

CE 418 FIRST EXAM STUDY GUIDE

Format will be **Closed Book/Closed Note** (equations supplied)

CHAPTERS 1, 2, 8 & 9

You should reread all material assigned in the class syllabus

You should review the board notes presented in class.

Descriptive Portion (60%)

You should be able to describe in your own words and apply and assess any terms and concepts related to the topics below.

1. Water quality and water technology based standards
2. Primary and Secondary water treatment standards
3. Secondary and Tertiary wastewater standards
4. Typical (based on source water) water treatment flow process diagrams and unit purpose-related names
5. Typical activated sludge and trickling filter wastewater treatment flow process diagrams and unit purpose-related names

Computational Portion (40%)

You should be able to demonstrate by computation that you can

1. Apply calculations for a single BOD test
2. Apply calculations using the time variation of BOD results
3. Calculate the various solids concentrations from water sample tests
4. Apply waste loading calculation equations in the waste load allocation process