**Intro to Environmental Studies**

**Oakland University, College of Arts and Sciences, Department of Chemistry**

# Course Information

**Course number** – ENV 3080, **CRN** - 13078

Winter 2025, Math and Science Complex (MSC), Room 388, 4 credits

#### Tuesday and Thursday 10:00 – 11:47 AM / 1-7-25 to 4-22-25

**Course Description -** Survey of a broad range of environmental issues from a scientific viewpoint. Basic ecological and thermodynamic principles with applications to air, water and land pollution; human demography and food supplies; alternative futures. Prerequisite(s): sophomore standing.

**General Education requirement -** *Satisfies the university general education requirement in the natural science and technology knowledge exploration area.*

**Course format** – In-Person

# Professor Information

**Name:** Ed van Hees (he/him) (Ph.D. - University of Michigan, 2000, Geological Sciences)

**Office Location**: Mathematics and Science Center, Room 287

**My student walk-in hours:** (office hours) Tuesday and Thursday 9:00 to 9:45 pm (just before class) or by appointment. My door is always open to people wanting to come in and talk about course related questions as well as any other topics. Virtual appointments are also a possible via Google Meet.

**You can reach me by Phone at**: (248) 370-2334 or **email** at [vanhees@oakland.edu.](mailto:vanhees@oakland.edu.) I will respond to emails within 24 hours during normal business hours.

**Professor Expectations:** My goal is to grade all assignments and tests within 72 hours.

**Protecting students and faculty: Important information**

Students must comply with Oakland University-mandated health protocols for face-to-face classes. The only OU requirement at the time that this syllabus is written is – “all students, faculty and staff planning to attend in-person courses and all other university activities on campus and at off-site locations be vaccinated against the COVID-19 virus.”

# Goals and Objectives

1. Understand course content in the textbook, with a focus on the PowerPoint presentations. The focus will be on substantive issues and current events in Michigan (less on minor “factoids”)
2. Develop critical thinking skills and understand the scientific approach
3. Develop an interest in Environmental Science – your future vocation?

# Learning Outcomes

Learning outcomes include, but are not limited to, the following…

1. Identify the importance of environmental sustainability
2. Describe the water cycle, and identify the reasons for water stress, both global and domestic
3. Understand the impacts of climate change on biological, geological, and environmental systems
4. Determine the environmental risks to species & ecosystems, and ways to remedy the risks
5. Understand how environmental pollution and stressors impact food production
6. Understand how human health is impacted by pollution (air, water, soil), climate change, etc.
7. Demonstrate hypothesis development and testing in labs
8. Understand how to read topographic and geologic maps
9. Improve and/or develop technical writing skills

#### General Education University Learning Outcomes

In addition to the general education learning outcomes, this course also includes the crosscutting capacity of **Effective Communication**.

# Textbooks and Other Materials

[**Microsoft Office 365 Free for OU Students**](https://www.oakland.edu/uts/common-good-core-resources/microsoft-office-365-education/). Enables access to a suite of Office 365 cloud products as well as download and install the full Office Productivity Suite, including Word, Excel, PowerPoint, OneNote, and more. The software can be shared on up to 5 personal devices.

**Textbook**: ENVIRONMENTAL SCIENCE, by Miller & Spoolman, 16th Edition or : ENVIRONMENTAL SCIENCE, by Miller, Spoolman, and [Andrews-Brown](https://www.amazon.com/s/ref=dp_byline_sr_book_3?ie=UTF8&field-author=Danielle+Andrews-Brown&text=Danielle+Andrews-Brown&sort=relevancerank&search-alias=books) ( 17th Edition. An e-book has been embedded in Moodle. Used and new paperback as well as loose-leaf copies were available through Amazon on January 6, 2025.

Graphical user interface, application, Word

Description automatically generated

**Grading**

# 10 weekly Environmental Exercises - 100 points

# Experiment 1 & Report - 50 pts (Water filtration)

# Experiment 2 & Report – 50 pts (Acid / Base generation)

# Experiment 3 & Report – 50 pts (Hard water)

# 2 Midterm Exams - 100 pts / each

Final Exam - 200 pts (Cumulative) Energy Usage Survey & Write Up - 100 pts (50 points each)

**Total Course Points – 650 pts**

***Note:***

*All lab and writing assignments must be turned in on the due date. Late assignments will receive a 10% deduction per day. The writing assignment will not be accepted >48 hours past due date.*

*Tests cannot be taken before / after the testing date unless there is an excused absence (doctor note, family emergency, etc.).*

#### Grading Scale - Grading will be done using a sliding scale. Also, fractional grades of 0.5% and higher will be rounded up (E.G., 92.1% converts to an A-, and 92.5% converts to an A).

|  |  |
| --- | --- |
| **Letter Grade** | **Range** |
| A | 93-100 |
| A- | 90-92 |
| B+ | 87-89 |
| B | 83-86 |
| B- | 80-82 |
| C+ | 77-79 |
| C | 73-76 |
| C- | 70-72 |
| D+ | 67-69 |
| D | 60-66 |
| F | ≤59 |

# All midterm and final exams will be based on the textbook and PowerPoint presentations. The classroom time is designed to achieve the learning objectives and integrate the information through discussions. Not all chapters in the textbook will be covered. We will generally follow the order of the chapters in the book, but some chapter topics will be merged. Assigned readings can be found on a separate sheet. Important dates are located at: <http://www.oakland.edu/important_dates>

# Important Dates

# January 7th, 2025 – classes begin

# January 6 to 10, 2025 – First week of late registration for this course

# January 11 to 17, 2025 – The instructor’s approval is required to register for this course

# January 20, 2025 – Martin Luther King Jr. Day (University Closed)

# January 17, 2025 (Friday) Last day to withdraw from this course (by 4 pm w Registrar, by 11;59 pm with mySAIL)

# February 22, 2025 (Saturday) Winter break begins

# March 3, 2025 (Monday) Winter break ends

**April 18, 2025** – Classes end

**April 19, 2025** – Study Day

**First Midterm Exam** – February 6, 2025

**Second Midterm Exam** – March 13, 2025

**Final Midterm Exam** – Tuesday, April 22, 2025 (8 – 11 am – 3 hours)

**Grades Due** – April 29, 2025 (10 a.m.)

### Course Disclaimer

Any information in this syllabus is subject to change at any notice. Any changes will be communicated to the students, who are responsible for abiding by those changes.

**Tentative course schedule**

See “Course Schedule” Document in Moodle

# Using Moodle and Other Technologies

MOODLE WILL BE THE “GO-TO” AREA FOR THIS COURSE IN TERMS OF FILE STORAGE, GRADE POSTING, ANNOUNCEMENTS, VIDEOS, AND ASSORTED SUNDRIES. E-LIS HAS A TREMENDOUS HELP GUIDE IF YOU ARE STRUGGLING WITH MOODLE – PLEASE VIEW IT HERE - [**STUDENT GUIDE FOR ONLINE LEARNING -**](https://docs.google.com/document/d/1BVM-sq1_KVJztGbIrYoSRKHBL2u-HJ8W4UIvgjlOfIo/edit)[**GOOGLE DOCS**](https://docs.google.com/document/d/1BVM-sq1_KVJztGbIrYoSRKHBL2u-HJ8W4UIvgjlOfIo/edit)

## Technology Back-up Plan

* In the event that your computer crashes or internet goes down, it is essential to have a “backup plan” in place where you are able to log in using a different computer or travel another location that has working internet.
* Any files you intend to use for your course should be saved to a cloud solution (Google Drive, Dropbox, etc.) and not to a local hard drive, USB stick or external disk. Saving files this way ensures the files are not dependent on computer hardware that could fail.

## Technology Help

* For help using Moodle, use the Get Help link at the top of the Moodle page (moodle.oakland.edu).
* For access to technology and in-person assistance, call or visit the [Student Technology](https://www.oakland.edu/stc/) [Center](https://www.oakland.edu/stc/) (Link to Student Technology Center: https://[www.oakland.edu/stc/).](http://www.oakland.edu/stc/))
* For general technology assistance, consult the [OU Help Desk](https://www.oakland.edu/helpdesk/) (Link to Help Desk: https://[www.oakland.edu/helpdesk/).](http://www.oakland.edu/helpdesk/))

## Respect Rules of Netiquette

* Identify yourself. Begin messages with a greeting and close with your name.
* Use clear subject lines for your discussion forum posts.
* Respect your peers and their privacy.
* Be intentional and cautious in forum posts. You will have 15 minutes to edit posts, and after that you cannot edit or delete your posts.
* Use professional, respectful language. Do not swear, use profanity, or other inappropriate language
* Avoid sarcasm, which can be misinterpreted and cause hurt feelings.
* When discussing controversial topics or topics that raise strong emotions, prioritize listening, learning, and empathy. Refrain from engaging in inflammatory or discriminatory comments.

# Classroom and University Policies

## Academic Integrity Pledge

Faculty should have students formally sign the pledge below, whether in a form, electronic signature, or by making it the first question of an online quiz or exam.]

In order to uphold academic conduct standards at Oakland University, all students must act according to the pledge below.

*I pledge that all my work in the course, including, but not limited to, my assignments, tests and examinations, are my own work and I have received no unauthorized assistance or collaboration.*

*I understand that if I am unclear about the appropriate or allowable use of any support materials to complete my required coursework, I will contact the faculty for clarification before using said materials.*

*I understand that all alleged violations of Academic Misconduct will be reported to the Academic Conduct Committee. If found responsible for violations of Academic Misconduct I will be subject to disciplinary measures by the University up to and possibly including expulsion (permanent separation) from the University.*

## Classroom Behavior

1. [***Academic conduct policy***](https://www.oakland.edu/deanofstudents/policies/)***.*** All members of the academic community at Oakland University are expected to practice and uphold standards of academic integrity and honesty. Academic integrity means representing oneself and one’s work honestly. Misrepresentation is cheating because it means students are claiming credit for ideas or work not actually theirs and are thereby seeking a grade that is not actually earned. The following are some examples of academic dishonesty:
   1. **Cheating.** This includes using materials such as books and/or notes when not authorized by the instructor, copying from someone else’s paper, helping someone else copy work, substituting another’s work as one’s own, theft of exam copies, falsifying data or submitting data not based on the student’s own work on assignments or lab reports, or other forms of misconduct on exams.
   2. **Plagiarizing the work of others.** Plagiarism is using someone else’s work or ideas without giving that person credit; by doing this, students are, in effect, claiming credit for someone else’s thinking. Both direct quotations and paraphrases must be documented. Even if students rephrase, condense or select from another person’s work, the ideas are still the other person’s, and failure to give credit constitutes misrepresentation of the student’s actual work and plagiarism of another’s ideas. Buying a paper or using information from the World Wide Web or Internet without attribution and handing it in as one’s own work is plagiarism.
   3. **Falsifying records** or providing misinformation regarding one’s credentials.
   4. **Unauthorized collaboration** on computer assignments and unauthorized access to and use of computer programs, including modifying computer files created by others and representing that work as one’s own.

For more information, review OU’s [Academic Conduct Regulations](https://www.oakland.edu/deanofstudents/policies/). (Link to Academic Conduct Regulations: https://[www.oakland.edu/deanofstudents/policies/)](http://www.oakland.edu/deanofstudents/policies/))

1. ***Behavioral Code of Conduct****.* Appropriate behavior is required in class and on campus. Disrespectful, disruptive and dangerous behavior are not conducive to a positive learning environment and might result in consequences. Core Standards for Student Conduct at OU includes
   1. **Integrity.** See academic conduct policy points above.
   2. **Community.** Policies regarding disruptive behavior, damage and destruction, weapons, and animals.
   3. **Respect.** Policies regarding harassment, hazing, and [sexual misconduct](https://www.oakland.edu/policies/health-and-safety/625/) (Link to Sexual Misconduct policy: https://[www.oakland.edu/policies/health-and-safety/625/)](http://www.oakland.edu/policies/health-and-safety/625/))
   4. **Responsibility**. Policies regarding alcohol, drugs, and other substances See the [**Student Code of Conduct**](https://www.oakland.edu/deanofstudents/student-code-of-conduct/)for details. (Link to Student Code of Conduct: https://[www.oakland.edu/deanofstudents/student-code-of-conduct/)](http://www.oakland.edu/deanofstudents/student-code-of-conduct/))

## Non-Discrimination Statement

Oakland University is an inclusive and diverse community that respects the rights, viewpoints and lifestyles of all of our community members. We strive to maintain a learning and working environment free from discrimination and harassment on any basis and to create an environment where students feel respected and included. Discrimination is differential treatment, or unfair treatment, towards an individual or group, because of one’s identity.

Harassment includes actions that create an offensive, demeaning, intimidating or hostile environment.

Students experiencing or witnessing discrimination from a fellow student can reach out to the professor for resolving the matter. If students prefer not to reach out to their professor or are experiencing discrimination not related to a class, reach out to your academic adviser or the Dean of Students. If you are experiencing discrimination from a faculty or staff member, you can contact the Dean of Students Office directly at (248) 370-3352.

These offices are available to provide additional support:

* + [Center for Multicultural Initiatives](https://oakland.edu/cmi/) (CMI)
  + [Gender and Sexuality Center](https://oakland.edu/gsc/) (GSC)
  + [Disability Support Services](https://oakland.edu/dss/) (DSS)
  + [Veteran Support Services](https://oakland.edu/veterans/) (VSS)
  + [Oakland University Counseling Center](https://oakland.edu/oucc/) (OUCC)

## Accommodation and Special Considerations

Oakland University is committed to providing everyone the support and services needed to participate in their courses, including any additional support needed during remote or online learning. Students with disabilities who might require special accommodations should make an appointment with campus [Disability Support Services](https://www.oakland.edu/dss/) (DSS). If you qualify for accommodations because of a disability, please submit to your professor **a letter from Disability Support Services in a timely manner** (for exam accommodations provide your letter at least one week prior to the exam) so that your needs can be addressed. DSS determines accommodations based on documented disabilities. Contact DSS at 248-370-3266 or by e-mail at [dss@oakland.edu.](mailto:dss@oakland.edu)

For information on additional academic support services and equipment, visit the [Student](https://www.oakland.edu/dss/student-resources/) [Resources webpage of Disability Support Services website](https://www.oakland.edu/dss/student-resources/). (Link to Disability Support Services website: https://[www.oakland.edu/dss/student-resources/)](http://www.oakland.edu/dss/student-resources/))

## Mental Health and Well-Being

Students can only learn when their most basic needs are met. [OU Resources for Student](https://docs.google.com/document/d/124S4BRWuC1ustfGYrhwwg8hf9xv1sAbeZEJdFKVt9oE/edit) [Immediate Needs](https://docs.google.com/document/d/124S4BRWuC1ustfGYrhwwg8hf9xv1sAbeZEJdFKVt9oE/edit) lists support OU provides related to material and mental health needs. If you or someone you know is feeling overwhelmed, depressed, and/or in need of support, services are available. For help, contact the [OU Counseling Center](https://oakland.edu/counseling/sehs-cc/) at Graham Health at (248) 370-3465, or the SEHS Counseling Center at 250A Pawley Hall, (248) 370-2633. Student resources can also be found at the [Dean of Students website](http://www.oakland.edu/deanofstudents) by clicking on Student Health & Safety Resources. (URL: [http://www.oakland.edu/deanofstudents).](http://www.oakland.edu/deanofstudents)) For immediate 24/7 services contact [Common Ground](https://commongroundhelps.org/%23/) via chat or call or text the word “hello” to 1-800-231-1127.

## Excused Absence Policy

This policy for university excused absences applies to any student participating in a University Sponsored Event as an official representative of Oakland University. University Sponsored Events include academic, artistic, athletic and scholarly endeavors, as well as participation in student organizations, including club sports, approved by the Provost or designee. A student must fill out the [Excused Absence form](https://www.oakland.edu/Assets/Oakland/provost/files-and-documents/Excused%20Absence%20Approval%20Form%20-%20Fillable_Final.pdf) and submit it to the professor in advance. For responsibilities and procedures see [Academic Policies and Procedures](https://www.oakland.edu/provost/policies-and-procedures/), which includes other considerations such as a new **Bereavement Leave Policy.** (Link to Academic Policies and Procedures: https://[www.oakland.edu/provost/policies-and-procedures/)](http://www.oakland.edu/provost/policies-and-procedures/))

## Religious Observances

Student should discuss with professor at the beginning of the semester to make appropriate arrangements. Although Oakland University, as a public institution, does not observe religious holidays, it will continue to make every reasonable effort to help students avoid negative academic consequences when their religious obligations conflict with academic requirements. See The [OU Diversity Calendar](https://www.oakland.edu/diversity/calendar/) for more information. (Link to calendar: https://[www.oakland.edu/diversity/calendar/)](http://www.oakland.edu/diversity/calendar/))

## Preferred Name and Pronoun

If you do not identify with the name that is listed with the registrar's office, please notify me so that I might amend my records appropriately. In addition, if you prefer to go by a different pronoun, please inform me. When you go to [MySail](http://mysail.oakland.edu/), just above My Courses and Grades you will see "Display or edit your personal information," which allows you to edit your preferred first name. For more name change options and information, visit the [Name Services page](https://oakland.edu/uts/common-good-core-resources/name-services/). (Link to Name Services and Preferred Name Policy: oakland.edu/uts/common-good-core- resources/name-services/)

## Sexual Misconduct

Faculty and staff are responsible for creating a safe learning environment for our students, and that includes a mandatory reporting responsibility if students share information regarding sexual misconduct/harassment, relationship violence, or information about a crime that might have occurred on campus with the University. In such cases, the professor will report information to the campus’ Title IX Coordinator (Chad Martinez, [chadmartinez@oakland.edu](mailto:chadmartinez@oakland.edu) or 248-370- 3496). You can report such incidents to the Dean of Students Office directly. Students who wish to speak to someone confidentially can contact the OU Counseling Center at 248-370-3465.

Additionally, students can speak to a confidential source off-campus 24 hours a day by contacting Haven at 248-334-1274. The [Dean of Students website](https://www.oakland.edu/deanofstudents/sexual-assault-and-violence-initiative/students/) provides more information on your options and support services. (Link to Sexual Misconduct/Assault and Violence Initiative: oakland.edu/deanofstudents/sexual-assault-and-violence-initiative/students/).

## Add/Drops

As a student, university policy officially gives you the responsibility to add and drop courses. Put in your calendar [deadline dates for dropping courses](https://www.oakland.edu/registrar/registration/dropornot/) (even if you think it won’t be necessary), and consult the [Drop or Not Guide](https://www.oakland.edu/registrar/registration/dropornot/) to make a well-informed decision before dropping a course. (Link to Drop or Not Guide: oakland.edu/registrar/registration/dropornot/)

## Faculty Feedback: OU Early Alert System

As a student in this class, you might receive “[Faculty Feedback](https://www.oakland.edu/studentsuccess/faculty-feedback/)” in your OU email if your professor identifies areas of concern that might impede your success in the class. Faculty Feedback typically occurs during weeks 2-5 of the Fall and Winter terms but might also be given later in the semester and more than once a semester. A “Faculty Feedback” email will specify the area(s) of concern and recommend action(s) you should take. Please remember to check your OU email account regularly as that is where it will appear. This system is to provide early feedback and intervention to support your success. (Link to Faculty Feedback for students: oakland.edu/studentsuccess/faculty-feedback/)

## Emergency Preparedness

In the event of an emergency arising on campus, the Oakland University Police Department (OUPD) will notify the campus community via the emergency notification system. The professor of your class is not responsible for your personal safety, so therefore it is the responsibility of each student to understand the evacuation and “lockdown” guidelines to follow when an emergency is declared. These simple steps are a good place to start:

* OU uses an emergency notification system through text, email, and landline. These notifications include campus closures, evacuations, lockdowns and other emergencies. Register for these notifications at oupolice.com.
* Based on the class cellphone policy, ensure that one cellphone is on in order to receive and share emergency notifications with the professor in class.
* If an emergency arises on campus, call the OUPD at (248) 370-3331. Save this number in your phone and put it in an easy-to-find spot in your contacts (ICE – In Case of Emergency).
* Review protocol for evacuation, lockdown, and other emergencies via the classroom’s red books (hanging on the wall) and oupolice.com/emergencies.
* Review with the professor and class what to do in an emergency (evacuation, lockdown, snow emergency).

**Violence/Active Shooter**: If an active shooter is in the vicinity, call the OUPD at (248) 370- 3331 or 911 when it is safe to do so and provide information, including the location and number of shooter(s), description of shooter(s), weapons used and number of potential victims. Consider your options: [Run, Hide, or Fight](https://oupolice.com/em/activeshooter/).