GEOG 105: The Dynamic Earth SPRING 2024 Syllabus

Course Information

Instructor Information

Instructor: Lisa Siewert

Office: 282A Wausau Campus (Mondays) or STEM Commons (Wednesdays)

Office Hours: In person 2-3 on M and 11:30-12:45 on W. Virtually, refer to the "One-

on-One Meeting with Instructor" page in the Course Overview module. E-mail: <u>Lsiewert@uwsp.edu</u> This is my preferred method of communication.

Course Information

Course Description: A contemporary approach to the study of Earth's geologic, atmospheric, hydrologic, and biological systems and its place in the solar system. Natural resource extraction, use, and environmental implications. Wisconsin's natural systems are emphasized.

Credits: 3 credits
Prerequisite: none
Class Meeting times:

- If enrolled in a flex section: asynchronous online
- If enrolled in a face-to-face lecture section: or Mondays and Wednesdays in Rm 126 at the Marshfield Campus or Room 191 at the Wausau Campus

Expected Instructor Response Times

- I will attempt to respond to student emails within 24 hours.
 - ***If you have a general course question (not confidential or personal in nature), please post it to the Course Q&A Discussion Forum found on the course homepage. I will post answers to all general questions there so that all students can view them. Students are encouraged to answer each other's questions too.
- I will attempt to grade submitted work within 72 hours.

Textbook & Course Materials

Required Text: Skinner & Murck. The Blue Planet: An Introduction to Earth System Science

Lab Manual: None--the labs are available on Canvas.

Course Learning Outcomes

After successful completion of the course, students will be able to:

- 1. Explain basic underlying processes that create patterns of weather and climate.
- 2. Explain basic physical processes that create and modify various landforms.
- 3. Explain basic hydrological cycle and its impacts on weather and climate, plant and animal distributions, rivers, and landforms affecting Wisconsin.
- 4. Explain basic location and characteristics of biomes, and interpret the distribution, origin, form, population, habitat, and human significance of natural organisms affecting Wisconsin.

General Education Program Learning Outcomes

- 1. students will be able to explain major concepts, methods, or theories in the natural sciences to investigate the physical world.
- 2. students will be able to interpret information, solve problems, and make decisions by applying natural science concepts, methods, and quantitative techniques.
- 3. students will be able to describe the relevance of aspects of the natural sciences to their lives and society.

You will meet the outcomes listed above by reviewing the textbook, instructor commentaries, lab exercises, applied activities, quizzes, and capstone project. This is a 100% online. The assessment due dates are listed on the course calendar.

- Quizzes/Exams: Questions are based on instructor commentaries/lectures and the assigned textbook chapters. The exams will be a combination of multiple choice, true/false, and short answer.
- **Final Exam**: Students enrolled in the in-person lecture section of the course have a cumulative final exam. There will be a cumulative final exam held during our scheduled final exam period. The final exam is divided into five sections with section 1 corresponding to Exam 1, section 2 corresponding to Exam 2, and section 3 corresponding to Exam 3, etc. You can replace two of your midterm exam scores by scoring a higher percentage on those sections. (If you improve on both sections, I will replace the one that helps your grade improve the most. If you don't score a higher percentage on any of the sections—your midterm exam scores will NOT be replaced by a lower percentage.)
- **Lab Exercises**: Lab exercises are to be completed online and provide you an opportunity to explore course concepts more deeply.
- **Applied Activities**: Applied activities summarize the learning outcomes for each module and require you to apply geographer tools to those outcomes.
- **Capstone Project**: The capstone project ties all of the modules together. The goal is for students to understand that Earth works as a system.

Course Structure

This course will be delivered 100% online through the course management system, Canvas. You will use your UWSP account to login to the course from the Canvas Login Page.

Grading Policies

Graded Course Activities

Click the **Assignments** link in Canvas to access assignment listing, categories, and weights as applicable. Click the **Syllabus** link to see a chronological listing of assignments. Click the **Grades** link to see current grades.

Participation

Students are expected to participate in all activities as listed on the course calendar.

Complete Labs

All labs and quizzes for this course will be submitted electronically through Canvas. Unless you're in the face-to-face section, then the exams are completed in person. Assignments should be submitted by the due dates listed in Canvas.

Late Work Policy

Assessments have listed due dates to encourage students to maintain pace with the recommended course schedule. There is a 2% late penalty for each day that an assignment is late. This light penalty will not harm your grade for missing a deadline by a day or two, but it will add up if you get weeks behind.

Viewing Grades in Canvas

Points you receive for graded activities will be posted to **Grades**. Click on the Grades link to view your points. I will update the online grades each time a grading session has been complete—typically 3 days following the due date of an assignment. You will see a visual indication of new grades posted on your Canvas home page under the link to this course.

Letter Grade Assignment

Final grades assigned for this course will be based on the percentage of total points earned and are assigned as follows:

Α	94-100%	В	84-87%	С	74-77%	D	60-67%
A-	90-93%	B-	80-83%	C-	70-73%	F	< 60%
B+	87-89%	C+	77-79%	D+	67-69%		

Course Policies

Understand When You May Drop This Course

It is the student's responsibility to understand when they need to consider unenrolling from a course. Refer to the UWSP <u>Academic Calendar</u> for dates and deadlines for registration. After this period, a serious and compelling reason is required to drop from the course. Serious and compelling reasons includes: (1) documented and significant change in work hours, leaving student unable to attend class, or (2) documented and severe physical/mental illness/injury to the student or student's family.

Incomplete Policy

Under emergency/special circumstances, students may petition for an incomplete grade. An incomplete will only be assigned if 50% of the course assignments have been completed by the end of the semester. All incomplete course assignments must be completed within a semester after the incomplete was assigned.

Equal Access for Students with Disabilities

UW-Stevens Point will modify academic program requirements as necessary to ensure that they do not discriminate against qualified applicants or students with disabilities. The modifications should not affect the substance of educational programs or compromise academic standards; nor should they intrude upon academic freedom. Examinations or other procedures used for evaluating students' academic achievements may be adapted. The results of such evaluation must demonstrate the student's achievement in the academic activity, rather than describe his/her disability.

If modifications are required due to a disability, please inform the instructor and contact the <u>Disability</u> and Assistive Technology Center to complete an Accommodations Request form.

Statement of Policy

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If modifications are required due to a disability, please inform the instructor and contact the Disability Resource Center.

Commit to Integrity

As a student in this course (and at this university) you are expected to maintain high degrees of professionalism, commitment to active learning and participation in this class and also integrity in your behavior in and out of the classroom.

UWSP Academic Honesty Policy & Procedures

Student Academic Disciplinary Procedures

UWSP 14.01 Statement of principles

The board of regents, administrators, faculty, academic staff and students of the university of Wisconsin system believe that academic honesty and integrity are fundamental to the mission of higher education and of the university of Wisconsin system. The university has a responsibility to promote academic honesty and integrity and to develop procedures to deal effectively with instances of academic dishonesty. Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others' academic endeavors. Students who violate these standards must be confronted and must accept the consequences of their actions. UWSP 14.03 Academic misconduct subject to disciplinary action.

- (1) Academic misconduct is an act in which a student:
 - (a) Seeks to claim credit for the work or efforts of another without authorization or citation;
 - (b) Uses unauthorized materials or fabricated data in any academic exercise;
 - (c) Forges or falsifies academic documents or records;
 - (d) Intentionally impedes or damages the academic work of others;
 - (e) Engages in conduct aimed at making false representation of a student's academic performance; or
 - (f) Assists other students in any of these acts.
- (2) Examples of academic misconduct include, but are not limited to: cheating on an examination; collaborating with others in work to be presented, contrary to the stated rules of the course; submitting a paper or assignment as one's own work when a part or all of the paper or assignment is the work of another; submitting a paper or assignment that contains ideas or research of others without appropriately identifying the sources of those ideas; stealing examinations or course materials; submitting, if contrary to the rules of a course, work previously presented in another course; tampering with the laboratory experiment or computer program of another student; knowingly and intentionally assisting another student in any of the above, including assistance in an arrangement whereby any work, classroom performance, examination or other activity is submitted or performed by a person other than the student under whose name the work is submitted or performed.

Religious Beliefs Accommodation

It is UW System policy (<u>UWS 22</u>) to reasonably accommodate your sincerely held religious beliefs with respect to all examinations and other academic requirements.

You will be permitted to make up an exam or other academic requirement at another time or by an alternative method, without any prejudicial effect, if:

- There is a scheduling conflict between your sincerely held religious beliefs and taking the exam or meeting the academic requirements; and
- You have notified your instructor within the first three weeks of the beginning of classes (first
 week of summer or interim courses) of the specific days or dates that you will request relief from
 an examination or academic requirement.
- Your instructor will accept the sincerity of your religious beliefs at face value and keep your request confidential.
- Your instructor will schedule a make-up exam or requirement before or after the regularly scheduled exam or requirement.
- You may file any complaints regarding compliance with this policy in the Equity and Affirmative Action Office.

Absences due to Military Service

As stated in the UWSP Catalog, you will not be penalized for class absence due to unavoidable or legitimate required military obligations, or medical appointments at a VA facility, not to exceed two (2) weeks unless special permission is granted by the instructor. You are responsible for notifying faculty members of such circumstances as far in advance as possible and for providing documentation to the Office of the Dean of Students to verify the reason for the absence. The faculty member is responsible to provide reasonable accommodations or opportunities to make up exams or other course assignments that have an impact on the course grade. For absences due to being deployed for active duty, please refer to the Military Call-Up Instructions for Students.

Course Assessment Schedule for 100% Asynchronous Online Section (Flex)

(subject to change—check Canvas for updates)

Module	Required Readings	Assessments	Due Dates (Mon 11:59pm CST)
	Module 1 Introduction	Lab: Observing Earth's Spheres	1/29
Module 1: Introduction to Physical	1.1 Introduction to Physical Geography 1.2 Tools Used by Geographers	Lab: Introducing Physical Geography Tools	1/29
Geography	1.3 Earth's Natural Systems Chapter 1: The Earth System	Module 1 quiz	2/5
	Chapter 2: Energy	Lab: Introduction to Using ArcGIS Online and the Living Atlas	2/5
	Module 2 Introduction	Lab: Earth Layers	2/12
	1.1 Earth's Layers & Plate	Lab: Plate Boundaries	2/12
l	Tectonics	Lab: Earthquakes	2/19
Module 2: The	1.2 Earthquakes	Lab: Volcanoes	2/19
Geosphere	1.3 Volcanoes Chapter 3: Matter Chapter 5: The Tectonic Cycle	Applied Activity: Analysis of Lithosphere Characteristics	2/26
	Chapter 6: EQ & Volcanoes	Module 2 quiz	2/26
		Lab: Streams and Floods	3/4
	Module 5 Introduction 5.1 Water on and under the Ground 5.2 Cryosphere 5.3 The Oceans Chapter 8: The Hydrologic Cycle Chapter 9: The Cryosphere Chapter 10: The World Ocean	Lab: Groundwater	3/4
Module 3: The		Lab: Glacial Processes and Landforms	3/11
Hydrosphere and		Lab: The Ocean Floor, Waves, and Coastlines	3/11
Cryosphere		Applied Activity: Analysis of Hydrosphere Characteristics in the United States	3/25
	·	Module 5 quiz	3/25
		Lab: Pressure and Winds	4/1
	Module 4 Introduction	Lab: Adiabatic Processes	4/1
Module 4: The	4.1 The Atmosphere 4.2 Wind and Weather Systems	Lab: Mid-Latitude Cyclones, Thunderstorms, and Hurricanes	4/8
Atmosphere	4.3 Severe Weather Chapter 11: The Atmosphere	Applied Activity: Investigation of Earth's Atmosphere and Climate	4/15
	Chapter 12: Wind & Weather	Module 4 quiz	4/15
	Module 5 Introduction	Lab: Ecosystems and Biomes	4/22
	5.1 Ecosystems and Biomes 5.2 Populations, Communities Chapter 15: Ecosystems, Biomes,	Lab: Communities and Populations	4/22
Module 5: The Biosphere		Applied Activity: Explore the Biosphere in selected Regions	4/29
Бюэрпеге	and Cycles of Life Chapter 16: Populations, Communities	Module 5 quiz	4/29
Module 6: Tying it all Together		Capstone Project: Geography Unveiled - Exploring Earth's Four Major Spheres	5/10

Course Lecture and Assessment Schedule for <u>Face-to-Face Lectures and</u> <u>Online Lab</u> Section

(subject to change, check Canvas for updates)

Module	Date	Lecture Topics	Assessments	Due Dates (Tues 11:59pm CST)
Module				CSI)
Module 1: Introduction	1/22	What is Earth System Science Geographer Tools & Reservoirs	Lab: Observing Earth's Spheres Lab: Introducing Physical Geography Tools	1/30
to Physical	1/29	Energy and Sources	Lab: Introduction to Using ArcGIS Online and the Living Atlas	2/6
Geography	1/31	Energy Cycle		
	2/5	Exam 1		
	2/7	Composition and Internal Structure of Earth	Lab: Earth Layers	2/13
	2/12	Plate Tectonics	Lab: Plate Boundaries	2/20
Module 2: The	2/14	Plate Interactions	Lab. Plate boundaries	
Geosphere	2/19	Earthquakes	Lab: Earthquakes	
Geosphere	2/21	Volcanoes	Lab: Volcanoes	2/27
	2/26	Catch up		
	2/28	Exam 2	Applied Activity: Analysis of Lithosphere Characteristics	3/5
	3/4	Hydrologic Cycle	Lab: Streams and Floods	3/12
	3/6	Water on the Ground		
Module 3: The	3/11	No class (video on	Lab: Groundwater	3/26
Hydrosphere		groundwater)	Lab: Glacial Processes and	
and	3/13	Glaciers and Glaciation	Landforms	
Cryosphere	3/25	Ocean Circulation		
5.75565	3/27	Ocean Waves and Tides	Lab: Waves, and Coastlines	4/2
	4/1	Exam 3	Applied Activity: Analysis of Hydrosphere Characteristics	
	4/3	The Atmosphere	Lab: Pressure and Winds	4/9
	4/8	Global air circulation		1,75
Module 4: The	4/10	No Class (video on thunderstorms and tornadoes)	Lab: Adiabatic Processes Lab: Mid-Latitude Cyclones,	4/16
Atmosphere	4/15	Wind & Weather Systems	Thunderstorms, and Hurricanes	
	4/17	Mid-latitude cyclones		
	4/22	Exam 4	Applied Activity: Investigation of Earth's Atmosphere and Climate	4/23
	4/24	Ecosystems	Lab: Ecosystems and Biomes	4/30
Modulo Ex Tho	4/29	Biomes	Lab: Communities and Populations	
Module 5: The Biosphere	5/1	Populations	Applied Activity: Explore the	5/7
טוטאוופופ	5/6	Communities	Biosphere in selected Regions	
	5/8	Exam 5		
	5/15	Final Exam 2:45-4:45		