NYU Tandon School of Engineering
Department of Civil and Urban Engineering
Course Outline CE 7373 Environmental Chemistry and Microbiology I
Spring 2017
Tuesday 6:00 to 8:30; RH304

To contact professor: dolman2000@gmail.com, Phone: 917-502-5784
Office hours: Tuesday 12:00 ~ 5:00 or by appointment

Course Pre-requisites
Students must have strong background on General Chemistry and Microbiology.

Course Description
The main purpose of this course is to develop better understanding on Water Chemistry and Microbiology.

Course Objectives
Students are expected to:
- Develop a strong foundation on water chemistry and microbiology
- Apply their understanding of the concepts, methods and applications on real situations

Course Structure
Lecture 1: Introduction of Chemistry and Microbiology
Lecture 2: Chemical Kinetics and Equilibrium
Lecture 3: pH and neutralization (part 1)
Lecture 4: pH and neutralization (part 2)
Lecture 5: pH and neutralization (part 3)
Lecture 6: Solubility Product and Application of Solubility
Lecture 7: Midterm exam
Lecture 8: Coordination Chemistry
Lecture 9: Precipitation and Dissolution
Lecture 10: Oxidation and Reduction Reaction
Lecture 11: Organic Chemistry
Lecture 12: Microbiology
Lecture 13: Bioassay and Application
Lecture 14: Final exam

Readings
The required text for the course is:

Course requirements
Class participation and attendance are important for this course and will be factored into your final grade. If you fail to satisfy the basic requirements on attendance and class participation, your final grade will be down graded.
Final grade

- Homework and lab reports 25%.
  Homework problems will be assigned regularly. Assignments to be turned in at the beginning of class on the due date, and late submission is not acceptable. No homework may be submitted after an assignment is returned or after solutions are provided. No homework assignments shall be returned to the students.

- Midterm 35% (date will be decided)
  One two-hour midterm exam will be given as noted on the exam schedule below. The midterm exams sheets will be returned to the students for review in class.

- Final 40% (date will be decided)
  A two and a half hour final exam will be given as determined by the University Final Exam Schedule (noted on the exam schedule below). Final exams sheets will not be returned, but will remain on file in the instructor’s office for a minimum period of time. Makeup exams will be given only if prior permission is granted for extreme situations such as valid medical reasons.

- Highest score of the Final exam will be awarded A….good luck!

- Any kinds of dishonorable conduct will be “F”