

Basic Course Information					
Semester:	Fall 2022	Instructor Name:	Marcos Tarazon		
	WT 150 - Wastewater				
Course Title & #:	Collection System	Email:	marcos.tarazon@imperial.edu		
CRN #:	10909	Webpage (optional):			
Classroom:	1307	Phone Cell #:	760-791-9532		
Class Dates:	8/18/2022 ~ 12/8/2022	Office Hours:			
Class Days:	Thursday	Office Phone #:			
Class Times:	6:00PM~10:15PM	Emergency Contact:	760-791-9532		
Units:	4.0	Class Format:			

Course Description

This course covers proper installation, inspection, operation, maintenance, and repair of wastewater collection systems. It provides the knowledge and skills to effectively operate and maintain collection systems. It also provides knowledge as to why collection systems affect treatment facilities and how they have a significant impact on the operation and maintenance costs and effectiveness of these systems. (CSU).

Course Prerequisite(s) and/or Corequisite(s)

Wastewater Treatment 130

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to: 1.- Identify and properly operate each component of a wastewater collection system. (ILO2, ILO3, ILO4) 2.- Describe and understand importance of standard operating procedures within a wastewater collection system. (ILO2, ILO3, ILO4, ILO3, ILO4) 3.- Describe and correctly restore abnormal conditions in a wastewater collection system. (ILO2, ILO3, ILO4, ILO3, ILO4) 4.- Identify equipment used during maintenance of wastewater collection system. (ILO4)

Course Objectives

Upon satisfactory completion of the course, students will be able to: 1. Demonstrate knowledge of health hazards caused by untreated wastewater flowing down streets and watercourses during stoppages and storms. 2. Understand system failures that result from the lack of proper installation, inspection, preventative maintenance, surveillance, and repair programs designed to protect the public's investment in these facilities. 3. Learn how to prevent odors in collection systems, lift stations, and treatment plants caused by collection system problems. 4. Explain how shock loads from the clearing of stoppages affect wastewater treatment processes. 5. Learn how to prevent corrosion damages to equipment and structures in collection systems and treatment plants. 6. Identify inflow and infiltration, major cause of decrease capacity of treatment facilities. 7. Learn how to prevent noise pollution from collection systems (noisy manhole lids) and lift stations; and learn how to handle. 8. Handle complaints from the public or local officials due to the unreliability of the collection system.



Textbooks & Other Resources or Links

Textbook Needed: **Operation and Maintenance of Wastewater Collection Systems** (Water Programs Sacramento State)

Book may be ordered at IVC Library or link to order on website: <u>Wastewater Courses (csus.edu)</u>

Course Requirements and Instructional Methods

Required materials: Notebook, pen and pencil with eraser, calculator with at least 9 digits capability (not programmable), solar power recommended. Cell phones will not be allowed as calculator. No red pens or pencils.

Assignments: Will be made in class/homework, and will not be accepted late. Assignments will be both individual and group work, and will include presentations.

Out of Class Assignments: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time <u>and</u> two (2) hours of outof- class time per week over the span of a semester. WASC has adopted a similar requirement.

Course Grading Based on Course Objectives

Exam grade scale is strictly base on score percentage. No partial credit will be given for math. All work must be shown for credit. You are strongly advised to be present for all exams. Make up test, unless due to special circumstances, will not be granted. Grade scale is as follows:

100 - 90%	~	Α
89 - 80 %	2	В
79 - 70 %	2	С
69 - 60 %	1	D
59 % or	2	F
less		

Course Policies

Attendance:

• A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to



add a class. It is the student's responsibility to drop or officially withdraw from the class. Failure to drop the class will result in an "F" for the semester. See <u>General Catalog</u> for details.

- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

Classroom Etiquette:

- <u>Electronic Devices:</u> Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor.
- <u>Food and Drink</u> are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed by the instructor.
- <u>Disruptive Students</u>: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the <u>General Catalog</u>.
- <u>Children in the classroom:</u> Due to college rules and state laws, only students enrolled in the class may attend; children are not allowed.

Online Netiquette:

- What is netiquette? Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word. Basically, netiquette is a set of rules for behaving properly online.
- Students are to comply with the following rules of netiquette: (1) identify yourself, (2) include a subject line,

(3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use appropriate language,

(10) use appropriate emoticons (emotional icons) to help convey meaning, and (11) use appropriate intensifiers to help convey meaning [do not use ALL CAPS or multiple exclamation marks (!!!!)].

Academic Honesty:

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property.

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

- <u>Plagiarism</u> is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to "cite a source" correctly, you must ask for help.
- <u>Cheating</u> is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of



the academic assignment in question.

Anyone caught cheating or plagiarizing will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the <u>General Catalog</u> for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment; (e) using a commercial term paper service.

Other Course Information

N/A

IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <u>http://www.imperial.edu/studentresources</u> or click the heart icon in Canvas.

Anticipated Class Schedule/Calendar

WT 230 – Wastewater Treatment Operator II Course Outline				
DATE	CHAPTER(S)	ΤΟΡΙϹ	ASSIGNMENT	
August 18, 2022		Introduction & Course overview		
August 25, 2022	1	WW Collection Op. & Why WW Op. Maint.	Class Practice	
September 1, 2022	2	Wastewater Collection Systems	Class Practice	
September 8, 2022	2	Wastewater Collection Systems		
September 15, 2022	3	Safe Procedures	Class Practice	
September 22, 2022	3	Safe Procedures	Class Practice	
September 29, 2022	4	Inspecting and Testing Collection Systems	Class Practice	
October 6, 2022	4	Inspecting and Testing Collection Systems		
October 13, 2022	5	Pipeline Cleaning and Maintenance Methods	Class Practice	
October 20, 2022	5	Pipeline Cleaning and Maintenance Methods	Class Practice	



October 27, 2022	6	Underground Repair Construction	Class Practice
November 4, 2022	6	Underground Repair Construction	
November 11, 2022		Holliday	
November 18, 2022	Apenx A	Intro Math	Class Practice
November 24, 2022		Review	Class Practice
December 1, 2022	All Chapters	Review	Class Practice
December 8, 2022	All	Final	Final