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Fall 2015

ENCE 4399

Gianna Cothren
University of New Orleans

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**ENGR 3090 Senior Seminar
ENCE 4399 Civil Engineering Senior Seminar
Required**

CATALOG DESCRIPTION

ENGR 3090 Senior Seminar

1 cr.

Current topics in engineering and the role of the engineer in today's society, professional ethics, professional registration; and technical societies.

Students are required to take the NCEES Fundamental of Engineering Exam.

ENCE 4399 Civil and Environmental Engineering Online Seminar

2 cr.

Prerequisite: Senior standing in degree program. Not for credit in CEE graduate program. Students will earn professional development hours (cpd's) on topics covering professional, licensure, and ethical responsibilities of the civil engineer. Contemporary issues will also be included to further develop an understanding of the impact of engineering solutions from a global and/or societal context. The ability of students to apply the fundamental knowledge of mathematics, sciences, and engineering will be tested. Passing this course is a requirement for graduation. Classes include a one-hour weekly online review and three-hour weekly problem solving sessions.

Students are required to take the NCEES Fundamental of Engineering Exam.

PREREQUISITES

Graduating Senior in current or following semester (<30 hours remaining, final semester preferred).

TEXTBOOKS AND OTHER MATERIAL

1. FEPREP FE [your Major] Practice Problems (Web Book or Hard Copy) by PPI required
2. FEPREP FE [your major] Review Manual (Web Book or Hard Copy) by PPI recommended. Included with purchase of Practice Problems by PPI.
3. FEPREP FE Electrical Discipline Specific Review by PPI required for EE's, FEPREP FE Review Manual (Web Book or Hard Copy) recommended
4. FEPREP free Study Schedule, PPI (required)
5. FEPREP free Assessment (Do Not use the assessment before instructor approval), PPI (required)
6. Free NCEES FE Supplied-Reference Handbook, NCEES, web version (supplied)
7. Online Course site: <http://uno.mrooms3.net/>

STUDENT LEARNING OBJECTIVES

After successfully completing this course each student will be able to:

1. Solve problems similar to those of the current edition of the National Council of Examiners for Engineering & Surveying (NCEES) Fundamentals of Engineering examination.
2. Give example of the professional and ethical responsibility of an engineer.
3. Explain your profession's typical licensure requirements and professional development requirements.

COURSE TOPICS AND SCHEDULE

- Discipline Specific Fe Exam review (Weekly Assignments up to 13 wks)
- Broad education on impact of engineering solutions in global and societal context (earn the required CPD_h by second to last week of classes)
- Engineering licensure and professional development (earn the required CPD_i by second to last week of classes)
- Contemporary issues topics (earn the required CPD_j by second to last week of classes)
- Professional and ethical responsibility (online assignment for CE students due second to last week of classes)

CONTRIBUTION OF THE COURSE TO MEETING PROFESSIONAL COMPONENT

- Contribution to one and one-half years of engineering topics, consisting of engineering sciences and engineering design: This course reviews basic and applied topics in sub-fields of civil, mechanical, and electrical engineering. It represents an applied side of the subject matter acquired under the previous requirements in the areas of mathematics and science.
- Contribution to proficiency in one of the four recognized major engineering areas: This course contributes to proficiency in the areas of civil, mechanical, and electrical engineering. In civil engineering it contributes to the specialized areas of structural, geotechnical, water resources, and environmental engineering.

RELATIONSHIP OF COURSE TO PROGRAM OUTCOMES

a. An ability to apply knowledge of mathematics, science, and engineering

This course relates to outcome (a) because it represents an applied side of the subject matter acquired under the previous requirements in the areas of mathematics and science.

e. An ability to identify, formulate, and solve engineering problems

This course relates to outcome (e) in that it develops the student's knowledge and ability to formulate and solve engineering mechanics problems by application of the appropriate equilibrium equations. Students successfully completing this course also develop an understanding of the assumptions and limitations of the solution procedure as it relates to engineering systems.

f. An understanding of professional and ethical responsibility

This course relates to outcome (f) in that students review professional and ethical experiences and recommend correct resolutions in the form of test questions. Additionally, students earn and are assessed on a student professional development hour (cpd) concerning professional licensure and ethics.

h. The broad education necessary to understand the impact of engineering solutions in a global and societal context

Students earn and are assessed on a student cpd on a topic related to this outcome.

i. A recognition of the need for, and an ability to engage in life-long learning

Students are required to earn cpd's similar to that required of licensed engineers. This prepares students for engaging in professional development and encourages life-long learning.

j. A knowledge of contemporary issues

Students earn a student cpd and are assessed on a topic related to this outcome.

PREPARED BY

Gianna Cothren, Ph.D., P.E., Associate Professor

08/18/15

ENGR 3090 / ENCE 4399 INTERNET COURSE GUIDE

COURSE DESCRIPTION

The ENGR 3090/ENCE 4399 Internet course has been designed to assist students in their review for the Fundamental of Engineering exam and assess their preparedness on each of the general topics. The results of this assessment are used to indicate the success of our curriculum in providing each student with a good engineering foundation and the ability to apply math, science, and engineering. All communication will take place using Moodle.

There are three objectives for this course.

After successfully completing this course each student will be able to:

1. Solve problems similar to those of the current edition of the National Council of Examiners for Engineering & Surveying (NCEES) Fundamentals of Engineering examination.
2. Give example of the professional and ethical responsibility of an engineer.
3. Explain your profession's typical licensure requirements and professional development requirements.

Students will gain a recognition of the need for, and an ability to engage in life-long learning by participating in the earning of continuing professional development hours (CPD's). Students will meet the following course outcomes by earning 1 student CPD in each of the following areas:

- The broad education necessary to understand the impact of engineering solutions in a global and societal context (CPD (h))
- A recognition of the need for, and an ability to engage in life-long learning (CPD(i))
- A knowledge of contemporary issues (CPD(j))

Opportunities to earn the required CPD credit will be offered through the college during the semester. Other outside opportunities such as conferences, seminars, workshops, and/or speaker presentations will be considered for CPD credit, but must be pre-approved with a flier, brochure, agenda, or brief description. If you have the opportunity to earn credit on your own, send a request via email. Have the speaker or coordinator sign your printed CPD form to demonstrate your attendance.

In addition to the ENGR 3090 requirements, ENCE 4399 students will also attend weekly group review sessions in EN 415 or other EN room to prepare for discipline specific style questions on the exam. These three-hour weekly group study sessions may involve topic review, online tutorials and quizzes, video tutorials, and practice problem solving, etc.

STUDENT/INSTRUCTOR INTRODUCTIONS

The first thing **you must do by the first Friday of classes** in Moodle is click on the Discussion Board/Student Introductions Discussion and write a brief message indicating your engineering **MAJOR**, your **expected graduation date**, your educational goals and plans after graduation, and anything else about yourself that you wish to share. This will be one way for us to introduce ourselves and get you familiar with using the Discussion Board.

REQUIREMENTS

Taking the NCEES Fundamentals of Engineering Exam, review assignments, professional development attendance/participation, and a Fundamentals of Engineering Proficiency Assessment count for 100% of the grade. While it is hoped that you pass the NCEES Fundamentals of Engineering Exam (FE Exam), you do not have to pass the NCEES FE Exam to pass this course, but you must take it – *that is more than registering for it. You must take it and we strongly recommend that you fully participate in this review as an opportunity to prepare well for the NCEES FE Exam, pass it, and become registered as an Engineering Intern (EI).*

Students must pass the UNO proficiency assessment to pass this course. The proficiency assessment is different for each of the different majors. Students who fail to pass the proficiency assessment on the first try will be given one additional opportunity to pass.

The proficiency assessment will be administered online. Students may take this proctored assessment after completing their FE review according to their own review and FE exam schedule. Students may elect to take the proficiency assessment on scheduled dates in the COE, arrange their own proctor, or use ProctorU.

A minimum score of 50% is required on the final proficiency assessment. Students who score $\geq 66\%$ receive a 100 pt A, 58% – 65% an 89 pt B, and 50%-57% a 79 pt C for the proficiency grade in the course.

COURSE GRADE

Assignments	30%	Homework grade
Proficiency Exam	40%	Proficiency assessment will be graded as follows: A $\geq 66\%$ of the FE Proficiency Exam grade (receive 100pts) B 58-65% (receive 89 pts) C 50-57% (receive 79pts)
CPD/Other	30%	
Grading Scale	A	90 and above
	B	80 – 89
	C	70 – 79
	D	60 – 69

A COURSE GRADE CALCULATOR spreadsheet is available in Course Information.

REMEDIATION

Students are required to re-take the class in the event of failing to meet the passing requirements. Additional review classes in selected areas may be required to address specific deficiencies.

SEMESTER SCHEDULE

ENGR 3090 Internet w/ 1 required face-to-face meeting ENCE 4399 Internet plus lab meets Fridays 8:30-11AM
August 28th 10 – 11AM

Office Hours EN 823 10 – 11 AM Monday-Friday or open door policy anytime (I'll let you know if I am not available.) You may also schedule an appointment via email gcothren@uno.edu.

Students will follow their own FE review outline according to their scheduled FE exam date using the free scheduling tool in FEPREP. READ and review the selected topics before completing the HW assignments. Students will complete assignments on each topic using the Discipline Specific Practice Problems (CE, ME, NAME) or FE Review and Electrical Discipline Specific problems (EE). **Assignments must be submitted each week by Monday morning 10:00 AM** in the INBOX outside of EN 823 or in Moodle Assignments weekly by the due date of Sunday midnight each week. 10 points credit will be given to students who submit their correctly completed HW on time. Students **MAY submit assignments EARLIER** according to their FE PREP exam schedule. **NO LATE assignments will be accepted.** The link will turn off and students will not be able to submit late assignments online.

Weekly optional resource/study group sessions will be arranged for the semester. The week day and time will be announced on Moodle. Resources that are available for group review are topic seminars on CD and flash cards.

If you have questions or concerns about the course please post them in Student Questions / Concerns in the Discussion Board.

Indicate that you have read EVERY word of this document by typing “yes” to the Internet Course Guide Question found in Moodle Assignments.

Additional University Information

Important Dates*

Last day to adjust schedule w/out fee	08/18/2015
Semester Classes Begin	08/19/2015
Last day to adjust schedule w/fee, or withdraw with 100% refund	08/25/2015
Last day to apply for December commencement	09/25/2015
Final day to drop a course or resign.....	10/14/2015
Mid-semester examinations	10/05-10/09/2015
Final examinations	12/07-12/11/2015
Commencement	12/18/2015

*Note: check Registrar's website for Saturday and A/B sessions, and for items not listed here:
<http://www.registrar.uno.edu>

Fall Semester Holidays

Labor Day	09/07/2015
Mid-semester break.....	10/15-10/16/2015
Thanksgiving.....	11/26-11/27/2015

Withdrawal Policy – Undergraduate only

Students are responsible for initiating action to resign from the University (withdraw from all courses) or from a course on or before dates indicated in the current Important dates calendar. Students who fail to resign by the published final date for such action will be retained on the class rolls even though they may be absent for the remainder of the semester and be graded as if they were in attendance. Failure to attend classes does not constitute a resignation. Check the dates on the Registrar's website, <http://www.registrar.uno.edu>. Please consult The Bulletin for charges associated with dropping and adding courses.

Incomplete Policy – Undergraduate only

The grade of I means *incomplete* and is given for work of passing quality but which, because of circumstances beyond the student's control, is not complete. The issuance of the grade of I is at the discretion of the faculty member teaching the course. For all graduate and undergraduate students, a grade of I becomes a grade of F if it is not converted before the deadline for adding courses for credit (as printed in the Important Dates Calendar) of the next regular semester including summer semester.

Repeat Policy

When a student is permitted to repeat a course for credit, the last grade earned shall be the one which determines course acceptability for degree credit. A student who has earned a C or better in a course may not repeat that course unless, (1) the catalog description indicates that the course may be repeated for credit, or (2) the student's Dean gives prior approval for documented extenuating circumstances.

Graduate Policies

Graduate policies often vary from undergraduate policies. To view the applicable policies for graduate students, see the Graduate Student Handbook: <http://www.uno.edu/grad/documents/GraduateStudentHandbook2014.pdf>

Academic Dishonesty Policy

<http://www.uno.edu/student-affairs-enrollment-management/documents/academic-dishonesty-policy-rev2014.pdf>

Safety Awareness Facts and Education

Title IX makes it clear that violence and harassment based on sex and gender is a Civil Rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, etc. If you or someone you know has been harassed or assaulted, you can find the appropriate resources here: <http://www.uno.edu/student-affairs-enrollment-management/>
UNO Counseling Services and UNO Cares

UNO offers care and support for students in any type of distress. Counseling Services assist students in addressing mental health concerns through assessment, short-term counseling, and career testing and counseling. Find out more at <http://www.uno.edu/counseling-services/>. First-year students often have unique concerns, and UNO Cares is designed to address those students succeed. Contact UNO Cares through <http://www.uno.edu/fye/uno-cares.aspx>.

Emergency Procedures

Sign up for emergency notifications via text and/or email at E2Campus Notification: <http://www.uno.edu/ehso/emergency-communications/index.aspx>. All emergency and safety procedures are explained at the Emergency Health and Safety Office: <http://www.uno.edu/ehso/>.

Diversity at UNO

As the most diverse public university in the state, UNO maintains a Diversity Affairs division to support the university's efforts towards creating an environment of healthy respect, tolerance, and appreciation for the people from all walks of life, and the expression of intellectual point of view and personal lifestyle. The Office of Diversity Affairs promotes these values through a wide range of programming and activities. <http://diversity.uno.edu/index.cfm>

Learning and Support Services

Help is within reach in the form of learning support services, including tutoring in writing and math and other supplemental instruction. Visit the Learning Resource Center in LA 334, or learn more at <http://www.uno.edu/lrc/>.

Affirmative Action and Equal Opportunity

UNO is an equal opportunity employer. The Human Resource Management department has more information on UNO's compliance with federal and state regulations regarding EEOC in its Policies and Resources website: <http://www.uno.edu/human-resource-management/policies.aspx>

Academic Integrity

Academic integrity is fundamental to the process of learning and evaluating academic performance. Academic dishonesty will not be tolerated. Academic dishonesty includes, but is not limited to, the following: cheating, plagiarism, tampering with academic records and examinations, falsifying identity, and being an accessory to acts of academic dishonesty. Refer to the Student Code of Conduct for further information. The Code is available online at <http://www.studentaffairs.uno.edu>.

Accommodations

It is University policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have disabilities that may affect their ability to participate in course activities or to meet course requirements. Students with disabilities should contact the Office of Disability Services as well as their instructors to discuss their individual needs for accommodations. For more information, please go to <http://www.ods.uno.edu>.

Verification for Online Students

To ensure academic integrity, all students enrolled in distance learning courses at the University of New Orleans may be required to verify their identity when completing exams or other high-stakes assignments. At the discretion of the faculty member teaching the course, verification may include on-campus proctored examinations, off-site or online

proctored examinations, or other reasonable measures to ensure student identity. If students cannot attend an on-campus proctored exam, UNO partners with ProctorU, a live, online proctoring service that allows students to complete exams from any location using a computer, webcam, and reliable internet connection. Verification measures for this course are identified below and any fees associated are the responsibility of the student.

To ensure academic integrity, all students enrolled in distance learning courses at the University of New Orleans may be required to participate in additional student identification procedures. At the discretion of the faculty member teaching the course, these measures may include on-campus proctored examinations, off-site or online proctored examinations, or other reasonable measures to ensure student identity. Authentication measures for this course are identified below and any fees associated are the responsibility of the student.

There will be one proctored proficiency exam. Students will have the choice of attending the proctored exam in EN 411 or 406 scheduled during the semester, arranging a private proctor, or using the Proctor U system for a fee published on the UNO website. The University of New Orleans partners with Proctor U, a live, online proctoring service that allows students to complete exams from any location using a computer, webcam, and reliable internet connection.