



Wayne County Community College District

COURSE SYLLABUS

WET 101 Water Treatment Technologies

CREDIT HOURS: 3.00

CONTACT HOURS: 45.00

COURSE DESCRIPTION:

This course will cover the conventional water treatment processes. Topics to be explored will include: preliminary treatment, coagulation, and flocculation, sedimentation and clarification, filtration, and disinfection.

PREREQUISITES: *NONE*

EXPECTED COMPETENCIES:

Upon successful completion of this course, the student will be able to:

- Students will understand the general history of drinking water quality and its impact on human health and economic health.
- Understand the basic tenants of laws and regulations that govern drinking water quality
- Understand the basic tenenats of laws, statutes and regulations that govern occupational health and safety
- Understand source water protection
- Knowledge of human resource regulations and associated regulatory requirements
- Understands project management coupled with the ability to work as part of a team
- Provide concise descriptions and instructions regarding the repair of equipment and instruments
- Provide concise descriptions and instructions regarding for the procurement of equipment
- Understand the basic physical and chemical aspects of water treatment
- Perform physical, chemical and microbiological tests for evaluating the treatment processes
- Perform physical, chemical and microbiological tests for compliance monitoring
- Understand the goals of process optimization
- Attain computer literacy for the purpose of data entry, data analysis and reporting
- Attain computer literacy for the purpose of operating SCADA systems
- Understand key operational issues, costs, efficiency, violations, staffing, training and consulting

ASSESSMENT METHODS:

Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.



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GRADING SCALE:

90%-100% = A

80%-89.9% = B

70%-79.9% = C

60%-69.9% = D

<60% = E