖂		
4.	Are significant changes in content/teach	ing objectives of the course being proposed?	YES 🔀	NO		
	If YES, explain and offer brief rationale:					
	The (1) credit hour laboratory portion of CE-303 is being dropped from the course. The laboratory portion of the course focuses on reading of construction plans and specifications and this content is being dropped from the course so the laboratory session is no longer needed.					
5.	Course Relationship to Program(s).					
a.	Are there other depts and/or pgms that	could be affected by the proposed change?	YES	NO 🖂		
	If YES, identify the depts. and/or pgms: _					
b.	Will modifying this course result in a new	requirement ⁷ for ANY program?	YES	NO 🖂		

 $^{^{6}}$ You must \emph{also} submit the Distance Learning Form in order for the course to be considered for DL delivery.

COURSE CHANGE FORM

If YES ⁷ , list the program(s) here:				
6.	Info	ormation to be	Placed on Syllabus.	
a.		Check box if changed to 400G or 500.	If <u>changed to</u> 400G- or 500-level course you must send in a syllabus and <i>you must include the differentiation</i> between undergraduate and graduate students by: (i) requiring additional assignments by the graduate students; and/or (ii) establishing different grading criteria in the course for graduate students. (See <i>SR</i> 3.1.4.)	

 $^{^{\}rm 7}$ In order to change a program, a program change form must also be submitted.

APPLICATION FOR NEW COURSE

Signature Routing Log

General Information:

Course Prefix and Number:

XXXXX CE 303

Proposal Contact Person Name:

James Fox

Phone: 7-8668

Email: jffox@engr.uky.edu

INSTRUCTIONS:

Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

Internal College Approvals and Course Cross-listing Approvals:

Reviewing Group	Date Approved	Contact Person (name/phone/e	nail) Signature
CE Education Group	2/9/11	N Stamatiadis / 7-8012 / nstamat@engr.uky.edu	£-
Civil Engineering	2/25/11	G Blandford / 7-1855 / gebland@eng	r.uky.edu Skarge Eßlandford
Engineering faculty	5/2/11	S.A. Sherrer 17-3000/Score. A. Richard 18827/ names	Sherver D Ala Dl Uky. edu gar @ Rabart Drigant
0		, lengr.	uky edy

External-to-College Approvals:

Council	Date Approved	Signature	Approval of Revision ⁶
Undergraduate Council	11/8/2011	Sharon Gill	
Graduate Council			
Health Care Colleges Council			
Senate Council Approval		University Senate Approval	

Comments:

⁶ Councils use this space to indicate approval of revisions made subsequent to that council's approval, if deemed necessary by the revising council.

University of Kentucky Department of Civil Engineering CE-303-001 Introduction to Construction Engineering Course Syllabus

COURSE DESCRIPTION

A study of the planning, administration, management, and cost of construction projects and an introduction to the methodology utilized in executing specified designs. Emphasis is placed on organization of construction firms, development of construction documents, theory of estimating and quantity take-off, contractual and management systems, scheduling, project administration and inspection of construction operations.

COURSE OBJECTIVES

The three overall ABET objectives for this course are for students to:

- 1) Understand the organization and structure of the construction industry
- 2) Understand the process of project development
- 3) Understand the concepts of engineering economics

STUDENT LEARNING OUTCOMES

To accomplish these objectives, students completing this course are expected to be able to:

- List the segments of the construction industry and explain similarities and differences (1)
- Explain the differences between planning and scheduling (1)
- Describe network analysis, forward and backward pass calculations (1)
- Define project duration, total float, free float, and critical path (1)
- Understand the major issues with construction safety (1)
- Explain the design process (2)
- Define what constitutes plans and specifications (2)
- Define what is meant by "performance vs. design vs. closed specifications (2)
- Describe the generalized steps for developing a detailed estimate (2)
- Understand the analysis of construction cost "S" curves (2)
- Be able to use the concepts of time value of money, equivalence, and compound interest in solving engineering problems (3)
- Understand the present worth, future worth, annual cost, benefit/cost ratio, and rate of return in the solution of engineering economic analysis (3)
- Understand and be able to compute depreciation (3)

COURSE PREREQUISITES

Registration in the College of Engineering and CE 106

INSTRUCTOR

Tim Taylor, Ph.D., P.E. Telephone: 859-323-3680

E-mail: <u>taylor@engr.uky.edu</u> (best way to reach me)

Office: 151A Raymond Building

Office hours: Monday/Wednesday 2:00 – 3:30 pm or by e-mail appointment

CLASS MEETINGS

Tuesdays 11:00 am – 12:15 pm, RGAN-202 Thursdays 11:00 am – 12:15 pm, RGAN-202

TEXTBOOKS (Required)

Construction Contracting, Clough and Sears, 7th Ed., Wiley, 2005.

Schaum's Outline of Engineering Economy, Sepulveda, Soulder & Gottfried, McGraw-Hill, 1984.

COURSE WEBPAGE

Class assignments, announcements, lecture notes, the grade book etc. are available on the course Blackboard Vista page. Students should frequently monitor this webpage for class announcements, schedule changes, assignment changes, etc. To access the course material on the Blackboard page you will need to be enrolled in the course on Blackboard. Everyone who registered for the course should be already enrolled in the course. If you find you are not enrolled, go to http://elearning.uky.edu and sign in using your Link Blue account. Search for and enroll in *CE 303-001 Introduction to Construction Engineering (Spring 2010)*.

If you have never used Blackboard Vista it is recommended that you complete the available "Bb 101 On-line for Students" training session. To enroll in the training course do the following ¹:

- Go to http://elearning.uky.edu and log in with your Link Blue ID.
- Click on the Courses link near the top left of the page (to the right of My Bb and under the Library tab).
- In the Course Search line, type **Bb9-101** (exactly as you see it there, including the dash).
- Find the Course ID (first column) **Bb9-101-OnLine-Stu**, and click the down arrow next to the Course ID.
- From the drop-down menu, click on *Enroll*.
- On the next page, enter the Access Code **bb9-101** (include the hyphen) and click on Submit. You are now enrolled and may proceed with the training course.

Please inform me of any problems in accessing the course Blackboard page.

COURSE REQUIREMENTS

Students are expected to participate actively in class discussions. Completion of class assignments is required to build proficiency and understanding. Reading assignments will be made from the assigned text, from class handouts, and from other sources.

¹ These instruction are taken directly from the TASC site available at http://www.uky.edu/TASC/IT/bb101online.php

<u>CLASS LECTURE SCHEDULE (Preliminary – subject to change, check course webpage)</u>

Week	Tuesday Class Session	Thursday Class Session	
1		Course Intro/Construction Industry	
2	Construction Industry	Business Ownership	
3	Business Ownership	Company Organization	
4	Plans & Specifications	Construction Contracts	
5	Project Management	Project Management	
6	Bonding	Exam No. 1	
7	Exam Passback and Review	Planning, Scheduling, & Estimating	
8	Planning, Scheduling, & Estimating	Planning, Scheduling, & Estimating	
9	Labor Law	Labor Relations	
10	Spring Break		
11	Construction Safety	Exam No. 2	
12	Exam Passback and Review	Engineering Economics	
13	Engineering Economics	Engineering Economics	
14	Engineering Economics	Engineering Economics	
15	Engineering Economics	Engineering Economics	
16	Engineering Economics	Engineering Economics	
	Exam No. 3: Tuesday, May 4 th 10:30 am – 12:30 pm (set by the University)		

ATTENDANCE

Students are expected to attend class meetings and actively participate in class discussions. Students are expected to behave professionally and respect the views of others during discussion periods. Disruptive behavior will not be tolerated and violators will be excused from class. As noted below, a portion of the course grade is determined by class participation and attendance. This portion of your grade will be determined through in-class exercises randomly distributed throughout the semester as well as the instructor's evaluation of your class participation. Unexcused absences will affect this portion of your grade. Excused absences are defined by the University in Section 5.2.4.2 of the *University Senate Rules*. The instructor will **rarely** grant excused absences outside of those defined in the *University Senate Rules*. Students will be allowed to make-up course material missed during an excused absence but will not be allowed to make-up work missed during unexcused absences. If you will miss class (excused or unexcused) it is considered professional courtesy to let the instructor know beforehand by either phone or e-mail.

Students anticipating an absence for a major religious holiday are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays no later than the last day in the semester to add a class. Information regarding dates of major religious holidays may be obtained through the religious liaison, Mr. Jake Karnes (859-257-2754).

GRADING

Course grades will be determined based on the following distribution:

Total	100%
Exam No. 3	25%
Exam No. 2	25%
Exam No. 1	25%
Class Participation and Attendance	5%
Engineering Economics Assignments	10%
Course Part I & II Assignments	10%

Each student will receive the **better** of their External Grade and their Internal Grade, determined as follows:

External Grade

<u>Grade</u>	Course Score
A	90-100%
В	80-89%
C	70-79%
D	60-69%
F	<60%

At the discretion of the instructor, the course scores required for specific external grades may be lowered (allowing more people to get better grades) but will not be raised.

Internal Grade (aka "the curve") -			
	Students Completing		
	Course Getting this		
<u>Grade</u>	Grade or Better		
A	>= 10%		
В	>= 20%		
\mathbf{C}	>= 30%		
D	no minimum		
F	no minimum		

As described by the inequalities, the fraction of the class to receive a specific grade may be increased at the discretion of the instructor (allowing more people to get better grades), but will not be lowered. Undergraduate students will be provided with a Midterm Evaluation (by the midterm date) of course performance based on the grades earned and the criteria in syllabus.

Questions about the grading of assignments should be addressed to the instructor within one week of receiving the grade, or before the last class meeting, whichever comes first. If, after understanding the basis for the grade assigned, you feel that you have provided what is asked for but have not received appropriate credit, write a letter to the instructor specifically pointing out these occurrences and documenting your position, and submit it with the unchanged submittal to the instructor. The instructor will then review the grading and contact you.

EXTRA CREDIT

It is strongly suggested that you come to class prepared. This means completing the assigned readings and reviewing your notes from the previous lecture *before* coming to class. Reading assignments are indicated on the course webpage. To encourage your attendance and review of this material, I will write the name of each student in this class on a playing card. At the beginning of each class I will randomly draw cards one at a time, asking a question of the person whose card is drawn. Questions will cover the reading assignment for that class and the lecture material from the previous class. Unless otherwise indicated, you may <u>not</u> use the textbook, class notes, etc. when answering the questions (i.e. the questions are 'closed book'). If you answer the question correctly, you will receive 1 point. If you answer the question incorrectly you will receive 0 points. I will use this questioning procedure each lecture class day (except for those in which an exam is scheduled or a guest lecturer), reshuffling the cards to begin each class. At the end of the semester your total points earned will be added to each of your exam grades (e.g. if you earn 7 "extra credit" points during the semester and you score 80%, 82%, and 81% on the three exams, your adjusted exam scores will be 87%, 89%, and 88% respectively).

PERMISSION TO DISTRIBUTE MINOR GRADED PAPERS TO CLASS MEMBERS

By your attendance in this class, and having been assigned to read this material, you grant permission for the instructors of this class to return your graded work, other than major exams, during class, by passing it out in a single bundle, for each student to retrieve their own paper. You understand that another student might see your grade, but you are waiving your right to privacy in this instance only. If you do not wish to have your homework paper handed out in class you will notify the instructor in writing, and will instead personally pick up your papers from the TA, upon presentation of a photo ID, at a mutually acceptable time and place. In any case, exam papers will be handed out individually and no student will be permitted to pick up another student's major exam under any condition.

GUIDELINES FOR SUBMISSION OF ASSIGNMENTS AND PROJECTS

All assignments should conform to the following guidelines unless specifically advised otherwise. If these guidelines are unclear, ask the instructor for clarification. It is your responsibility to understand the assignment (what is expected, due date, objectives, criteria for evaluation, etc.) before you hand in the finished product and in time to prepare your submittal by the deadline. Read and start on assignments early enough to provide adequate time for questions to the instructor and to your teammates.

Submittals in this course are like bids, in that they are due on the date and time specified, and extensions are rarely given. Assignments are due at the beginning of class on the due date specified. Late assignments will be accepted only by prior arrangement with the instructor *at least* 48 hours before the assignment deadline. Extensions will be granted only for extreme circumstances beyond the student's control or as defined by the University in Section 5.2.4.2 of the *University Senate Rules*. E-mail submittals will not be accepted except by prior arrangement and extenuating circumstances.

Submittals must be in hard copy, printed, spell-checked, and checked for accuracy. Neatness, grammar, spelling, and organization certainly count in all engineering work so they will count in this course as well. Writing help is available at the University Writing Center at

http://www.uky.edu/AS/English/wc/. Your money (tuition) helps fund the Writing Center so take advantage of it.

Format: Submittals should be organized and easy for the grader to follow. Identify all assumptions made and the sources of all technical information. Identify the answers clearly. Text must be printed or typed in 12 point type and 1 1/2-line spacing. Unless specified in the assignment assume, handwritten work will not be accepted for assignments Necessary handwritten material such as calculations, graphs, and drawings should be large and printed legibly. Provide your name, assignment title, and date at the top of the first page. Number the pages.

Diagrams: Insert diagrams, equations, graphs, etc. into the text near where they are referenced. Figures and tables should be captioned and all figures and tables must be cited in the text.

References: Refer to published material in the text with the authors' last names and year of publication of the reference in brackets, as: (Halpin and Woodhead, 1998); (Vanhoucke et al., 2001); (Forrester 1997). Provide a reference list (alphabetically by the first author's last name) at the end of the text in the following format:

Halpin, D. W., and R. W. Woodhead, *Construction Management*, John Wiley & Sons, New York, 1998.

Vanhoucke, M., E. Demeulemeester, and W. Herroelen, "On Maximizing the Net Present Value of a Project Under Renewable Resource Constraints," *Management Science*, Vol. 47, No. 8, August 2001, pp. 1113-1121.

Refer to oral or unpublished sources as in the following example:

Forrester, J. W., personal communication, 1997.

Summary: Effective communication is essential for success in engineering and project management. Developing that skill requires practice. Be brief, concise, and to the point. Use the spell-checker on the word processor. In the case of team work, every team member should proofread and approve the final document before submittal.

ACADEMIC HONESTY

Academic dishonesty, in the form of plagiarism and cheating, is a large problem at many U.S. universities and it is an issue I take very seriously. No form of scholastic dishonesty will be tolerated in this course. This is consistent with Section 6.3.0 of the University Senate Rules which states that "students shall not plagiarize [or] cheat."

Section 6.3.1 of the University Senate Rules states the following in regards to plagiarism.

"All academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where students feel unsure about a question of plagiarism

involving their work, they are obliged to consult their instructors on the matter before submission.

When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording or anything else from another source without appropriate acknowledgment of the fact, the students are guilty of plagiarism.

Plagiarism includes reproducing someone else's work, whether it be published article, chapter of a book, a paper from a friend or some file, or whatever. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work which a student submits as his/her own, whoever that other person may be. Students may discuss assignments among themselves or with an instructor or tutor, but when the actual work is done, it must be done by the student, and the student alone.

When a student's assignment involves research in outside sources or information, the student must carefully acknowledge exactly what, where and how he/she has employed them. If the words of someone else are used, the student must put quotation marks around the passage in question and add an appropriate indication of its origin. Making simple changes while leaving the organization, content and phraseology intact is plagiaristic. However, nothing in these Rules shall apply to those ideas which are so generally and freely circulated as to be a part of the public domain."

As commonly defined, plagiarism consists of passing off as one's own the ideas, word, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have permission of that person. This includes copying material from books, reports, journals, pamphlets, handouts, other publications, web sites, etc., without giving appropriate credit for those ideas or without identifying material as quotations when taken directly from another source. If you have any doubt, uncertainty, or questions regarding plagiarism while working on an assignment for this (or any other course) please come see me before you turn in the assignment. Additional information on plagiarism is available on the UK Ombud website at: http://www.uky.edu/Ombud/Plagiarism.pdf

Section 6.3.2 of the University Senate Rules states the following in regards to cheating.

"Cheating is defined by its general usage. It includes, but is not limited to, the wrongfully giving, taking, or presenting any information or material by a student with the intent of aiding himself/herself or another on any academic work which is considered in any way in the determination of the final grade. The fact that a student could not have benefited from an action is not by itself proof that the action does not constitute cheating. Any question of definition shall be referred to the University Appeals Board."

Unless specifically allowed in advance by the instructor, all assignments, homework, and exams in this class are expected to be completed based on individual effort. While working within a study group is an acceptable learning method, copying the work and ideas of others is cheating.

Incidents of academic dishonesty in this course will be handled according to policies and procedures outlined in, but not limited to, the University Senate Rules, the Department of Civil Engineering Undergraduate Handbook, the Department of Civil Engineering Graduate Handbook, and the Office of Academic Ombud Services. Please note that the Department of Civil Engineering Undergraduate Handbook states that "The *minimum* penalty for an academic offense is for the instructor to award a grade of zero for the assignment on which the offense occurred, if there are no prior offenses or letters of warning in the student's record" [emphasis added].

ACCOMMODATIONS

If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (Room 2, Alumni Gym, 257-2754, email address jkarnes@email.uky.edu) for coordination of campus disability services available to students with disabilities.