

MEMORANDUM FOR STUDENTS ENROLLED IN CENG 4371/5391

SUBJECT: ENGR 4371 or CENG 5391 Administrative Instructions, AY191

1. Welcome to CENG 4371 (CENG 5391) (Environmental Engineering Design), the last of a three course series on environmental engineering which includes Hydrology (CENG 3361), Introduction to Environmental Engineering (CENG 3371) and this design course (CENG 4371). If you are enrolled in the CENG 5391 as a graduate student you will have additional materials to complete for your grade consideration in the course. (See grading section of this memo) During the upcoming semester you will find our study of Environmental Engineering Design to be interesting, challenging, and rewarding. We will meet according to the course schedule which includes the course topics, also found on Attachment 1. The course objectives are found on Attachment 3 and you will also find my bio and contact information as Attachment 2.
2. My teaching schedule includes 1220 MW in RBN 2011, 1800 W in RBS 2019 otherwise you may find me in my office RBS 1005. Please email or call if you need an appointment. If you will miss a scheduled class, you are still responsible for the material.
3. You are welcome to seek additional instruction I have set aside specific time in my Office Hours schedule specifically for CENG 4371/5391 Problem Sessions. Please see the schedule posted on my office window.. I will also be available during my regular office hours. If these hours are not convenient call or email to simply arrange a mutually agreeable time to meet with me. For the sake of your grade please take advantage of my office hours; I have them for your benefit!
4. Class Room Procedures:
  - a. Again this year I will take daily time survey data – please help me by ensuring the Time Survey Sheets are circulated.
  - b. Bring study notes, textbook, note-taking material, straight edge and calculator TO EVERY CLASS. You may not borrow or exchange calculators during graded events. If your calculator fails during a graded exercise, I am not responsible to furnish a substitute. Class preparation is your individual responsibility. Please refer to Calculator Policy.
  - c. Textbook: Water and Wastewater Engineering: Design Principles and Practice (Professional Edition) Davis, M. L., McGraw Hill Publishers, ISBN 0-07-171384-0, or 978-0-07-171384-9), 2010. If you still own a copy of the text from CENG 3371 you may use that as a supplement for your studies. Additionally, there will be handout materials for a substantial portion of the course.
  - d. Read the chapter assignments so that you will be prepared for class discussions. I may have announced and unannounced quizzes over the text assignments if it appears that students are not reading the assigned text materials.
  - e. NOTE: There are two midterm exams and both will be given during an evening exam time as indicated on the schedule. The final exam will be during the regular designated final time.

f. **ACADEMIC DISHONESTY:** Representation of other's work as your own will not be tolerated. Cheating on examinations, quizzes, and homework and the false representation of work will be interpreted as academic dishonesty. Academic dishonesty will be subject to disciplinary action as outlined by the UT Tyler Student Guide on Conduct and Discipline. Please refer to the University of Texas at Tyler current Undergraduate Catalog for academic policies and Manual of Policies and Procedures for Student Affairs (MOPPS, Chapter 8) regarding academic integrity, cheating and plagiarism. Academic dishonesty will not be tolerated. Ignorance of the rules and policies will provide no protection from the consequences.

5. Exams and Grading:

a. Grade Breakout and Cutoffs:

Course Points		Grade Scale	
<b><u>CENG 4371</u></b>			
Hour Exams (2 at 150 each)	300 (15%)	A+ 96.67%	1933
Homework/Problem Sets (10 at 20 each)	200 (10%)	A 93.33%	1866
Design Projects (2 at 300 each)	600 (30%)	A- 90.00%	1800
Project Presentation	200 (10%)	B+ 86.67%	1733
Professional Practice	200 (10%)	B 83.33%	1666
Final Examination	<u>500 (25%)</u>	B- 80.00%	1600
<b>Course Total</b>	2000 (100%)	C+ 76.67%	1533
<b><u>CENG 5391</u></b>			
Graduate Self Learning Project	500 (10%)	C- 70.00%	1400
Graduate Teaching Opportunity	<u>500 (10%)</u>	D 65.00%	1300
Course Total	3000 (100%)	F <65.00%	<1300

You MAY fail this course, if you earn less than 65% on all Exams or if you fail to earn at least 50% on the Final exam, **regardless of your course grade**. Of course, according to UT Tyler grading policies final grades are only A, B, C, D, F and therefore, a C- is a C for a final grade. The distribution provided above is to graphically remind you of how well you are doing and your progress in the course.

b. Hour Exams and Final Exam:

- 1) The dates for Hour Exams are included in the course schedule. The mid-semester exams will be given during a late hour so that you will have additional time to complete the exams. Official reasons for missing an exam include official University participation, family emergency or other unforeseen circumstance. See policies for Student Absence in this syllabus, Section 11 and Section 12 below. Regardless of the reason you are required to notify the instructor prior to the exam and as early as feasible. You are required to take a make-up Exam, regardless of your reason for missing the scheduled Exam. Report any conflict to me as soon as possible prior to the Exam.

- 2) All the Exams and the Final are closed book and notes. You must use an **NCEES approved calculator. All test questions will be formatted in order to use the same calculator that you MUST use for the FE exam.** Non-approved NCEES calculators may not be used for the exams. You will also be allowed the reference sheet supplied by the instructor for each examination.
  - (1) If you are unsure about your calculator, it is your responsibility to check with the instructor for approval.
  - (2) It is recommended that additional batteries be carried with you during exams.
- 3) Solutions to Homework and Exams will be posted on Blackboard. Other class resources as needed will also be posted to Blackboard including PowerPoint reviews of the topics.
- c. The use of any electronic device (laptop/Cell Phone/tablet or similar device), during class and exam is prohibited. Your exam will be collected and your grade will be a zero if you are caught using a non-approved electronic device/calculators. The use of phones and tablets are not permitted for any reason during lectures. The second occurrence of phone use, for any reason, may result in being asked to leave the classroom.

If you plan to record the lectures for your personal use please notify me.

- d. Collection of Student Work: Throughout the semester I will collect student work (best, average, and worst) for the ABET course or program outcomes notebooks. This will require me to make a copy of your work, keep your original and return a copy of the graded work to you. I will not draw attention as to what level of work you accomplished.
  - e. Embedded indicators of accomplishment of program outcomes: At times throughout the semester, portions of student work will be analyzed to determine if our program is accomplishing stated program outcomes based on established metrics. **If your work is below the minimum established metric, you may be required to repeat the assignment or that portion of the assignment until you achieve the minimum acceptable standard based on the metric.**
6. Homework problems will be assigned according to the course schedule. Students may *discuss* their homework solutions with one another, but each student must submit their own solutions, unless it is designated as specifically group work (i.e. you may not just copy someone else's homework). If you receive assistance from a fellow student on a particular problem you must cite that assistance within your solution. Failure to cite assistance will be considered a basis for allegations of academic integrity violations. The homework due date is marked on the attached schedule sheet. Homework is due at the beginning of class. (Prior to lecture beginning). Assignments turned in after class will be considered late and are subject to a 50 percent reduction. *No credit will be given for homework* after the solution has been published on the course management web (Canvas) .

**HOMEWORK FORMAT:** The production of a neat, organized, high-quality homework assignment cannot be overestimated nor can its importance to your course grade be overstated. A homework assignment should be something you are proud of and not something hastily “slapped together”. Toward this end, considerable emphasis will be placed on not only getting the correct answer but also on how the solution is presented.

All homework is mandatory and becomes part of your grade, failure to submit any required homework will result in an incomplete. As an engineer your goal is to make a clear, logical, and professional presentation of your work. As such both your presentation and the accuracy of your work is important, and both will be graded. It is critical that you show all of your work and leave “foot prints” so that it can be easily followed. No guess work should be required to see what you did. All submissions are due at the beginning of class on the due date. In the designated CENG 4371 folder in RBS 1003.

a. Homework - Problem Sets (PS)

- 1) **Use Engineer paper only or full-page printouts from Mathcad, Excel, Visual Analysis, etc.** Appropriately placed in the logical flow of the problem solution and printed on engineering paper. Use only one side of the engineering paper. Clearly present a **brief problem statement or a sketch** with your solution. Clearly and concisely explain each step. For narratives of more than a line or two, use your word processor or the text capability if you are using Excel. If you are writing out a paragraph or more, you must type it in a word processing package..
- 2) **Late Submissions.** It is a basic principle of professionalism that **“Professionals are not Late with their work products.”** Since this is an upper level design course there will be no late work accepted for grade. You may submit assignments late for review; however, you will receive NO points toward your course grade for the submission

However, there are circumstances that will occur and make a timely submission impossible and I will work with you if and when those circumstances legitimately occur.

- 3) All homework in this course must be properly documented. As you are having your work reviewed it is likely that you might receive help from your classmates, just simply document it. Information from the course textbooks (equations and outlines of procedures), class notes, or me is considered immediately available to all students and need not be acknowledged or documented. **YOU ARE REQUIRED TO ACKNOWLEDGE AND DOCUMENT ALL OTHER ASSISTANCE AND REFERENCES USED.** Documentation will be accomplished in accordance with any manual for writing, footnote or endnote, for papers, but for written homework, just place the documentation right at the point you received help using Who and what assistance.
- b. **Assigned readings.** Doing the assigned reading prior to class will help you to understand the material presented during the instruction and will fill in gaps for things we do not cover (***I will not cover everything***). It will also make you more familiar with terms and concepts to be covered. To help motivate you to do the reading there may be unannounced quizzes that cover the assigned sections of the text.
7. **Students Rights and Responsibilities.** To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link:  
<http://www.uttyler.edu/wellness/StudentRightsandResponsibilities.html>

## UNIVERSITY POLICIES AND ADDITIONAL INFORMATION THAT MUST APPEAR IN EACH COURSE SYLLABUS

**UT Tyler Honor Code** Every member of the UT Tyler community joins together to embrace: Honor and integrity that will not allow me to lie, cheat, or steal, nor to accept the actions of those who do.

**Students Rights and Responsibilities** To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link:

<http://www.uttyler.edu/wellness/rightsresponsibilities.php>

**Campus Carry** We respect the right and privacy of students 21 and over who are duly licensed to carry concealed weapons in this class. License holders are expected to behave responsibly and keep a handgun secure and concealed. More information is available at

<http://www.uttyler.edu/about/campus-carry/index.php>

**UT Tyler a Tobacco-Free University** All forms of tobacco will not be permitted on the UT Tyler main campus, branch campuses, and any property owned by UT Tyler. This applies to all members of the University community, including students, faculty, staff, University affiliates, contractors, and visitors. Forms of tobacco not permitted include cigarettes, cigars, pipes, water pipes (hookah), bidis, kreteks, electronic cigarettes, smokeless tobacco, snuff, chewing tobacco, and all other tobacco products. There are several cessation programs available to students looking to quit smoking, including counseling, quitlines, and group support. For more information on cessation programs please visit [www.uttyler.edu/tobacco-free](http://www.uttyler.edu/tobacco-free).

**Grade Replacement/Forgiveness and Census Date Policies** Students repeating a course for grade forgiveness (grade replacement) must file a Grade Replacement Contract with the Enrollment Services Center (ADM 230) on or before the Census Date of the semester in which the course will be repeated. Grade Replacement Contracts are available in the Enrollment Services Center or at <http://www.uttyler.edu/registrar>. Each semester's Census Date can be found on the Contract itself, on the Academic Calendar, or in the information pamphlets published each semester by the Office of the Registrar. Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates are eligible to exercise grade replacement for only three course repeats during their career at UT Tyler; graduates are eligible for two grade replacements. Full policy details are printed on each Grade Replacement Contract. The Census Date is the deadline for many forms and enrollment actions of which students need to be aware. These include:

- Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit.
- Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date)
- Schedule adjustments (section changes, adding a new class, dropping without a "W" grade)
- Being reinstated or re-enrolled in classes after being dropped for non-payment
- Completing the process for tuition exemptions or waivers through Financial Aid

**State-Mandated Course Drop Policy** Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped

after the census date (See Academic Calendar for the specific date). Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must be submitted to the Enrollment Services Center and must be accompanied by documentation of the extenuating circumstance. Please contact the Enrollment Services Center if you have any questions.

**Disability/Accessibility Services** In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University of Texas at Tyler offers accommodations to students with learning, physical and/or psychological disabilities. If you have a disability, including a non-visible diagnosis such as a learning disorder, chronic illness, TBI, PTSD, ADHD, or you have a history of modifications or accommodations in a previous educational environment, you are encouraged to visit <https://hood.accessiblelearning.com/UTTyler> and fill out the New Student application. The Student Accessibility and Resources (SAR) office will contact you when your application has been submitted and an appointment with Cynthia Lowery, Assistant Director of Student Services/ADA Coordinator. For more information, including filling out an application for services, please visit the SAR webpage at <http://www.uttyler.edu/disabilityservices>, the SAR office located in the University Center, # 3150 or call 903.566.7079.

**Student Absence due to Religious Observance** Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester. Student Absence for University-Sponsored Events and Activities Revised 01/18 If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed.

**Social Security and FERPA Statement** It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.

**Emergency Exits and Evacuation** Everyone is required to exit the building when a fire alarm goes off. Follow your instructor's directions regarding the appropriate exit. If you require assistance during an evacuation, inform your instructor in the first week of class. Do not re-enter the building unless given permission by University Police, Fire department, or Fire Prevention Services.

**Student Standards of Academic Conduct** Disciplinary proceedings may be initiated against any student who engages in scholastic dishonesty, including, but not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.

- i. "Cheating" includes, but is not limited to:
  - copying from another student's test paper;
  - using, during a test, materials not authorized by the person giving the test;
  - failure to comply with instructions given by the person administering the test;
  - possession during a test of materials which are not authorized by the person giving the test, such as class notes or specifically designed "crib notes". The presence of textbooks constitutes a violation if they have been specifically prohibited by the person administering the test;

- using, buying, stealing, transporting, or soliciting in whole or part the contents of an unadministered test, test key, homework solution, or computer program;
  - collaborating with or seeking aid from another student during a test or other assignment without authority;
  - discussing the contents of an examination with another student who will take the examination;
  - divulging the contents of an examination, for the purpose of preserving questions for use by another, when the instructors has designated that the examination is not to be removed from the examination room or not to be returned or to be kept by the student;
  - substituting for another person, or permitting another person to substitute for oneself to take a course, a test, or any course-related assignment;
  - paying or offering money or other valuable thing to, or coercing another person to obtain an unadministered test, test key, homework solution, or computer program or information about an unadministered test, test key, home solution or computer program;
  - falsifying research data, laboratory reports, and/or other academic work offered for credit;
  - taking, keeping, misplacing, or damaging the property of The University of Texas at Tyler, or of another, if the student knows or reasonably should know that an unfair academic advantage would be gained by such conduct; and
  - misrepresenting facts, including providing false grades or resumes, for the purpose of obtaining an academic or financial benefit or injuring another student academically or financially.
- ii. “Plagiarism” includes, but is not limited to, the appropriation, buying, receiving as a gift, or obtaining by any means another’s work and the submission of it as one’s own academic work offered for credit.
- iii. iii. “Collusion” includes, but is not limited to, the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any section of the rules on scholastic dishonesty. iv. All written work that is submitted will be subject to review by plagiarism software. UT Tyler Resources for Students
- UT Tyler Writing Center (903.565.5995), [writingcenter@uttyler.edu](mailto:writingcenter@uttyler.edu)
  - UT Tyler Tutoring Center (903.565.5964), [tutoring@uttyler.edu](mailto:tutoring@uttyler.edu)
  - The Mathematics Learning Center, RBN 4021, this is the open access computer lab for math students, with tutors on duty to assist students who are enrolled in early-career courses.
  - UT Tyler Counseling Center (903.566.7254)

Attachments

*Attachment 1*

**COURSE OUTLINE and SCHEDULE (see attached)**

**Topics Covered**

<u>SUBJECTS</u>	<u>LESSONS</u>
Course Introduction	1
Design and construction process	2
Hydraulics and design of distribution and collection systems	6
Design of water treatment plants	4
Design of wastewater treatment plant	6
Storm Water Design components	5
Open Design Topics (To be determined)	2
University Scheduled Study Days**	1
Student design presentations	1
<u>Exams (includes final)</u>	<u>3</u>
Total Lessons	27

*Attachment 2*

**CENG 4371/5391 Environmental Engineering Design**

**Course Objectives:**

1. Apply basic principles of environmental engineering in a design of a water treatment plant and distribution system
2. Apply basic principles of environmental engineering in a design of a waste water treatment plant and collection system
3. Apply basic principles of environmental engineering in a design of a barrier for safety or security from environmental agents/hazards.
4. Analyze the performance of designed environmental engineering processes
5. Evaluate system performance to regulatory limits for water and waste water contamination
6. Modify existing environmental system to address new or changed pollutant demands.
7. Recognize and specify environmental contaminant concentrations to certain human health concerns.
8. Distinguish between the adequacy of design and comparison of environmental control systems