### **SOS 110: Sustainable World**

Class Number:

Credit Hours: 3

Semester & Year:

Prerequisite: None

# **Instructor Information**

Name: Bjoern Hagen

Email: BHagen1@asu.edu

Office: Center for Planetary Health (ISTB 7), #304B

Office Hours: By Appointment

#### **Course Communication Policy**

All student/instructor communication will be directed through the Canvas Inbox. This ensures the security, privacy, and record of the communication. Note: You must have your primary Canvas email address set as your asurite@asu.edu, not firstname.lastname@asu.edu or a personal email account.

This course uses a "three-before-me" policy regarding student/instructor communications. When course-related questions arise, please check these three sources for an answer before emailing the instructor with your question:

- 1. Course Syllabus
- 2. Canvas Announcements
- 3. Community Forum: This is a discussion forum in Canvas used for general questions about the course. You are encouraged to respond to your classmates' questions and comments.

# **Course Textbook and Materials**

# Required Textbook(s)

Have the required textbook with the digital resources access code before the course start date.

The required materials for this course, *Environmental Science and Sustainability* (Inquizitive), will be integrated into Canvas and made available to you at a special discounted price of \$76.00, plus tax. You have the option to opt out of this program by clicking this link: <a href="https://includedcp.follett.com/1230">https://includedcp.follett.com/1230</a>, but please be advised that access to this courseware is required to take this course, and if you do opt out you will need to purchase elsewhere at current market rates, which will be more expensive. The charge for the materials will appear on

your student account under the item type Digital Integrated Course Mtrl after drop/add. To access the content, click on the Norton link in Canvas.

More information is available at **Sun Devil Campus Stores Inclusive Access FAQs** 

Sherman, D. J., & Montgomery, D. R. (2023). *Environmental Science and Sustainability* (2nd. ed.). W. W. Norton & Company.

### **Additional Course Technology**

#### **Norton Digital Resources**

Our Help Notes are always available to guide you through your use of Norton digital products and can be found here: <a href="http://wwnorton.com/helpnotes">http://wwnorton.com/helpnotes</a>

Or you can contact Norton Customer Support at <a href="http://support.wwnorton.com">http://support.wwnorton.com</a>

Our representatives will help you via live chat once you submit a request form. Be sure to provide us with the following:

- Your school
- Your instructor's name
- Your section name
- Your Student Set ID number, if you have one

Technology Support is available to all students enrolled at Arizona State University. All students can contact the University Technology Help Desk by any of the following methods:

- Login to MyASU and click on "Help"
- Call 1-855-ASU-5080 (1-855-278-5080)

### **Computer Requirements**

A smartphone, iPad, Chromebook, etc. will not be sufficient for completing your work in online courses. While you will be able to access course content with mobile devices, you must use a computer for some assessments.

This course requires a computer with Internet access and the following:

- Web browsers (Chrome, Microsoft Edge, Mozilla Firefox, or Safari)
- Adobe Acrobat Reader (free)
- A webcam, microphone, headset/earbuds, and speaker
- Microsoft Office (Microsoft 365 is free for all currently-enrolled ASU students)
- Reliable broadband internet connection (DSL or cable) to stream video

## **Course Information**

#### **Course Overview**

Lays the groundwork for understanding the fundamental geological, biological, and social processes that gave rise to the world we live in and continue to maintain its viability for human life.

### **Core Sustainability Competencies**

All courses in the School of Sustainability (SOS) are designed to build and deepen student's understanding of the following Core Sustainability Competencies (<u>read more</u>):

- 1. Systems Thinking: Analyze sustainability challenges and opportunities as complex and dynamic social-ecological-technological systems, in which systems are interconnected.
- 2. Future Thinking: Envision and craft desirable and possible sustainable futures by anticipating the potential consequences—both positive and negative—of human actions,
- 3. Values Thinking: Understand justice, fairness and equity concerns by recognizing diversity in cultural values/worldviews and finding the ways to break the equity/justice barriers,
- 4. Strategic Thinking: Develop skills to carefully design a plan to achieve a particular vision that prioritizes progress toward long-term goals rather than reactive and short-term fixes
- 5. Collaborative Competency: Work effectively with others to achieve a goal by finding the most productive way to communicate with others and develop strategies and solutions.

This course mainly addresses **System Thinking** and **Values Thinking**, but also introduces students to other Core Competencies.

### General Studies (GS) Gold Statement

This course fulfills the ASU Sustainability General Studies requirement. Students completing a Sustainability course will be able to:

- 1. Demonstrate an understanding of the earth and its ecosphere, including the measures that indicate their capacities and limits.
- 2. Trace historical impacts of a range of socio-economic, political or cultural choices on integrated human-environmental wellbeing.
- 3. Envision pathways toward futures characterized by integrated human-environmental wellbeing.
- 4. Articulate an approach to addressing contemporary questions or challenges that employs concepts or practices of sustainability.

How the Sustainability Gold Standards are assessed in this course

Gold Standard	Assessment(s)
1. Demonstrate an understanding of the earth and its ecosphere, including the measures that indicate their capacities and limits. (CO 1, CO 2)	<ul> <li>Module Practice and Assessments:</li> <li>In Module 2 - 4, students learn about Earth systems, major biogeochemical cycles and the ecosystem services (provisioning, supporting, regulating processes) and their boundaries as well as their capacities and limits</li> <li>Mastery of their knowledge will be assessed in InQuizitives which reinforce major concepts and ideas</li> <li>Final Assessment: Most students (&gt;80%) will complete Problem Solving exercises 2-4 with &gt;80% mark</li> </ul>

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	Module Practice and Assessments:
2. Trace historical impacts of a range of socio-economic, political or cultural choices on integrated human-environmental wellbeing. (CO 3)	<ul> <li>In Module 1 and 5-6, students develop an understanding on the systems thinking and can explain the boundaries of social and technological systems and their roles and interactions with Earth systems</li> <li>Knowledge reinforcement will be practiced and assessed in these modules' InQuizitives and discussion posts</li> </ul>
	Final Assessment: Most students (>80%) will complete Problem Solving exercises 1, 5, and 6 with >80% mark
	Module Practice and Assessments:
3. Envision pathways toward futures characterized by integrated human-environmental wellbeing. (CO 4)	<ul> <li>In Module 5-7, students learn to apply a diverse set of sustainability principles and concepts on the interconnectedness of society, ecology and technological systems in sustainability</li> <li>Knowledge reinforcement will be practiced and assessed in these modules' InQuizitives and discussion posts</li> <li>Final Assessment: Most students (&gt;80%) will complete Problem Solving exercise 7 with &gt;80% mark</li> </ul>
	Module Practice and Assessments:
4. Articulate an approach to addressing contemporary questions or challenges that employs concepts or practices of sustainability. (CO 5)	<ul> <li>In Module 7, students will collaborate in a team to produce the final presentation (a creative work such as a 5 minutes video, powerpoint presentation, podcast)</li> <li>Students can explain the socio-ecological-technical systems and their boundaries, including appropriate biogeochemical cycles and ecosystem services, and can develop a set of strategies targeting the selected topic.</li> </ul>
	Final Assessment: Most students (>80%) will complete the final presentation with >80% mark

# **Course Objectives**

# **Learning Outcomes**

# **Course Workload Expectations**

This course is structured and delivered in seven learning modules (plus a Welcome module). Each module has a set of objectives, readings and videos, and assignments. The assignments do not carry over to the next module.

This course is an accelerated session, which is highly condensed and structured in such a way that it expects the students to be proactive and take ownership of their learning. Students should expect to spend around 18 hours per week studying and completing course assignments.

#### **Student Success**

- Attend class regularly
- Communicate with instructors, TAs, and peers often
- Read course announcements and engage in discussion

# **Assignment Information and Policies**

### **Assessment Weights**

#### Assessment Weights

Assessment	% of Grade
Quizzes	40%
What Would You Do? Decision-Making Exercises	30%
Final Project: Development	10%
Final Project	10%
Participation	10%
TOTAL	100%

#### **Assessment Descriptions**

#### Full assignment instructions are located in Canvas.

#### **Quizzes**

You will complete a quiz for each chapter of the textbook, for a total of 20 quizzes. Quizzes are accessed in Norton Digital Resources.

#### What Would You Do? Decision-Making Exercises

In Modules 1-6, you will complete a scenario-based exercise in Norton Digital Resources. This activity includes discussion with a large group of your classmates and an individual video in which you explain your responses to the scenario.

#### **Final Project**

Starting in Module 3, you will create a Final Project that articulates a sustainability approach to addressing a contemporary topic. You will have a choice of formats to create: Video, written work, infographic, etc.

You will work on the project in stages, and you will have opportunities to share ideas and feedback with your classmates.

#### **Participation**

There are a few other assignments throughout the course that contribute to your participation grade. You will create a video to introduce yourself to your team, provide feedback on other students' Final Projects, and submit a Final Reflection.

# **Submitting Assignments**

All assignments, *unless otherwise announced*, MUST be submitted to the designated area of Canvas. Do not submit an assignment via email (unless asked to do so).

Submit the assignment in the requested format per the assignment directions.

### **Artificial Intelligence**

#### **Use of Generative AI is Generally Permitted Within Guidelines**

Artificial Intelligence (AI), including ChatGPT, are being used in workplaces all over the world to save time and improve outcomes by generating text, images, computer code, audio, or other media. Use of AI tools is generally welcome and even encouraged [*N.B.*: This could say *required* in some instances] in this class with attribution aligned with disciplinary guidelines. AI tools might be employed to brainstorm, draft, edit, revise, etc. I will provide examples of how to properly cite use. Any submitted course assignment not explicitly identified as having used generative AI will be assumed to be your original work. Using AI tools to generate content without proper attribution will be considered a violation of the <u>ASU Academic Integrity Policy</u>, and students may be sanctioned for confirmed, non-allowable use. If at any point you have questions about what is permitted, contact the instructor to discuss *before* submitting work.

### **Late or Missed Assignments Policy**

All assignments are due at the listed date and time based on Arizona Standard Time. <u>All due dates are firm</u>, <u>late submission is usually not possible</u>. Notify the instructor *before* an assignment is due if an urgent situation arises and your work cannot be completed on time.

Please follow the appropriate University policies to request an <u>accommodation for religious practices</u> or to accommodate a missed assignment due to University-sanctioned activities.

*IMPORTANT NOTE*: Arizona *does not* observe Daylight Savings Time. Please utilize a relevant resource to check on local times such as the <u>Time Zone Converter</u>, the National Institute of Standards and Technology <u>Official US Time</u>, or <u>Time and Date</u>.

### **Grading Scale**

This course will be graded on an A-E plus/minus scale.

Grading Scale

%	Grade
98 to 100%	A+
94 to < 98%	A
90 to < 94%	A-
87 to < 90%	B+
84 to < 87%	В
80 to < 84%	В-
77 to < 80%	C+
70 to < 77%	C
60 to < 70%	D
Below 60%	<ul> <li>E = Failing, participated in class</li> <li>EN = Failing, never participated</li> </ul>

		EU = Failing, insufficient participation in class and did not complete XE - Academic dishonesty
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# Arizona State University Policies, Standards, and Expectations

#### **ASU Online Course Policies**

Consult <u>ASU Online Course Policies</u> for information on the following items:

- Course Time Commitment
- Drop and Add Dates/Withdrawals
- Photo ID Requirement
- Grade Appeal Process
- Netiquette Expectations
- Prohibition of Harassment
- Student Conduct and Academic Integrity
- Title IX
- SAILS Disability Accommodations
- Statement on Inclusion
- Mental Health Support Services
- Course Evaluations
- Trigger warnings
- Academic Affairs Manual
- Copyright Information
- Student Privacy FERPA

#### **Accessibility**

All students should have equal technology opportunities in the classroom. For information about the resources offered by ASU and the technologies commonly used in ASU Online courses, consult the <u>ASU Online Student Accessibility</u> webpage.

# Grade Appeals

Grade disputes must first be addressed by discussing the situation with the instructor. If the dispute is not resolved with the instructor, the student may appeal to the School of Sustainability per the <u>University Policy for Student Appeal Procedures on Grades</u>. Undergraduate students, please see additional instructions for <u>undergraduate College of Global Futures courses</u>. Graduate student grade appeals are initiated within the school offering the course (please email <u>CGF@asu.edu</u> for more information about initiating a grade appeal for a graduate course in the College of Global Futures).

### **Tutoring**

ASU offers a variety of support services from the University Academic Success Programs (UASP). If you're looking for specific support in writing or other academic assistance, please contact UASP via any of the following methods:

• Website: https://tutoring.asu.edu/

• Call: 1-480-965-9072

### **Community of Care**

As Sun Devils, we take care of ourselves, each other, and our community. For up-to-date information about helping to maintain the health of our community, please visit ASU's <u>Live Well @ ASU: Wellness and Community Care During COVID-19</u>.

#### Discrimination, Harassment, and Retaliation

ACD-401 Prohibition against Discrimination, Harassment, and Retaliation, prohibits discrimination, harassment, or retaliation on the basis of race, sex, gender identity, age, religion, national origin, disability, sexual orientation, and veteran status. Violations of this policy may result in disciplinary action, including termination of employees or expulsion of students. Contact the Office of Student Rights and Responsibilities at (480) 965-6547, if you feel another student is harassing you based on any of the factors above; contact the Office of Equity and Inclusion at (480) 965-5057 if you feel an ASU employee is harassing you based on any of the factors above.

Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited. An individual who believes they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at <a href="https://sexualviolenceprevention.asu.edu/faqs">https://sexualviolenceprevention.asu.edu/faqs</a>.

As a mandated reporter, I am obligated to report any information I become aware of regarding alleged acts of sexual discrimination, including sexual violence and dating violence. ASU Counseling Services, <a href="https://eoss.asu.edu/counseling">https://eoss.asu.edu/counseling</a> is available if you wish to discuss any concerns confidentially and privately. ASU online students may access 360 Life Services, <a href="https://goto.asuonline.asu.edu/success/online-resources.html">https://goto.asuonline.asu.edu/success/online-resources.html</a>.

## **Disruptive Student Behavior**

Students are entitled to receive instruction free from interference by other members of the class. An instructor may withdraw a student from the course when the student's behavior disrupts the educational process per the <u>SSM 201-10 Instructor Withdrawal of a Student for Disruptive Classroom Behavior</u> and <u>SSM 104-02</u> Handling Disruptive, Threatening, or Violent Individuals on Campus policies.

Appropriate online behavior (also known as netiquette) is defined by the instructor and includes keeping course discussion posts focused on the assigned topics. Students must maintain a cordial atmosphere and use tact in expressing differences of opinion. Inappropriate discussion board posts may be deleted by the instructor.

## **Prohibition of Commercial Note Taking Services**

Course content, including lectures, are copyrighted materials. Students may not share outside the class, upload, sell, or distribute course content or notes taken during the conduct of the course (see <a href="ACD 304-06 Commercial">ACD 304-06 Commercial</a> <a href="Note Taking Services">Note Taking Services</a> for more information).

# **Student Code of Conduct and Academic Integrity**

Students have the responsibility to understand and follow ASU's Student Code of Conduct and Academic Integrity Policy. You may face ethical decisions during your time as a student. If you're not sure whether or not something is permitted, it is your responsibility to ask questions or find out by doing more research using the links above. Any violations in this course are subject to sanctions and will be reported to the College of Global Futures and the college or school of your major.

The Office of Student Rights and Responsibilities accepts incident reports from students, faculty, staff, or other persons who believe that a student or a student organization may have violated the Student Code of Conduct.

Academic Integrity (also known as cheating, copying others' work, uploading your work online to encourage cheating by others, or even reusing your own work) falls under the Student Code of Conduct. Possible sanctions for violations include, but are not limited to, appropriate grade penalties, course failure (indicated on the transcript as a grade of E), course failure due to academic dishonesty (indicated on the transcript as a grade of XE), suspension, and expulsion.

Beware that some websites promote themselves as tutoring and educational resource sites but may actually be sites that put you at risk for an academic integrity violation if you are using the services to submit work that is not your own or gain knowledge of what to expect on a quiz or exam.

**Important:** Students must refrain from uploading to any course shell, discussion board, or website used by the course instructor or other course forum, material that is not the student's original work, unless the students first comply with all applicable copyright laws; faculty members reserve the right to delete materials on grounds of suspected copyright infringement.

All academic integrity violations are reported to the College of Global Futures Academic Integrity Office (AIO). The AIO maintains record of all violations and has access to academic integrity violations committed in all other ASU colleges/schools.

### **Plagiarism Statement**

Plagiarism of any kind will not be tolerated. Students must take the exams independently without assistance from other students. Students may not submit papers written by persons other than themselves. Students must submit original work for this course and may not submit papers previously submitted to (an)other class(es). The ASU student academic integrity policy lists violations in detail. These violations fall into five broad areas that include but are not limited to: (1) Cheating on an academic evaluation or assignment; (2) Plagiarizing; (3) Academic deceit, such as fabricating data or information; (4) Aiding academic integrity policy violations and inappropriately collaborating; (5) Falsifying academic records. See https://provost.asu.edu/academic-integrity

### **Disability Accommodations**

ASU provides professional disability specialists and support staff through the office of Student Accessibility and Inclusive Learning Services (SAILS, formerly the DRC) for all qualified students. You may be eligible for additional support and accommodations per ASU's Policy (SSM 701-01)

Qualified students are encouraged to reach out the SAILS team through any of the following means:

Phone: (480) 965-1234

Email: accessibility@asu.edu

# **Additional Information and Resources**

- <u>Dean of Students</u> aka Educational Outreach and Student Services; provides opportunities for student advocacy, rights and responsibilities, and other support
- <u>College of Global Futures</u>— this course is offered through the College of Global Futures at Arizona State University. Questions about the course should first be addressed with the instructor. If necessary, you may contact the Student Services Center by calling 480-727-6963 or emailing <u>CGF@asu.edu</u>.
- <u>Career Services</u>— offers assistance to students in choosing their major, setting career goals, interviewing, and job-hunting strategies.
- <u>Counseling Services</u>— professional counseling and crisis services for students experiencing emotional concerns, problems in adjusting, and other factors that affect their ability to achieve their academic and personal goals. Support is available 24/7 between campus locations and EMPACT's 24-hour ASU-dedicated crisis hotline.
- <u>Financial Aid and Scholarship Services</u>— offers information and applications for student funding such as grants, loans, scholarships, and student employment.
- <u>GPA Calculator</u> students can use this calculator to project their GPA.
- <u>Libraries</u>- offers 24/7 access to librarians through "Ask a Librarian" online chat and help by librarians in person at the Reference Desk during most hours the libraries are open.
- <u>Tutoring and Writing Centers</u>— provides students with academic support services such as tutoring, peer advising, computer assisted instruction, writing support, and supplemental instruction
- <u>Contact Arizona State University</u> provides frequently asked question resources and contact information for new questions.
- <u>ASU Basic Needs</u> Please use this resource if you're struggling with basic needs such as housing, access to food, or emergency financial assistance.
- <u>ASU's Pitchfork Pantry</u> Please use this Canvas Self-Enroll link to resources around accessing sustainable, adequate, and nutritious food.

## Schedule and Due Dates (Subject to change: see syllabus disclaimer)

Overview of Module Contents and Due Dates all assignments due by end of module 11:59pm

Module Topics and Objectives	Readings/Viewings	Assessments and Due Dates
Welcome and Get Started	<ul><li>Welcome to SOS 110</li><li>Course Technology and Assignment Overview</li></ul>	<ul><li>Due TBD</li><li>Course Readiness Confirmation</li></ul>
Module 1: Systems Thinking in Sustainability	See Module 1 Readings and Viewings for all required and optional materials	Quiz  InQuizitive: Ch. 1, 2, & 3  Final Project  Sign up for a group Video Introduction  Discussion

		What Would You Do? Exercise 1
Module 2: Life on Earth -1 (Ecosystems and Socio- economic Linkages)	See Module 2 Readings and Viewings for all required and optional materials	Quiz  InQuizitive: Ch. 4, 5, & 6  Final Project  ASU Library Tutorials: Confirmation  Discussion  What Would You Do? Exercise 2
Module 3: Life on Earth -2 (Life-Supporting Processes and Societal Roles)	See Module 3 Readings and Viewings for all required and optional materials	Quiz  InQuizitive: Ch. 7, 8, & 9  Final Project  Topic Selection  Discussion  What Would You Do? Exercise 3
Module 4: Earth's Biogeochemical Cycles - Regulating Processes and Ecosystems Services	See Module 4 Readings and Viewings for all required and optional materials	<ul> <li>Due TBD</li> <li>Quiz</li> <li>• InQuisitive: Ch. 10 &amp; 11</li> <li>Final Project</li> <li>• Literature Review and Thesis Statement</li> <li>Discussion</li> <li>• What Would You Do? Exercise 4</li> </ul>
Module 5: Interconnectedness of Society, Ecology, and Technology in Sustainability	See Module 5 Readings and Viewings for all required and optional materials	<b>Due TBD Quiz</b> • InQuisitive: Ch. 12, 13, 14, 15, & 16

		Final Project
		Review feedback
		Discussion
		• What Would You Do? Exercise 5
		<b>Due TBD</b>
Module 6: Environmental Justice, Policy and Governance		Quiz
	materials	• InQuisitive: Ch. 17, 18, 19, & 20
		Final Project
		Submit Final Project
		Discussion
		What Would You Do? Exercise 6
		<b>Due TBD</b>
Module 7: Learning from Nature and Envisioning Alternatives	See Module 7 Readings and Viewings for all required and optional materials	Final Project
		Feedback and Discussion
		Additional Task
		Final Reflection

Syllabus Disclaimer: All syllabi are subject to minor changes to meet the needs of the instructor, school, or class. Every effort will be made to avoid changing the course schedule, but the possibility exists that unforeseen events will make syllabus changes necessary. The instructor reserves the right to make changes to the syllabus as deemed necessary. Students will be notified in a timely manner of any syllabus changes. Please check your ASU email and the Announcements on the course site often. Updated Fall, 2024

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