LAKES REGION COMMUNITY COLLEGE

379 Belmont Road
Laconia, NH 03246
(603) 524-3207

COURSE OUTLINE/SYLLABUS SHEET

- **COURSE NO:** ENVS150L
- **COURSE TITLE:** Environmental Science
- **CREDIT HOURS:** 4.00
- **SEMESTER:** Spring 2023
- **INSTRUCTOR NAME:** Matt Simon
- **E-MAIL ADDRESS:** msimon@ccsnh.edu
- **OFFICE LOCATION:** 248 Health Sciences Building
- **CONFERENCE HOURS:** Wednesday 1pm-4pm; Thursday 11am-2pm; by appointment
- **PREREQUISITES:** None
- **COURSE DESCRIPTION:** This course provides an introduction to environmental science as a complex, interdisciplinary, scientific area of study. The focus of this course is on the scientific and ecological principles basic to understanding environmental issues. Major themes examined include water quality, human population, sustainability, biodiversity, and the relationship between human society and the natural world. Coursework will include lecture, laboratory exercises, field trips and in-class discussions.
- **TEXT/INSTRUCTIONAL MATERIALS AND EQUIPMENT NEEDED:**
  - **Environment**
    Author: Withgott
    Edition: 6th
    ISBN: 9780134204888
    Copyright Year: 2018
    Publisher: Pearson
  - **Composition Book**
- **GRADING:**

  Exam 1 – 15%
  Exam 2 – 15%
  Exam 3 – 20%
  Lab Assignments – 15%
  Discussion Participation – 10%
  Quizzes 10%
  Ecosystem Assignment – 15%

EXAMS 1, 2 – Each of these exams will cover the material since the previous exam (they will **not** be cumulative exams). Exams will consist of short-answer style questions. Exams will be graded out of 100.

EXAM 3 (final exam) – This exam will focus most heavily on the material covered after Exam 2. However, it **will** have a cumulative aspect to it. Exam will consist of short- and long-answer style questions. This exam will be graded out of 100.

LAB ASSIGNMENTS – Lab assignments will include written responses to questions in the lab handouts, problem sets, and other small assignments.

DISCUSSION PARTICIPATION – Each week will include a good deal of discussions on relevant applications of the lecture topics. Active participation in these discussions is expected.

QUIZZES – Weekly quizzes will be given over Canvas on the most recent course material. Quizzes will consist of multiple choice and short-answer style questions.

ECOSYSTEM ASSIGNMENT – See handout for details.

Grades for all assessments and assignments will be posted online on Canvas prior to being returned in class.

To calculate your class grade at any time, use the following equation:
(Average Exam 1-2 grade * 0.30) + (Final Exam grade * 0.20) + (Average Lab Assignment grade * 0.15) + (Discussion Participation grade * 0.10) + (Average Quiz grade * 0.10) + (Ecosystem Assignment grade * 0.15)

Grading Scale:

A	93-100	B	83-86	C	73-76	D	63-66
A-	90-92	B-	80-82	C-	70-72	D-	60-62
B+	87-89	C+	77-79	D+	67-69	F	0-59

COURSE OUTCOMES/COMPETENCIES:
Upon completion of this course, each student should be able to:

1. Describe the scientific method
2. Define sustainability
3. Explain the concepts behind environmental law and policy
4. Explain the laws of thermodynamics
5. Describe the earth's structure
6. Describe organism and population ecology
7. Explain the process of evolution
8. Describe the dynamics of human population growth
9. Explain the flow of energy in ecological systems
10. Explain the impact of disturbance on community change
11. Describe the geography of biomes
12. Define biodiversity
13. Explain threats to and conservation of biodiversity
14. Describe long term climate patterns
15. Explain causes of natural climate variation
16. Define the greenhouse effect
17. Explain ways of mitigating and adapting to climate change
18. Describe the causes and impacts of air pollution

19. Describe the hydrologic cycle and earth's water budget
20. Explain methods of water management and conservation
21. Describe air and water resources policy and law
22. Explain the history of agriculture and its role in human populations
23. Describe agroecosystems
24. Define sustainable forest management
25. Explain the consequences of deforestation
26. Explain the types of nonrenewable resources that are used to produce energy
27. Describe an overview of renewable energy sources

- **COURSE SCHEDULE:**
  - This is an online course, which means that you will be able to complete the course and all assignments without ever attending an in-person class or zoom session. You will need to pay close attention to each weekly module in Canvas to know what assignments to complete and turn in each week.
  - In addition, I will hold a weekly 1-hour zoom session on Tuesdays from 10-11am that will be designated time for you to access me with any questions that can't be handled over email. You can think of this time as Environmental Science-specific office hours. You may log into my zoom room during this hour to ask questions about course content, assignments or anything else on your mind. This will be available (but not mandatory) each week of the semester.
  - Below you will find the weekly schedule in terms of content. You should complete the reading listed for each week in the textbook and refer to Canvas for weekly to-do lists and assignment due dates.

Class Dates	Topics/Textbook Readings
January 17-22	**Introduction to Environmental Science and the Earth** *Reading: Chapter 1 (All), Chapter 2 (pgs 20-32)*
January 23-29	**Biodiversity** *Reading: Chapter 3 (pgs 46-58, 67-69), Chapter 11 (pgs 271-280)*
January 30-February 5	**Introduction to Ecology** *Reading: Chapter 3 (pgs 58-67)*
February 6-12	**Environmental Health** *Reading: Chapter 14 (All)*
February 13-19	**Community Ecology** *Reading: Chapter 4 (All)*
February 20-26	**Ecosystem Ecology** *Reading: Chapter 5 (pgs 102-116)* EXAM 1
February 27-March 5	**Human Population** *Reading: Chapter 8 (All)*
March 6-12	**Environmental Ethics** *Reading: Chapter 6 (All)* **Environmental Policy** *Reading: Chapter 7 (pgs 158-174)*
March 13-19	SPRING BREAK
March 20-26	**Sustainable Agriculture and Forest Management** *Reading: Chapter 10 (All), Chapter 12 (All)*
March 27-April 2	**Fossil Fuels** *Reading: Chapter 19 (pgs 514-529)*
April 3-9	**Air Quality and Pollution** *Reading: Chapter 17 (All)* EXAM 2

April 10-16	**Global Climate Change** *Reading: Chapter 18 (pgs 478-488)*
April 17-23	**Water Resources and Urban Environment** *Reading: Chapter 15 (pgs 402-411), Chapter 13 (All)*
April 24-April 30	**Sustainability** *Reading: Chapter 24 (All)*
May 1-5	**Presentations/Exam Prep** *None* EXAM 3

*** I reserve the right to make changes to this schedule as needed. Students will be informed of changes as they arise.**

- **COURSE POLICIES/STUDENT RESPONSIBILTIES**
  - Students should read the assigned material in the text as well as any supplemental resources posted on Canvas each week as assigned.
  - Students are responsible for all material covered according to the above schedule and in accordance with what is posted in the weekly Canvas modules.
  - Makeup exams will not be offered. Failure to turn in an exam by its due date will result in a grade of 0 for that exam.
  - Cheating of any kind will result in the recommendation to the administration that the student be expelled from the class.
  - Specific policies of this course follow those stated in the LRCC Student Handbook. Students are expected to become familiar with these policies prior to beginning this course.

- **ATTENDANCE AND LATE WORK POLICIES**
  - **Attendance**
    This section of ENVS150L is an online course. Your attendance will be judged by your successful meeting of deadlines and due dates spelled out in the weekly Canvas modules.

    Students missing three (3) consecutive weeks of due dates without contacting me may be withdrawn from the course and receive a grade of "AF."
  - **Late Work**
    Assignments in this class will always be due by 11:59pm on the Sunday of the week that they were assigned. Late work will not be accepted unless worked out with me ahead of time. In situations where late work is accepted, it will be accepted at anytime during the week after the deadline with a penalty of 20%.

- **DIVERSITY, EQUITY AND INCLUSION STATEMENT**

The content of this course is designed to challenge your viewpoints and perspective as part of your learning experience. It is my intent that students from all backgrounds and perspectives are well-served by this course. Students' learning needs will be addressed both in and out of class, and the diversity of students will benefit the class and will be considered a resource and strength. Materials and activities presented in class will respect diversity including: gender identity, sexuality, disability, age, socioeconomic status, ethnicity, race, nationality, religion, and culture.

- Discuss privately with me if you feel your success in the class is being impacted by experiences outside of class. I am always open to listening to students' experiences and want to find acceptable ways to process and address the issue.
- If you feel that something offensive occurred regarding DEI topics in class (by anyone) that made you feel uncomfortable, please let me know.

- Please make me aware if you have a name and/or set of pronouns that are different from those appearing on your official records.
- I encourage you to seek out other resources, such as an academic advisor or another trusted faculty member, if you feel more comfortable addressing issues with these individuals. Anonymous feedback can be submitted here.

It is my hope that this course meets your every expectation as a challenging, engaging, respectful learning experience. If you find this not to be the case, I would welcome the opportunity to address your concerns. This is not only a courtesy, it is a matter of process and procedure outlined in the LRCC Student Handbook. Should we fail to arrive at a mutually satisfactory understanding, you should refer the matter to my immediate supervisor Steve Freeborn, sfreeborn@ccsnh.edu).