and 4 hours every Friday!!!!

A weekly handout will be given and the lectures will be posted on the web.

Course Grade:

Final Examination	**45 %**
Mid-Term Test	**35 %**
One (1) Written Assignment	**20 %**

Prerequisites: No prior knowledge of environmental science is required.

N.B. ***Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the***

_____***. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.***

TENTATIVE COURSE OUTLINE

Jan 8 **ORIENTATION**
Course Outline; Lecture Schedule

UNDERSTANDING POLLUTION
Humans are massively changing the Earth
Why does pollution happen?
Global pollution and global environmental health
Root causes
Our actions have consequences

Jan 15 **GLOBAL CLIMATE CHANGE (PART I)**
A warming Earth
Greenhouse gases and their sources

Jan 22 **GLOBAL CLIMATE CHANGE (PART II)**

Lake Washington
Lake Nyos

Mar 19 **GREAT LAKES ECOLOGY-FOOD WEB DYNAMICS**
Great Lakes Water Quality Agreement
Eutrophication problems in:
(i) Lake Erie; (ii) Lake Superior; (iii) Lake Michigan, (iv) Lake Huron;
(v) Lake Ontario
Invasive Species
Biotic Resistance Model-Invasional Meltdown Model
Examples

Mar 26 **AN INCONVENIENT TRUTH & GLOBAL WARMING (THE SIGNS AND THE SCIENCE)**

Apr 2 **MATHEMATICAL MODELS & ENVIRONMENTAL MANAGEMENT**
Models as a Management Tool
Models as a Scientific Tool
Modelling Elements
The Modelling Procedure
Selection of Model Type
Selection of Model Complexity and Structure
Evaluation of the Current State of Mechanistic Aquatic Biogeochemical Modeling

READINGS

The required textbook for this course is:

483 Td ( )Tj 4 Hill, Marquita K. (2004). *Understanding Environmental Pollution (2*