

**J. Sargeant Reynolds Community College  
Course Content Summary**

**Course Prefix and Number:** ENV 40      **Credits:** 2

**Course Title:** Basic Wastewater Licensure Review

**Course Description:**

Review materials which are normally associated with the Wastewater Treatment Plant Operator's Class IV or Class III level certification examinations. Utilizes lecture, audiovisual, and workshop sessions to review required materials and to prepare the trainee to complete the wastewater operator examinations. Lecture 1 hours. Laboratory 2 hours. Total 3 hours per week.

**General Course Purpose:**

This course is designed to address the education requirements of both operators working in the wastewater industry and students interested in entering the wastewater /water industry. Work experience requirements must be met before students are eligible to take an examination for certification. This course will use the Association of Boards of Certification (ABC) Water Treatment Need-to-Know Criteria. The Need-to-Know describe the competencies tested on the ABC Wastewater/Water Treatment Standardized Exams used by the State of Virginia Department of Professional and Occupational Regulation (DPOR) Operator Certification Program.

**Course Prerequisites and Co-requisites:**

None

**Student Learning Outcomes:**

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

- Analyze wastewater treatment parameters for state certification exams and wastewater treatment
- Examine calculated data to determine process efficiency and make process changes.
- Analyze regulatory compliance sampling for wastewater treatment facilities
- Analyze, evaluate, predict use inductive or deductive reasoning to arrive at a solution

**Major Topics to Be Included:**

- Source Water Characteristics
- Laboratory Data Analysis
- Equipment Operations and Maintenance
- Treatment Process
- Security and Safety Compliance

**Effective Date/Updated:** January 26, 2023