

2015 Fall Biology 3610: Environmental Biology Course Outline **[August 24, 2015 Final]**

Instructor: Dr. Wensheng Qin
Homepage: <http://flash.lakeheadu.ca/~wqin/>
Email: wsteaching@gmail.com
Office: CB 4016 (Tel: 343 8467)

TA: Shafiqur Rahman
Email: mrahman7@lakeheadu.ca
Tel: 766-7141 (Lab: CB 3037)

Office Hours: CB4016, Tuesday, 4:00 am to 5:00 pm, or by appointment

Lecture

Location: BB 1021

Time: Tuesday & Thursday: 2: 30-4:00 pm

Duration: 2015/09/14 - 2015/12/07

Credits: 0.50

General information for TA: (1) Help administer quizzes and exams, (2) Help marking, (3) Upload student marks to the D2L website, (4) Answer student's questions when possible, by emails or meetings.

Textbook: Environmental Science, 5th Edition, Bill Freedman (**Required for 5th edition, not 4th edition**)

Schedule

September 15: Introduction & Chapter 1: Ecosystems and Humans

September 17: Chapter 4: Energy and Ecosystems

September 22: Chapter 5: Flows and Cycles of Nutrients

September 24: Chapter 7: Biodiversity

September 29: Chapter 8: Biomes and Ecozones

October 1: Chapter 9: Ecology: From Individuals to the Biosphere

October 6: Chapter 12: Resources and Sustainable Development

October 8: Chapter 13: Non-renewable Resources & **Quiz One (15%, 45 minutes, chapter 1, 4, 5, 7, four chapters, October 8, 2015)**

October 13: Chapter 14: Renewable Resources

October 20: Chapter 15: Pollution and Disturbance as Environmental Stressors

October 22: Chapter 16: Gaseous Air Pollution

October 27: Mid-term exam (Chapters 1, 4, 5, 7, 8, 9, 12, 13; eight chapters). Short answer and/or long answer questions + multiple choices questions. TA will help administer the exam.

October 29: Chapter 17: Atmospheric Gases and Climate Change

November 3: Chapter 18: Toxic Elements

November 5: Chapter 19: Acidification

November 10: Chapter 20: Additional Problems of Surface Waters

November 12: Chapter 21: Oil Spills & **Quiz Two (15%, 45 minutes, chapter 14, 15, 16, 17, four chapters, November 12, 2015)**

November 17: Chapter 22: Pesticides

November 19: Chapter 23: Environmental Effects of Forestry

November 24: Chapter 24: Agriculture and the Environment

November 26: Chapter 27: Ecologically Sustainable Development

December 1: Guest speaker presentation or Group Poster Competition

December 3: [Last Class] General Review & Questions

Additional Requirements:

(1). Preview the textbook and think about the questions in the chapter(s) before the applicable class. 2). Review the textbook and try to answer the questions in the chapter(s) after the class. (3). Read the entire lectured chapters for exams (PPT slides information is not enough).

Grading Scheme:

1. Two Quizzes [30%]: Some sample questions will be given in the classes before the Quiz One.

Quiz One (15%, 45 minutes, chapter 1, 4, 5, 7, sixty multiple choices questions and/or True/False questions, 0.25% each. October 8, 2015).

Quiz Two (15%, 45 minutes, chapter 14, 15, 16, 17, sixty multiple choices questions and/or True/False questions, 0.25% each. November 12, 2015).

2. Mid-term exam [30%]: Evenly cover Chapters 1, 4, 5, 7, 8, 9, 12, 13; eight chapters. Short answer and/or long answer questions (10%) + multiple choices questions (20%, 80 questions, 0.25% each). TA will help administer and mark the exam. Duration is 75 minutes.

3. Final exam [40%]: Will consist of short answer and/or long answer questions (10%) and multiple choices questions (30%, 120 questions, 0.25% each). Duration is 3 hours. Evenly cover chapters 14-24 and 27 (twelve chapters).

4. Bonus points: [1] 4 attendance bonus points (only for the students attended the classes, once again, only for the attended students! We will have five attendance signatures. You will get the full 4 attendance bonus points as long as you sign no less than four times). You will automatically get one bonus point for getting yourself family with the course outline, you may lose this bonus point if you are not family with the course outline. For the attendance bonus points, I will forward you the signing sheet as below: Please initial your name inside the square. If you cannot find your name in the form due to your late registration, please write your name neatly in the blank square and initiate your name. The total bonus points will be uploaded to the D2L website at the end of the semester, once again at the end of the semester. A bonus point can be counted as higher or less than 1% and add to your final grade, depending on the class average of marks from quizzes and examinations. [2] Other bonus points may be awarded when necessary, such as class survey or pop quiz, if the class average is too low. [3] Whispering in class may cause loss of bonus points or something else (may be discussed in the class).

Name	Signature 1	Signature 2	Signature 3	Signature 4	Course outline bonus point	Total bonus points

N.B. Up to 5% of the exam questions may be from class lectures which are not covered in the textbook and/or Powerpoint slides). This may include new environmental biology knowledge from new literature or governmental policy reports presented in class. Quiz and Exam related information will be emphasized in normal classes.