Course Name	**Sanitary Drainage Systems**
Credit Hours	4 Hours
Instructor(s)	Randy Drake
Fee	$40.00
Reference Materials	2021 Edition of the International Plumbing Code 2021 Edition of the Uniform Plumbing Code

Course Description

This course on sanitary drainage systems (SDS) is tailored for plumbing professionals and presents the general principles involved in designing, installing, and maintaining efficient sanitary drainage systems in residential and commercial settings. It examines the components of a well-designed SDS and provides insight into:

- proper installation practices,
- sizing methods,
- fluid dynamics,
- materials selection,
- and alternative systems.

The course also examines grease interceptors, their importance, and F.O.G. Participants will gain foundational knowledge and insight for further study and practice. This course emphasizes the importance of SDS in public health and environmental protection.

Learning Objectives

At the completion of the course, plumbers will be able to:

- Understand the general principles of planning, installing, and maintaining sanitary drainage systems.
- Explain the basic components of a well-designed sanitary drainage system and their functions.
- Identify appropriate materials for sanitary drainage systems and the planning required for proper installation.
- Identify selected alternative sanitary systems and methods.
- Interpret relevant building codes and standards to ensure compliance and enhance system safety.
- Describe common types of grease interceptors and their role in sanitary drainage systems.
- Understand the critical role of sanitary drainage systems in public health and environmental protection by preventing contamination and ensuring effective wastewater management.

Equipment Requirements

You must have an active, working internet connection to access this course online, as well as a platform to access the internet, such as a computer, tablet, or phone. All popular web browsers are supported, including Google Chrome, Mozilla Firefox, Safari, and Opera. No specialized software, speaker, microphone, or web camera is required.

Schedule and Location

This course is available online at any time at www.TradesmanCE.com. Upon enrolling in the course, Learners will have six (6) months from the date of enrollment to complete their course. However, this time frame may be shortened or lengthened if course expiration dates or regulatory requirements dictate otherwise.

Student Support

Both general and technical support is available to the student before, during, and after taking the course online. Students have access to general customer support via phone, chat, and email. Students have access to the course instructor via email. All questions, concerns, and comments received will be responded to within one business day.

Definition of Attendance

To be considered as "attending" a course, learners must log in to the Learning Management System (LMS) and complete all course materials, including any mandatory quizzes, exams, and interactive components. Simply logging in is not sufficient; active engagement with all required elements is essential. Learners will have six (6) months from the date of enrollment to complete their course. However, this time frame may be shortened or lengthened if course expiration dates or regulatory requirements dictate otherwise.

Student Support

Both general and technical support is available to the student before, during, and after taking the course online. Students have access to general customer support via phone, chat, and email. Students have access to the course instructor via email. All questions, concerns, and comments received will be responded to within one business day.

Participation Guidelines

All learners are expected to:

- Complete 100% of the required components of the course.
- Adhere to any specified deadlines within the course timeline.
- Engage with course materials in a consistent and timely manner to remain in good standing.

Failure to complete required components within the designated timeframe may result in loss of access to the course or forfeiture of any certifications or credit hours.

Accountability Measures

To ensure academic integrity and compliance with regulatory standards:

- Each learner must access the LMS using a unique username and password.
- Additional security measures, such as security questions or biometrics, may be implemented based on regulatory requirements.
- An inactivity timer is in place within the LMS. Learners who are not actively engaging with course content will be automatically logged out after a period of inactivity.

Sanitary Drainage Systems Timed Outline

Section	Title	Questions	Minutes
1	Introduction	1	4.2
2	Basics of Sanitary Drainage Systems		2.3
	Components of Sanitary Drainage Systems		13.1
	Fluid Dynamics	3	3.2
3	Sizing of Systems	1	5.1
	Determining System Drainage Load		3.4
	Continuous and Intermittent Flow Considerations		4.3
	Pipe Sizing Methods		2.8
	Tables and Charts	3	6.3
4	Installation	1	9.9
	Installation Techniques		11.6
	Post-Installation	3	3.3
5	Codes and Standards	1	4.9
	UPC and IPC		5.2
	Comparison of UPC and IPC		7.1
	Local and State Regulations		2.2
	ADA Compliance	3	5.1
6	Technical Considerations: Design and Engineering Principles	1	6.7
	Hydraulic Load Calculations		2.8
	Pipe Gradient and Flow Rates	3	9.5
7	Technical Considerations: Materials and Equipment Standards	1	7.9
	Innovation in Materials and Technology		0.9
	Case Study: The AGU Building	3	8.5
8	Alternative Sanitary Systems and Methods: Eco-Friendly and Sustainable Practices	1	6.2
	Recyclable Materials in Construction	3	13.2
9	Alternative Sanitary Systems and Methods: Advanced and Non-Traditional Systems	1	12.1
	Constructed Wetlands	3	7.8
10	Grease Interceptors: Functionality and Efficiency	1	6.1
	Types of Grease Interceptors	3	12.8
11	Grease Interceptors: Installation and Maintenance	1	16.4
	Cleaning Protocols and Maintenance Schedules	3	8.1
12	Conclusion		3.9
	Totals:	**40**	**216.9**
	Student Minimum Time Required:		**200**