

**IVC Course Syllabus
Wastewater Collection Systems WT150
Fall 2013**

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Course Code/CRN: WT 150 / 10916

Units: 4.0

Room: 1308 / Building 1300 (Thursdays 5:50pm ~ 10:10pm)

Textbook: **Operation and Maintenance of Wastewater Collection Systems**
6th Edition, by Kenneth Kerri
California State University Sacramento
Ph. : (916) 278 - 6142 Fax # : (916) 278 - 5959
ISBN : 1-884701-43-4 (Volume I)
Website : www.owp.csus.edu

Course Description and Objectives: This course is designed to provide wastewater collection systems operators with the knowledge and skills where possible to effectively operate and to maintain collection systems, thus eliminating or reducing the following problems:

- * Health hazards caused by untreated wastewater flowing down streets and watercourses during stoppages and storms.
- * System failures that result from the lack of proper installation, inspection, public's investment in these facilities.
- * Odors from the collection system, lift stations, and treatment plants caused by collection system problems.
- * Shock loads from the clearing of stoppages that affect wastewater treatment processes.
- * Corrosion damages to equipment or structures in collection systems and treatment plants.
- * Inflow and infiltration that use a valuable portion of the capacity of the facilities.
- * Noise pollution from collection systems (noisy manhole lids) and lift stations.
- * Complaints from the public or local officials due to the unreliability of the collection system.

Required Material(s): 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.**

Prerequisite: WT 105 - Computational Procedures for Treatment Plant Operator I.

Exam and Grade Policy: Exam grade scale is strictly base on score percentage. No partial credit will be given for math. All work must be shown for credit. Grade scale is as follows:

100-90%	-	A
89-80%	-	B
79-70%	-	C
69-60%	-	D
59% or less-		F

Final grade shall consist of:

Attendance & Class Participation	-	25%
Chapter exams	-	25%
SLO Assignment	-	25%
Final Exam	-	25%
		<u>100%</u>

Attendance: Roll call will be conducted during the first five minutes of class. This course adheres to college attendance and drop policies. Regular attendance and class participation is expected. Tardiness is considered negligence and is strongly discouraged. Only three absences excused or unexcused will be allowed during the semester.

Students will not be dropped from the class. Students are responsible for dropping classes. Failure to drop the class will result in an F for the semester.

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.

Field Trips: If any, they will be scheduled as needed. Great efforts by the Institution and instructors are involved and your attendance is expected.

Classroom Policy: You are strongly advised to be present for all exams. Make up test, unless due to special circumstances, will not be granted. Cheating on an exam will result as an F score for that exam. Cheating on the Final will result as an F for the semester. Food and drinks will not be allowed in the classroom, only bottled water. Cellular phones and pagers are to put on silent mode or turned off during class. This syllabus **may be modified** at the instructor's discretion as necessary to meet the needs of the course.

Student Outcomes: Understand the problems and safety issues related to collection systems and effectively operate and maintain most collection systems with the proper use of tools and equipment, thus eliminating or reducing the following problems common in the collection of water wastes. After completing this course, it is expected that students will..

- A.- Demonstrate knowledge of Health hazards caused by untreated wastewater flowing down streets and watercourses during stoppages and storms.
- B.- Understand system failures that result from the lack of proper installation, inspection, preventive maintenance, surveillance, and repair programs designed to protect the public's investment in these facilities.
- C.- Learn how to prevent odors in collection systems, lift stations, and treatment plants caused by collection system problems.
- D.- To explain how shock loads from the clearing of stoppages affect wastewater treatment plants.
- E.- Learn how to prevent corrosion damages to equipment and structures in collection systems and treatment plants.
- F.- Identified Inflow and infiltration, major cause of decrease capacity of treatment facilities.
- G.- Learn how to prevent noise pollution from collection systems (noisy manhole lids) and lift stations.
- H.- Handle complaints from the public or local officials due to the unreliability of the collection systems.

Fall 2013 Semester Calendar:	
Date	Chapter and Assignment
* August 22, 2013	Introduction, objectives, and course overview.
* August 29, 2013	Chapters 1 and 2 lecture/discussion.
* September 5, 2013	Chapter 3 lecture/discussion.
* September 12, 2013	Chapter 3 review. Math introduction.
* September 19, 2013	Chapters 1-3 exam.
* September 26, 2013	No class scheduled. Instructor out of town.
* October 3, 2013	Chapter 4 lecture/discussion.
* October 10, 2013	Chapter 4 lecture/discussion.
* October 17, 2013	Chapter 5 lecture/discussion.
* October 24, 2013	Chapter 5 review and Math.
* October 31, 2013	Chapters 4 - 5 exam.
* November 7, 2013	Chapter 6 lecture/discussion.
* November 14, 2013	Chapter 6 review and video. Chapter 7 lecture.
* November 21, 2013	Chapters 1 - 6 exam / (SLO).
* November 28, 2013	No classes scheduled. Thanksgiving.
* December 5, 2013	Final Exam.

Disability Policy:

Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible.

DSP&S
Room 2117
Health Sciences Building
(760) 355-6312

Approval of Syllabus		
_____	_____	_____
Course Instructor	Signature	Date
_____	_____	_____
Department Chair	Signature	Date