

### **SYLLABUS**

# CHEE 400/500A – Environmental Engineering Laboratory I

Location and Times:											
CHEE 400A- 001 (38322)	Environmental Engineering Lab (Laboratory)	6	Day / Time		Location University of Ari Main		izona -	Aug xx, 20xx- Dec xx, 20xx			
CHEE 400A- 001A (61341)	Environmental Engineering Lab (Lecture)	Day	/ / Ti	Time Location		on	University of Arizona - Main		Aug xx, 20xx- Dec xx, 20xx		
CHEE 500A- 001 (38321)	Environmental Engineering Lab (Laboratory)		4	Day /	Time Location		tion l	University of Arizona - Main		Aug xx 20xx- Dec xx 20xx	
CHEE 500A- 001A (63901)	Environmental Engineering Lab (Lecture)		4	ay / me	Locat	ion I	Univers Main	ity of Arizona -	Aug xx, 20 Dec xx, 20		

#### **Instructor and Contact Information**

Instructor: Dominic Gervasio

Office location: 146A Harshbarger, Phone: 267 230 5563, email: gervasio@email.arizona.edu

Office Hours: "Open Door Policy" or please schedule a meeting

Web information, including course home page, instructor home page, and D2L information TBD

### **Course Objectives and Expected Learning Outcomes**

During the course, the students will foster and develop rational thought processes as they pertain to the proficient and safe operation of environmental engineering processing units. Students will analyze data obtained from engineering unit operations and tell technical information they learned through the writing of reports and as well as clear oral presentations and communication during teamwork.

#### **Learning outcomes:**

- Ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
- Ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- Ability to communicate effectively with a range of audiences
- Ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors

## **Absence and Class Participation Policy**

The UA's policy concerning Class Attendance, Participation, and Administrative Drops is available at: <a href="http://catalog.arizona.edu/policy/class-attendance-participation-and-administrative-drop">http://catalog.arizona.edu/policy/class-attendance-participation-and-administrative-drop</a>

The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable, <a href="http://policy.arizona.edu/human-resources/religious-accommodation-policy">http://policy.arizona.edu/human-resources/religious-accommodation-policy</a>.

Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored. See: <a href="https://deanofstudents.arizona.edu/absences">https://deanofstudents.arizona.edu/absences</a>

Participating in the course and attending lectures and other course events are vital to the learning process. As such, attendance is required at all lectures and laboratory section meetings. Students who miss class due to illness or emergency are required to bring documentation from their health-care provider or other relevant, professional third parties. Failure to submit third-party documentation will result in unexcused absences.

☐ Long pants, closed toed shoes, and safety glasses MUST be worn in the laboratory at all times.

#### **Required Texts or Readings**

**Lab Protocol** 

Class notes and assigned reading TBD

# Assignments and Examinations: Schedule/Due Dates

Lab coats and Safety Glasses are provided. If you are not dressed appropriately, you will not
be allowed to participate in the laboratory experiment and you will receive <u>2 grades</u> less than
your laboratory partners (i.e. An A lab report will become a C for the individual).
If you are more than 5 minutes late for lab or leave early, then you will receive one grade less
than your partners.
Contacts may not be worn during the Reactor experiments.
All laboratory data sheets must be signed by the TA or instructor at the end of the laboratory period. All computer data must be sent to D2L within 24 hours of the laboratory experiment.
Laboratory write ups are due 1 week after the laboratory experiment was completed. They are due at the beginning of the next laboratory class (i.e. 5 pm). Laboratory reports and pre-labs will be penalized 5% per hour for being late. Requirements and rubric will be emailed (or posted
on D2L TBD). All reports must be submitted as soft copy via email (or to D2L TBD) and <b>as a</b>
hard copy.
Pre-labs are required for the RO (both weeks). If not complete, you may not begin the lab. These are to be submitted via email (to D2L TBD) 24 hours before you start the lab at 5 pm. They will be checked for completeness at that time. Bring a hardcopy to Lab for reference.
Pre-labs for the Reactor labs due 48 hours after the first time you attend lab (Friday at 5 pm). It will be graded and returned prior to your second lab session. Submit via email (or to D2L TBD).
Attendance is expected in the lecture and will affect your participation grade.  For Grad Students, lab reports are individual assignments

### **Final Examination or Project**

There is no final examination or project in this course

### **Grading Scale and Policies**

3 Labs @ 30% Each 90% Attendance/Participation – 10% **Specific Lab Score Breakdown** 

RO	Pre-Labs 10%	Lab Report 90%			
Design a Labs	Pre-Lab 10%	Written PPT and Oral presentation 90%			
AOPs	Pre-Lab 10%	Lab Report 90%			

### **Scheduled Topics/Activities**

This laboratory experience focuses on unit operations and processes commonly applied in environmental engineering and supports fundamental concepts developed in required courses for Environmental Engineering majors. Individual and group reports and oral presentations will serve as vehicles for the development of technical communications skills. 50 minutes lecture and two and a half hours of laboratory per week during 6 weeks.

#### Threatening Behavior Policy

The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself. See <a href="http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students">http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students</a>.

#### **Accessibility and Accommodations**

At the University of Arizona we strive to make learning experiences as accessible as possible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, you are welcome to let me know so that we can discuss options. You are also encouraged to contact Disability Resources (520-621-3268) to explore reasonable accommodation. For additional information on the Disability Resource Center and reasonable accommodations, please visit <a href="http://drc.arizona.edu">http://drc.arizona.edu</a>. If our class meets at a campus location: Please be aware that the accessible table and chairs in this room should remain available for students who find that standard classroom seating is not usable.

### **Code of Academic Integrity**

Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog. See: <a href="http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity">http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity</a>.

The University Libraries have some excellent tips for avoiding plagiarism, available at <a href="http://new.library.arizona.edu/research/citing/plagiarism">http://new.library.arizona.edu/research/citing/plagiarism</a>.

Selling class notes and/or other course materials to other students or to a third party for resale is not permitted without the instructor's express written consent. Violations to this and other course rules are subject to the Code of Academic Integrity and may result in course sanctions. Additionally, students who use D2L or UA e-mail to sell or buy these copyrighted materials are subject to Code of Conduct Violations for misuse of student e-mail addresses. This conduct may also constitute copyright infringement.

### **UA Nondiscrimination and Anti-harassment Policy**

The University is committed to creating and maintaining an environment free of discrimination; see <a href="http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy">http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy</a>

Our classroom is a place where everyone is encouraged to express well-formed opinions and their reasons for those opinions. We also want to create a tolerant and open environment where such opinions can be expressed without resorting to bullying or discrimination of others.

#### **Additional Resources for Students**

UA Academic policies and procedures are available at http://catalog.arizona.edu/policies

### **Confidentiality of Student Records**

 $\frac{http://www.registrar.arizona.edu/personal-information/family-educational-rights-and-privacy-act-1974-ferpa?topic=ferpa$ 

#### **Subject to Change Statement**

Information contained in the course syllabus, other than the grade and absence policy, may be subject to change with advance notice, as deemed appropriate by the instructor.

#### Schedule (Please check D2L for most current one)

Fall 20x	x 400A/500A Sch	edule							
		Wednesday labs							
Monday Lecture		Date	DOL	UV	RO 1	RO 2	RO 3		
xx-Aug	Intro	xx-Aug No class							
xx-Sep	Labor Day	xx-Sep	Class Safety Tour						
xx-Sep	RO	xx-Sep			UG				
xx-Sep	RO	xx-Sep			UG	G1	G2		
xx-Sep	UV	xx-Sep		UG		G1	G2		
xx-Sep	DOL	xx-Oct	G1	UG					
xx-Oct	UV/DOL	xx-Oct	G1	G2					
xx-Oct	UV/DOL	xx-Oct	UG	G2					
xx-Oct	UV/DOL	xx-Oct	UG	G1					
xx-Oct	UV/DOL	xx-Oct	G2	G1					
xx- Nov	UV/DOL	xx-Nov	G2						
xx- Nov	Veterans day	xx-Nov	No class						
xx- Nov		xx-Nov							
xx- Nov		xx-Nov							
xx-Dec		xx-Dec							
xx-Dec		xx-Dec	last day of semester						