# UNIVERSITY OF TEXAS AT EL PASO
## ENVIRONMENTAL ENGINEERING FUNDAMENTAL
### SYLLABUS
#### FALL 2022

**Course Information:**
CE 2385  CRN 15277  
**Class Time:** MWF 10:30 AM – 11:20 AM  
**Class Mode: In Classroom**

<table>
<thead>
<tr>
<th>Class Meeting Place</th>
<th>Psychology Building RM 115</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructor:</td>
<td>Dr. Henry Van</td>
</tr>
<tr>
<td>Instructor's Office Number/Building</td>
<td>Civil Engineering Room A202</td>
</tr>
</tbody>
</table>
| Office Hours (Dr. Van's) | Tue. - 08:30 AM – 11:30 AM & 1:00 PM – 5:00 PM  
Wed. - 8:00 AM – 11:30 AM  
Thu. - 8:00 AM – 11:30 AM & 1:00 AM – 5:00 PM  
Fri. - 8:00 AM – 11:30 AM & 1:00 AM – 5:00 PM |
| Phone:              | Office: (915) 747-6966, Cell: 915-255-9593 |
| Email:              | hvan2@utep.edu            |
| Teaching Assistant (TA): | Ms. Avianna Gallegos |
| TA Office:          | TBD                       |
| Phone:              | TBD                       |
| Office Hours:       | TBD                       |
| Email:              | Gallegos, Avianna E aegallegos2@miners.utep.edu |
| Librarian:          | Debjani Mukhopadhyay  
dmukhopadhyay@utep.edu |
| Textbook:           | *No Textbook*  
*Dr. H. Van’s His Course Slides* |
OTHER MATERIALS NEEDED:
- One three ring binder or notebook for readings/handouts, class notes, assignments and/or journal entries.
- Access to computer or laptop.
- Scientific calculator.

MATERIALS PROVIDED – POWERPOINT SLIDES & LINKS TO TECHNICAL VIDEOS
- **PowerPoint Slides** of professor’s lessons will be provided in the Blackboard course website.
- Links of places for further reading suggestions in the Blackboard course website.
- **Links for Videos** to further explain topics will be provided. It is critical that you study these videos because they are carefully selected to further clarify technical topics and give excellent photos, diagrams and moving systems that will give you very good understanding how these process systems operate.

COURSE DESCRIPTION

The course is designed to be a survey of various areas that broadly fall under the umbrella of environmental engineering. Many of the topics taught are covered in much more detail in other courses, such as water and wastewater engineering, hydraulic and hydraulic structures, air pollution control, and solid waste management. For successful completion of this course, I expect the students to understand persistent and emerging environmental issues and have a sound understanding of material balance, including how processes work. You will be shown the importance of unit conversions. Further, after completion of this course, students should be able to understand basic considerations in water resources management, water pollution control, water treatment and reclamation, air pollution sources and controls, and solid waste management. Also, key environmental laws and regulations will be discussed to provide you with an understanding of why environmental treatment processes apply. A brief summary of what environmental compliance management is will be provided. There will be discussion of what environmental investigation and remediation is and why they are critical to the regulatory and business sectors.
COURSE OBJECTIVES AND LEARNING OUTCOMES

After completing the course, students should be able to:

- Define and describe the role of Environmental Engineers in identifying and solving problems related to human interaction with the environment (including regulations development and compliance).
- Assess the impact of human activity on the environment (e.g., environmental risk and impact assessment).
- Explain the main concepts and principles that are used to understand and analyze problems related to Environmental and Water Resources Engineering (e.g., design of environmental engineering solutions applicable to real world situations, use of risk assessment in environmental engineering compliance management, transport processes, water resources, design parameters, remediation of contaminated sites, negotiating with regulatory agencies permit and remediation project, etc.).
- Apply scientific and engineering principles for the quantitative analysis of environmental systems (e.g., environmental sampling design and data analysis).
- Learn about the processes and operations aimed to decrease the effects of pollution in the air, water, and land systems.
- Illustrate the impact of engineered systems on the environment and apply current engineering technologies to protect the environment (water, air, and soil).
- Begin synthesizing data to develop solutions to complex environmental problems such as compliance with rigorous laws and regulations.

STUDENT CONDUCT

All students are expected and required to obey federal, state, and local laws, to comply with the Regents' Rules and Regulations, with The University of Texas System and University rules and regulations, with directives issued by an administrative official of the U.T. System or The University of Texas at El Paso in the course of his or her authorized duties, and to observe standards of conduct appropriate for an academic institution.
Syllabus Change Policy

Except for changes that affect the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice. I will keep you informed if it is necessary for me to make changes to the syllabus and will explain the reasons.

UTEP Final Exam Policy

Exemption from final examinations cannot be given. Final examinations are scheduled to be two hours, forty-five (45) minutes in length and take place during the final examination period. It is the policy of the University not to administer a second final examination in a course. It is also University policy that students shall not have more than two final examinations in a single day. In the unlikely event that the examination schedule results in a student having three final examinations on a single day, the faculty member upon the request of the student shall reschedule the second of that student’s three examinations.

Copyright Statement

Some of the materials in this course are copyrighted. Violation of US copyright law can result in civil damages up to $100.000 for each work copied. Copying of textbooks are not “fair use” under the Copyright Act. The “fair use doctrine” only permits non-commercial copying of part (in general, not more than 10%) of a copyrighted work. Do not bring a copied textbook to this class. Your cooperation is expected.

Grading:
- 3 Exams: 45%
- Final Exam: 20%
- Project Report in Word: 20%
- Homework, quiz, class participation, activities, and survey: 15%

Semester Project:
The project will be a team process design engineering project. More information and deadlines about the project will be given at later in a separate Word document.
You will be divided into Teams to work on your project. The teams will be formed by Hector Chacon. The Team Lead (TL) will appointed by the Hector Chacon. The TL will manage the team and will assign the task(s) that each team member needs to do. The TL will report to Hector Chacon the performance of each team member. The performance of each team member will be given points. Any member that does not cooperate will be deducted points from their project grade.

No team member can work on their own on the project. The reason is that the project needs to be done with team collaboration. The team member that does not work with her/his team will be given a zero for the project.

**PROJECT SUBMITTAL:**
The project report will be submitted to your Teaching Assistant on the deadline indicated in the “Course Calendar”.

**HOMEWORK:**
Must be submitted to the Hector Chacon to comply with the deadline. The Hector Chacon will grade all homework.

**EXAMS AND FINAL EXAM:**
Students will be given 3 Exams and 1 Final exam. The exams will be multiple choice and will be set up to be taken via Blackboard. You are required to take the exams and final on time. If you have issues and cannot take the exams when indicated, you need to speak with your Hector Chacon to have the approval to give you the extension. Hector Chacon will consult Dr. Van when necessary to clarify the reasons for giving extension to take an exam. Your reason for requesting an extension should be properly justified.

**CLASS PARTICIPATION AND ACTIVITIES:**
You are expected to participate in class discussions about the diverse topics Dr. Van and Hector Chacon will be lecturing in and the case histories that will be presented.

**COURSE SURVEY:**
There will be an end-of-semester survey. Your participation is important, and it will count as a homework and class activity.
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GRADING SCALE:
100%-90%........ A
89% -80%.........B
79% -70%.........C
69% -60%.........D
59% - 0%......... F

ATTENDANCE: You are required to come to class and be on time. Attendance is especially important since during class you will be given the tools needed to successfully complete this class. You must contact Hector Chacon or Instructor if you know you will be absent either by phone or email. It is your responsibility to get all the lecture notes, assignments, and hand-outs you missed. An excused absence will only be given as described in the undergraduate catalog. Please keep in mind that you will be dropped after 6 unexcused absences. However, if you want to be dropped at any time, you must contact your professor and TA.

MENTORING: If you wish you can meet, on a “One-on-One” mentoring session with you Dr. Van to provide guidance in looking for a job, internship, and other career needs or questions you may have in mind. Please schedule directly with Dr. Van a meeting to talk about your issues.

MISSING ASSIGNMENTS AND EXAMS:
You will be allowed one make-up homework assignment during the course of the semester provided you show proper reason(s). If you need to makeup an exam you need to show your Hector Chacon proper proof that you need to makeup the exam. The Hector Chacon can also decide to discuss your case with Dr. Van.

ACADEMIC CONDUCT:
Academic dishonesty will not be tolerated. You must submit your work only. If you are found to be cheating or plagiarizing, you will be subject to disciplinary action, per UTEP catalog policy (http://www.utep.edu/dos/acadint.htm).
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**CELL PHONE:** All cell phones must be turned off or on vibrate before the beginning of the class. If a student starts using his/her cell phone during class, he/she will have to leave the classroom and may only return with the instructor’s permission.

**HARASSMENT:** Please be aware that harassment is unacceptable in the classroom. No jokes, comments of sexual nature as well as racists will be tolerated. The student that uses harassment will be sent to the Dean of students for disciplinary action.

**SCHOLASTIC DISHONESTY**

Any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes but is 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.

**STUDENTS WITH DISABILITIES POLICY**

Students with Disabilities Policy: If you have or suspect a disability and need an accommodation, you should contact the Center for Accommodations and Support Services at (915) 747-5148 or at cass@utep.edu or go to Room 106 Union East Building.

**ACADEMIC CALENDAR FALL 2022 DATES:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>Mar 28th</td>
<td>Fall Registration Begins</td>
</tr>
<tr>
<td>Aug 11th</td>
<td>Last Day to Clear Students on Suspension/Probation as well as those with Insufficient Prerequisites</td>
</tr>
<tr>
<td>Aug 12th</td>
<td>Drops for Students with Unsatisfactory Academic Standing, Insufficient Prerequisites, and Prior Grades of C in the Course</td>
</tr>
<tr>
<td>Aug 15th</td>
<td>Financial Aid is Disbursed</td>
</tr>
<tr>
<td>Aug 22nd</td>
<td>Fall classes begin</td>
</tr>
<tr>
<td>Aug 22nd-26th</td>
<td>Late Registration (Fees are incurred)</td>
</tr>
<tr>
<td>Sept 5th</td>
<td><strong>Labor Day Holiday – University Closed</strong></td>
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<tr>
<td>Sept 7th</td>
<td>Fall Census Day</td>
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Note: This is the last day to register for classes.
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>Sept 19th</td>
<td>20&lt;sup&gt;th&lt;/sup&gt; Class Day</td>
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<tr>
<td></td>
<td>Note: Students who were given a payment deadline extension will be dropped at 5:00 pm if payment arrangements have not been made.</td>
</tr>
<tr>
<td>Sept 30th</td>
<td>Graduation application deadline for degree conferral</td>
</tr>
<tr>
<td>Oct 28th</td>
<td>Fall Drop/Withdrawal Deadline</td>
</tr>
<tr>
<td></td>
<td>Note: Student-initiated drops are permitted after this date, but the student is not guaranteed a grade of W. The faculty member of record will issue a grade of either W or F.</td>
</tr>
<tr>
<td>Nov 11th</td>
<td>Deadline to submit candidates’ names for degree conferral</td>
</tr>
<tr>
<td>Nov 24-25th</td>
<td>Thanksgiving Holiday - University Closed</td>
</tr>
<tr>
<td>Dec 1st</td>
<td>Fall – Last day of classes</td>
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<tr>
<td>Dec 2nd</td>
<td>Dead day</td>
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<tr>
<td>Dec 5-9th</td>
<td>Fall Final Exams</td>
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<tr>
<td>Dec 10-11th</td>
<td>Fall Commencement</td>
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<tr>
<td>Dec 14th</td>
<td>Grades are Due</td>
</tr>
<tr>
<td>Dec 15th</td>
<td>Grades are posted to student records; students are notified of grades and academic standing</td>
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**Payment Deadlines**

For more information on payment deadlines, visit the [Student Business Services Website](#)