



# SCHOOL OF STEM SYLLABUS



**TERM:**

**COURSE CODE:** ENV-103

**COURSE TITLE:** Sustainability and Conservation

**DAY(S) AND TIME(S):**

**LOCATION:**

**INSTRUCTOR:**

**OFFICE HOURS:**

**OFFICE LOCATION:**

**EMAIL:**

**PHONE:**

**COURSE PREREQUISITE:** Complete ENG-101, Exit Basic Math and Basic Algebra.

**CREDITS:** 3

**COURSE DESCRIPTION:**

This course introduces principles and practices of sustainability and conservation. It explores the origins and evolution of the discourse surrounding the idea of sustainable development, as it applies to local and global processes and practices. Other topics include: population and consumption, sources of energy, and climate change.

**STUDENT LEARNING OUTCOMES:**

Upon completion of this course, you should be able to:

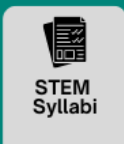
- Describe and understand the fundamentals of Sustainability
- Understand The recent shift to sustainability and conservation
- Describe current energy generation processes
- Describe current and future clean energy generation processes.
- Understand Climate change and its effects on the world.

**GRADING POLICY:**

Attendance	15%
Participation	20%
Final Project outline	10%
Discussions	25%
Final Project	30%

## STEM STUDENT HUB

Information & Resources tailored towards students taking any STEM courses



**SAMPLE COURSE SCHEDULE:**

Week	Topic
1	<p>Introduction and Course Overview</p> <p>Lecture 1 <b><u>History of Human induced disasters</u></b></p> <ul style="list-style-type: none"> <li>- Historical human influenced environmental disasters.</li> </ul>
2	<p><b>Discussion 1 Due: 1/31/24</b></p> <p><b><u>History of Environmental Agencies</u></b></p> <ul style="list-style-type: none"> <li>- Review the history of EPA, NJDEP, County Agencies</li> <li>- Review and discuss the areas of focus for agencies.</li> <li>- Discuss how level of governmental agency interacts with one another.</li> </ul>
3	<p><b>Discussion 2 Due: 2/7/24</b></p> <p><b><u>Brief History of Conservation and Sustainability</u></b></p> <ul style="list-style-type: none"> <li>- Its place in the history of the United States</li> <li>- Teddy Roosevelt and John Muir's role</li> <li>- US Forestry Service</li> <li>- Earth Day</li> </ul>
4	<p><b>Discussion 3 2/7/24</b></p> <p><b><u>Local Sustainability efforts</u></b></p> <ul style="list-style-type: none"> <li>- Local and community Sustainability efforts</li> <li>- What cities towns and states have implemented to improve sustainability.</li> </ul>
5	<p><b>Discussion 4: 2/14/24</b></p> <p><b><u>Modern conservation and local efforts</u></b></p> <ul style="list-style-type: none"> <li>- Local Conservation efforts and laws.</li> <li>- Conservation efforts of local groups.</li> </ul>

6	<p><b>Discussion 5: 2/28/24</b></p> <p><b><u>Endangered Species Act and success stories</u></b></p> <ul style="list-style-type: none"> <li>- Endangered species act history and the successes the act has accomplished.</li> </ul>
7	<p><b>Discussion 6 : 3/6/24</b></p> <p><b>Final Project outline discussion</b></p> <p><b><u>Environmental careers and possibilities</u></b></p> <ul style="list-style-type: none"> <li>- Discussion of environmental careers and the future of the of profession</li> </ul>
8	<p><b>Discussion 7: 3/13/24</b></p> <p><b><u>Corporate Environmental and changes surrounding</u></b></p> <ul style="list-style-type: none"> <li>- There has been a large shift in corporate sustainability for the better.</li> <li>- Guest speaker Director of Sustainability</li> </ul>
9	<p><b>Discussion 8: 3/20/24</b></p> <p><b>Final Project outline due</b></p> <p><b><u>Climate change and its impacts</u></b></p> <ul style="list-style-type: none"> <li>- Greenhouse effect</li> <li>- Effect on ocean water levels</li> <li>- World temperature trends</li> <li>- World agreements to protect the Environment.</li> </ul>
10	<p><b>Discussion 9: 4/3/24</b></p> <p><b><u>Non-Renewable Energy generation and trend</u></b></p> <ul style="list-style-type: none"> <li>- Review and discuss the current energy generation mix</li> <li>- What has caused this to occur and what trends we will see into the future.</li> </ul>

11	<p><b>Discussion 10: 4/10/24</b></p> <p><b><u>Clean Energy policy and Renewable energy generation</u></b></p> <ul style="list-style-type: none"> <li>- Discuss the history of the renewable energy</li> <li>- Explore the current renewable energy generation options.</li> <li>- Electric car policy</li> <li>- Wind energy policy in NJ</li> </ul>
12	<p><b>Discussion 11: 4/17/24</b></p> <p><b><u>The future of Sustainability and Conservation</u></b></p> <ul style="list-style-type: none"> <li>- The future of the sustainability movement and the possibilities it holds.</li> <li>- Small nuclear reactors</li> <li>- Conservation efforts and challenges that it faces.</li> </ul>
13	<p><b>Discussion 12 : 4/23/24</b></p> <p><b><u>TBD</u></b></p>
14	<p><b><u>Final Preparation and review of project</u></b></p>
15	<p><b>Final project presentation</b></p>

**HCCC POLICIES, STATEMENTS, AND SERVICES:**

<https://www.hccc.edu/administration/academic-affairs/syllabus-addendum.html>



