

NEW COURSE

Division: Applied Technology & Transportation
Department: WATER SUPPLY TECHNOLOGY
Course ID: WST050
Course Title: Water Technology Mathematics
Units: 3
Lecture: 3
Laboratory: None
Departmental Advisory: MATH 942 or Math 942 A, B, and C with a grade of C or better or eligibility for Math 952 as determined through the SBVC assessment process.

Catalog Description: Basic mathematical calculations used in the operation and evaluation of conventional water and wastewater treatment processes. It includes wastewater collection, treatment and disposal. Course material parallels problems found on the State Certification examination.

Schedule Description: Basic mathematical calculations used in the operation and evaluation of conventional water and wastewater treatment processes.

Effective: FA2007

Rationale: The 104th congress made extensive changes to the Safe Drinking Water Act (SDWA.) Among the changes, the SDWA 1996 amendment mandated that many more system operator be certified for proper system operation. This law has resulted in much greater demand for licensed operators. Approximately 30% of the questions in the licensing examination pertain to applied mathematics problems. Many of our students are weak in mathematics skills. This is specialized mathematics course which emphasizes the areas of mathematics, which water treatment operators need to know to pass the licensing examinations and in order to work successfully in a treatment facility. All the students coming into our WST 140, WST 142 and WST 146 classes would be given a short test to test their knowledge of mathematics as related to water technology. If they do not pass the test, then they would be advised (not mandatory) to take WST 050 course. A student may choose not to take the WST 050 course and find other means to learn the mathematics required to successfully complete the course.