

SYLLABUS
FNR 30200 Global Sustainability Issues (Sem. 2, 2 credits)

Instructor: Eva Haviarova, Professor
Forest Products Bldg., Room 111A
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Office hours: By appointment

Class Time:
Wednesday, 3:30 to 5:20 pm (Smith 201)

Recommended Textbook

The instructor will provide the learning material:
Science of Sustainable Design by Mary Myers
<https://www.amazon.com/Science-Sustainable-Design-Mary-Myers/dp/162131927X>

Course Description

This course explores global sustainability issues in natural resources with an emphasis on forestry, wood products manufacturing, conservation, water management, energy, and their impact on the world. The purpose of this course is to present students, regardless of their disciplinary background, with an overview of the interdisciplinary aspects of sustainable natural resource management. This **colloquium course** will examine global sustainable natural resources and related issues (including population, poverty, pollution, climate change, deforestation, invasive species, urbanization, habitat loss, cultural traditions, water management, energy, education, technology, and international collaboration). The course will also address personal/local sustainability practices. It will teach and utilize biomimicry methodology to address sustainable product development.

Learning Outcomes:

Upon completion of this course, students will be able to:

- Appraise the impact of natural resources in developing and developed economies;
- Understand the most important factors that threaten natural resources;
- Understand how developments in natural resources in foreign countries relate to similar developments in Indiana and the United States.
- Comprehend the complexity of global natural resource issues and the role of sustainable natural resource management in sustainable development.
- Be able to utilize biomimicry tools for problem-solving or product development.

Students will participate in weekly discussions and will develop assigned presentations and papers where they will effectively integrate the concepts and principles presented throughout the course.

Expected Products

- 1) Short reflection reports (5)
- 2) Biomimicry projects and presentations (4);

Research Project Products:

- 3) Submit a well-written report on assigned research topics;
- 4) Prepare and present a presentation on selected research topics;
- 5) Prepare extension product (publication, pamphlet, app, or video);

The content of these papers and presentations should demonstrate the integration of concepts and principles from readings, lectures, and in-class discussions. All assignment expectations, along with specific requirement details, will be provided in handouts.

Evaluation of Student Performance

The grading will be broken down as follows:

Item	Percentage
Short reflection reports (5)	20 %
Biomimicry project outputs (4)	30 %
Research project (presentation, extension product)	40 %
Participation	5 %
Attendance	5 %

Grading Structure

A: 90 – 100 %; B: 80 – 89%; C: 70 – 79%; D: 60 – 69%; F: below 60%.

Learning Resources

Most materials will be provided electronically through the Purdue University “Bright space” platform. In addition to lectures and discussions, course assignments include weekly readings posted on Blackboard, ten weekly discussion topic conversations, three short (2 – 3 page) weekly papers, and research presentations that reflect critical thinking about the sustainability topic the student will select. All assignments are designed to help students develop a holistic approach to sustainable natural resource management. In addition, the student will write a term paper that integrates concepts presented during the course and applies them to the selected analysis of a natural resource issue.

Weekly Discussions

Active participation is essential in this course! Strong participation in weekly discussions will significantly enhance student learning. Personal experiences related to the discussion topic are encouraged.

Exams There are no exams in this course.

Course Content

FNR 30210 Global Sustainability Issues, Spring 2025		SMTH 201		
Course Outline				
Week	Day	Topic/Module	Lectures:	Homework & Projects:
1	17-Jan	Intro Sustainability	L: Intro (Haviarova) Sustainable future L: (Haviarova) What is Sustainability - Graphics Discussion: Global Sustainability Issues	Asign 1: Definition of Sustainability and Who am I - PPT 5 slides (Due 1/23) 10 P
	Week 1			
2	24-Jan	Definition of Sustainability	Students' Definition of Sustainability Discussion: Personal sustainability (pledge)	Asign 2: No Impact Man - 1/2 pg reflection Watch video: No impact Man Textbook Ch-2 (Due 1/30) 10 P
	Week 2			
3	31-Jan	Local Scale Sustainability	Continue Students' Def. of Sustainability Discussion - No Impact Man (groups)	Asign 3: Sustainability Resources Watch lecture: Sustainability (Tasdemir) Textbook Ch-10 (Due 2/6) 10 P
	Week 3			
4	7-Feb	Population	L: Population (Haviarova) Discussion: Groups - graphical maps)	Asign 4: Future of Food Supply Watch Lecture: Future of Food HW Textbook Ch-9 (Due 2/13) 10 P
	Week 4			
5	14-Feb	Future of Food	Video: Food? Discussion - Food	Textbook Ch-7 & 8 Asign 5: Poverty and Sustainability (Due 2/20) 10 P
	Week 5			
6	21-Feb	Waste Management	Waste Management Presentation 1 ZT (1/2 in class) explain all projects Discussion - Food	Presentation 1 (ZT) Homework Biom Project 1 - Life Principles (Due 2/26) 10 P
	Week 6			
7	28-Feb	Biomimicry	Biom Project 1 presentations - Life Principles Evaluated by Zuzana T and Eva H in class	Presentation 2 (ZT) Homework Biom Project 2 - Function carts (Due 3/5) 10 P
	Week 7			
8	7-Mar	Biomimicry	Biom Project 2 present. - Function Carts Evaluated by Zuzana T and Eva H in class	Presentation 3 (ZT) Homework Biom Project 2 - Correct Function carts (Due 3/12)
	Week 8			
9	14-Mar	Biomimicry	Biom Project 3 - Groups work Students will work in groups directed by Eva H	Biom Project 3 - Selecting FC Group Proj Work on Group Proj (Due 4/2) 10+10
	Week 9			
	21-Mar	Spring Break		
10	28-Mar	Biomimicry	Work on Biomimicry projects as a group	
	Week 10			
11	4-Apr	Biomimicry	Biom Project 3 Pich Presentations Evaluated by Zuzana T and Eva H in class	Biom Project 3 - Project Evaluations, video (Due 4/9) 50 P
	Week 11			
12	11-Apr	Forestry	L: (Haviarova) SF example for research project Discussion	Asign 5A. Individual Research Project (Due 4/23) 50 P
	Week 12			
13	18-Apr	Plastic Energy	L: (Haviarova) Plastic as a global issue Discussion	Continue on project
	Week 13			
14	25-Apr	Education Deforestation	Asign 5. Individual Final Project Presentations (In groups presentations) Discussion	Asign 5B. Extension Products Extension Product (Due 4/30)
	Week 14			
15	2-May	Population Habitat loss	Asign 5. Individual Final Project Presentations Discussion	
	Week 15			

Class attendance

The student must know what was covered in class during any absence (notes, handouts, and assignments). Contact the instructor if you anticipate extended absences. 5 unexcused absences will result in "F" grade in the course (exceptions, such as medical issues, must be communicated with the instructor).

Academic integrity

Students are expected to be honest and ethical in their academic work. Intentional acts of academic dishonesty, such as cheating or plagiarism, may be penalized by imposing an "F" grade in the course.

Plagiarism

You are expected to submit your work in all your assignments and to give credit to the work of others when you use it.

What is Plagiarism? - The Council of Writing Program Administrators (CWPA) states that plagiarism “occurs when a writer deliberately uses someone else’s language, ideas, or other original (not common knowledge) material without acknowledging its source”. Thus, whenever a person chooses to repeat the exact words written by another author, that person must mark them with quotation marks (“ ”) and provide a citation to the original source. Two excellent sources of additional guidance are:

1. Michael Harvey, *The Nuts and Bolts of College Writing* (Hackett Publishing Co.)
2. Gordon Harvey, *Writing with Sources: A Guide for Students* (Hackett Publishing)

Use of AI

Academic dishonesty includes using Artificial Intelligence to write your assignment. If students are permitted to use AI for an assignment by the instructor, they must disclose how and where they used it. Instead of using openAI to edit your assignments, we encourage students to use Grammarly or Hemmingway Editor. AI technology is evolving, so this policy is subject to change and will be updated on Brightspace.

Term Paper and Classroom Presentation

A list of research topics will be provided, from which each student will select one for a research paper. Students may also suggest a topic in which they are personally interested. The research project is expected to be of very high quality. It will culminate into a 20-minute in-class presentation and other products. Details will be provided in the assignment.

Best Practices in the Case of Campus Emergency

Emergencies due to weather or other circumstances may necessitate a change in the course. Mass communication via email or text messaging will be developed to alert students of class cancellations or assignments. Information help is available at:

<http://www.itap.purdue.edu/ilt/faculty/>

Please sign up for emergency text alerts. Text message sign-up procedures can be found at: <http://www.purdue.edu/securepurdue/>

Updates and emergency information will also be posted on Purdue’s home page:

<http://www.purdue.edu/>

Emergency Procedures Guide (EPG) can be viewed at:

https://www.purdue.edu/emergency_preparedness/flipchart/index.htm

The Emergency Preparedness website is at:

http://www.purdue.edu/emergency_preparedness/

Specific building information is found in the Building Emergency Plan (BEP). The BEP is normally maintained by the Building Deputy (FPRD Bldg. Betty Barlow - 494 3615.

“Shelter in place” means that students should not leave the building when the outdoor sirens are sounded. Moreover, if the building fire alarms are activated, everyone must evacuate the building and should proceed to their emergency assembly area as specified in the BEP. The FPRD BEP can be seen at:

<https://ag.purdue.edu/fnr/Documents/property-pdfs/BEPFPRD.pdf>

Nondiscrimination -- The existing Purdue University Nondiscrimination Policy: *Purdue University is committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters tolerance, sensitivity, understanding, and mutual respect among its members; and encourages each individual to strive to reach his or her own potential. In pursuit of its goal of academic excellence, the University seeks to develop and nurture diversity. The University believes that diversity among its many members strengthens the institution, stimulates creativity, promotes the exchange of ideas, and enriches campus life.*

Purdue University prohibits discrimination against any member of the University community on the basis of race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability, or status as a veteran. The University will conduct its programs, services and activities consistent with applicable federal, state and local laws, regulations and orders and in conformance with the procedures and limitations as set forth in (http://www.purdue.edu/purdue/ea_eou_statement.html) which provides specific contractual rights and remedies.

Mental Health

Purdue University is committed to advancing the mental health and well-being of its students. If you or someone you know is feeling overwhelmed, depressed, and/or in need of support, services are available. For help, such individuals should contact Counseling and Psychological Services (CAPS) at 765-494-6995 or <http://www.purdue.edu/caps/> during and after hours, on weekends and holidays or through its counselors physically located in the Purdue University Student Health Center (PUSH) during business hours.

Anti-Harassment Policy -- Strictly following and interpreting existing University Policy: *Purdue University is committed to maintaining an environment that recognizes the inherent worth and dignity of every person; fosters tolerance, sensitivity, understanding and mutual respect; and encourages its members to strive to reach their potential. The most effective way to work toward preventing Harassment is through education that emphasizes respect for every individual.*

Harassment in the workplace or the educational environment is unacceptable conduct and will not be tolerated. Purdue University is committed to maintaining an educational and work climate for faculty, staff and students that is positive and free from all forms of Harassment. This policy addresses Harassment in all forms, including Harassment toward individuals with legally protected status for reasons of race, gender, religion, color, age, national origin or ancestry, genetic information or disability and Harassment toward individuals for other reasons such as sexual orientation, gender identity, gender expression, marital status or parental status. The University will not tolerate Harassment of its faculty, staff or students by persons conducting business with or visiting the University, even though such persons are not directly affiliated with the University.

Purdue Anti-Harassment Policy (III.C.1): <http://www.purdue.edu/policies/ethics/iic1.html>

Building emergency - <https://www.purdue.edu/ehps/emergency-preparedness/emergency-plans/bep/campus-bep-list.php>. Please direct any questions to jpstefan@purdue.edu