COC Water Technology Certification/Associate’s Degree Program:

**Core Courses (Five Required)**

- WATER 020 – Introduction to Water Technology
- WATER 030 – Waterworks Mathematics
- WATER 031 – Advanced Waterworks Mathematics
- WATER 032 – Water Supply
- WATER 035 – Water Quality

**Advanced Courses (Two Required, Either)**

- WATER 040 Water Distr. I  OR  WATER 050 Water Treat. I  OR  WATER 060 Wastewater Treat. I
- WATER 041 Water Distr. II  AND  WATER 052 Water Treat. II  AND  WATER 061 Wastewater Treat. II

Course Description:

Explores the technologies, potential career opportunities and the State of California certification requirements in the water industry. Topics include water sources, water quality, water treatment, water distribution, and related topics.

Student Learning Outcomes:

The student will be able to:
1. Analyze general concepts of water works technology and their role in public health and safety.
2. Explain college course work required to achieve a water works industry career.

Course Objectives:

1. Describe the various aspects of drinking water and related industries.
2. Identify potential water sources and treatment technologies.
3. Interpret state and federal water quality regulations.
4. Diagram conventional and alternative water treatment processes.
5. Examine potential water treatment and distribution technologies, facilities, and systems.
6. Compare and contrast various treatment technologies.
Course Prerequisites:

This is an introductory course, and there are no prerequisites or recommended courses for this course.

Class Information:

Location: This course is 100% Online!
Instructor: Stephen J. McLean, P.E.
Phone No.: 661-312-5463
e-mail: stephen.mclean@canyons.edu
Web Site: http://bb.canyons.edu

Recommended Textbooks & Materials:

While not required for this course, the “Water Supply Operations” series of five books from the American Water Works Association is highly recommended. These books are used in other courses in the COC Water Technology program, so you may be purchasing them in the future.

Also, some research and reading will be required on the Internet. Facilities for Internet access are available for free student use in the Library and the TLC on the Valencia and Canyon Country campuses at COC.

Course Schedule: See attached Course Schedule.

Grading:

Grade Elements:

Weekly Quizzes (7 @ 20 points each) 140 points
Weekly Assignments (8 @ 20 points each) 160 points
Final Exam 100 points
Total Possible 400 points

Minimum Points Required per Grade:

A 360 points
B 320 points
C 260 points
D 200 points

Finally, NO CHEATING! Please refer to the COC Statement on Academic Integrity and Plagiarism Approved by the Academic Senate in May, 2010, for our college’s expectations in this regard. For failing to live up to these standards in this course, you will be subject not only to complete forfeiture of the grade on the affected assignment, but also to disciplinary action by the college.
Online Assignments and Expectations:

You will be required to visit the Blackboard site for the course at least once each week. To do so, log on to: http://bb.canyons.edu. If you are new to Blackboard, go to www.canyons.edu, click on the “Blackboard” tab, and click on “Blackboard Assistance” for information on how to access the site and accomplish everything you will need to do online.

Each week you will see a new folder in Blackboard under the heading “Weekly Assignments” which will guide you through your course work for the week. These may include videos you need to watch, web sites you need to visit, textbook reading assignments, online discussions in which you need to participate, and even online quizzes you need to complete. But everything you need to accomplish online each week will be clearly identified in the Weekly Assignment folder in Blackboard.

**IMPORTANT NOTE:** If you fail to complete two consecutive weekly assignments, you will be dropped from the class roster.

Minimum Online Capabilities

To successfully complete this course, you will need at least the following:

- Access to a computer with Internet access (Computers are available for student access in the COC library and the Tutoring Centers on each campus.)
- A very basic (beginner’s level) ability to “browse” among and within various web sites

If you have difficulty with these, please contact the Instructor or find “Student Support” help online at the COC Blackboard/Distance Learning site noted above.

Other Notes

Please be prepared: you may encounter “technical difficulties” along the way. If so, please keep trying and, if necessary, contact the Instructor. Generally, with or without online activities, you should expect to spend about 18 hours during the week working on this course: your normal six hours of “classroom” time plus two hours outside of class for every hour normally in class, for an additional twelve hours.

Absolutely no late assignments will be accepted, unless you contact the Instructor in advance and have a very convincing reason for your tardiness (i.e., major illness in the immediate family, home destroyed by a natural disaster, etc.) There is plenty of time allotted to complete all the assignments, and plenty of notice regarding their nature and due dates as well.

Technical difficulties do not constitute a natural disaster. As noted above, you should expect and plan on such difficulties. If one web site doesn’t work, please try another. If your computer is lost or stolen, use the facilities on campus.

Please contact the Instructor by e-mail if you have any questions during the week. We expect to be able to respond to you within 48 hours of your message.