



ARIZONA STATE UNIVERSITY

GENERAL STUDIES COURSE PROPOSAL COVER FORM

Course information:

Copy and paste current course information from Class Search/Course Catalog.

College/School School of Sustainability Department
Prefix SOS Number 110 Title Sustainable Worlds Units: 3

Is this a cross-listed course? No If yes, please identify course(s)

Is this a shared course? No If so, list all academic units offering this course

Note- For courses that are crosslisted and/or shared, a letter of support from the chair/director of each department that offers the course is required for each designation requested.

Is this a permanent numbered course with topics? No

If yes, all topics under this permanent numbered course must be taught in a manner that meets the criteria for the approved designation(s). It is the responsibility of the chair/director to ensure that all faculty teaching the course are aware of the General Studies designation(s) and adhere to the above guidelines. Chair/Director Initials (Required)

Course description: 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.

Requested designation:

Mandatory Review: No

Social-Behavioral Sciences-SB

Note- a separate proposal is required for each designation.

Eligibility:

Permanent numbered courses must have completed the university's review and approval process. For the rules governing approval of omnibus courses, contact Phyllis.Lucie@asu.edu.

Submission deadlines dates are as follow:

For Fall 2016 Effective Date: October 1, 2015

For Spring 2017 Effective Date: March 10, 2016

Area(s) proposed course will serve:

A single course may be proposed for more than one core or awareness area. A course may satisfy a core area requirement and more than one awareness area requirements concurrently, but may not satisfy requirements in two core areas simultaneously, even if approved for those areas. With departmental consent, an approved General Studies course may be counted toward both the General Studies requirement and the major program of study.

Checklists for general studies designations:

Complete and attach the appropriate checklist

- Literacy and Critical Inquiry core courses (L)
Mathematics core courses (MA)
Computer/statistics/quantitative applications core courses (CS)
Humanities, Arts and Design core courses (HU)
Social-Behavioral Sciences core courses (SB)
Natural Sciences core courses (SQ/SG)
Cultural Diversity in the United States courses (C)
Global Awareness courses (G)
Historical Awareness courses (H)

A complete proposal should include:

- Signed course proposal cover form
Criteria checklist for General Studies designation(s) being requested
Course catalog description
Sample syllabus for the course
Copy of table of contents from the textbook and list of required readings/books

It is respectfully requested that proposals are submitted electronically with all files compiled into one PDF.

Contact information:

Name Caroline J Harrison E-mail caroline.harrison@asu.edu Phone 5-8645

Department Chair/Director approval: (Required)

Chair/Director name (Typed): Christopher Boone Date: 11/9/15

Chair/Director (Signature): [Handwritten Signature]

**Arizona State University Criteria Checklist for**  
**SOCIAL-BEHAVIORAL SCIENCES [SB]**

**Rationale and Objectives**

Social-behavioral sciences use distinctive scientific methods of inquiry and generate empirical knowledge about human behavior, within society and across cultural groups. Courses in this area address the challenge of understanding the diverse natures of individuals and cultural groups who live together in a complex and evolving world.

In both private and public sectors, people rely on social scientific findings to consider and assess the social consequences of both large-scale and group economic, technological, scientific, political, ecological and cultural change. Social scientists' observations about human interactions with the broader society and their unique perspectives on human events make an important contribution to civic dialogue.

Courses proposed for a General Studies designation in the Social-Behavioral Sciences area must demonstrate emphases on: (1) social scientific theories, perspectives and principles, (2) the use of social-behavioral methods to acquire knowledge about cultural or social events and processes, and (3) the impact of social scientific understanding on the world.

Revised April 2014

Proposer: Please complete the following section and attach appropriate documentation.

<b>ASU--[SB] CRITERIA</b>					
<b>A SOCIAL-BEHAVIORAL SCIENCES [SB] course should meet all of the following criteria. If not, a rationale for exclusion should be provided.</b>					
YES	NO		Identify Documentation Submitted		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. Course is designed to advance basic understanding and knowledge about human interaction.	Syllabus, Reading assignments, Course competencies		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Course content emphasizes the study of social behavior such as that found in: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <ul style="list-style-type: none"> <li>• ANTHROPOLOGY</li> <li>• ECONOMICS</li> <li>• CULTURAL GEOGRAPHY</li> <li>• HISTORY</li> </ul> </td> <td style="width: 50%; vertical-align: top;">                     Life Sciences Environmental Sciences                 </td> </tr> </table>	<ul style="list-style-type: none"> <li>• ANTHROPOLOGY</li> <li>• ECONOMICS</li> <li>• CULTURAL GEOGRAPHY</li> <li>• HISTORY</li> </ul>	Life Sciences Environmental Sciences	Syllabus, Reading assignments, Course competencies
<ul style="list-style-type: none"> <li>• ANTHROPOLOGY</li> <li>• ECONOMICS</li> <li>• CULTURAL GEOGRAPHY</li> <li>• HISTORY</li> </ul>	Life Sciences Environmental Sciences				
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Course emphasizes: a. the distinct knowledge base of the social and behavioral sciences (e.g., sociological anthropological). <b style="color: yellow;">OR</b> b. the distinct methods of inquiry of the social and behavioral sciences (e.g., ethnography, historical analysis).	Syllabus, Reading assignments, Course competencies		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Course illustrates use of social and behavioral science perspectives and data.	Syllabus, Reading assignments, Course competencies		
		<b>THE FOLLOWING TYPES OF COURSES ARE EXCLUDED FROM THE [SB] AREA EVEN THOUGH THEY MIGHT GIVE SOME CONSIDERATION TO SOCIAL AND BEHAVIORAL SCIENCE CONCERNS:</b>			
		• Courses with primarily arts, humanities, literary or philosophical content.			
		• Courses with primarily natural or physical science content.			
		• Courses with predominantly applied orientation for professional skills or training purposes.			
		• Courses emphasizing primarily oral, quantitative, or written skills.			

Course Prefix	Number	Title	General Studies Designation
SUS	110	Sustainable World	SB

Explain in detail which student activities correspond to the **specific** designation criteria.  
Please use the following organizer to explain how the criteria are being met.

Criteria (from checksheet)	How course meets spirit (contextualize specific examples in next column)	Please provide detailed evidence of how course meets criteria (i.e., where in syllabus)
1	Through studying socio-ecological couple systems we can better understand anthropogenic impacts.	Readings from text: 1.1-People and Nature 1.2-Understanding Human Impacts 1.3-Natural Systems and Human Well-being 2.1-Understanding Wicked Sustainability Problems 2.2-Resolving Sustainability Problems 3.3-Stakeholder Analysis 7.1/7.2- Thinking about the Future Course Competencies: 2,10,11, 12 Activity: World Values Survey
2	Course content is interdisciplinary in scope including economics, life science, environmental science, anthropology, and geography.	Readings: 1.4-Origin of Sustainability 2.1-Understanding Wicked Sustainability Problems 9.1 Introduction to Tragedy of the Commons 9.2-Characteristics of Successful Common Property Regime Course Competencies: 2, 3, 4,12, 13
3	The course has a theoretical framework with regard to how to conduct analyses of human-natural systemic interactions.	Readings: 3.1-Approaches to resolve wicked problems 3.2-Casual Chain/Web Analysis 3.3-Stakeholder Analysis Course Competencies: 3, 10,12,13,14,15 Activity: Indicator Case Study Concepts: Scale, drivers, and systems

4	Course is drawn from the collaboration between scientists and social scientists. Local to global issues are examined using real-world data.	Readings: 4.1-Introduction to Sustainability Indicators 5.1/5.2/5.3-Resilience and Patterns of Change 6.2-Interactions between the System and External Conditions 6.3-Adaptation 8.1/8.2-Sustainability Transitions Course Competencies: 10, 13
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## **SOS 110: Sustainable World**

**Catalog Description:** 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.

## **SOS 110: Sustainable World**

**Mondays: 3:00 - 4:15, WGHL 101**

**Tuesdays: Breakout sessions as scheduled (See ASU Course Catalog)**

*\*\*\*This syllabus is subject to change as necessary to accommodate the needs of the professor, school or class\*\*\**

### **The Teaching Team**

Instructor: Dr. Susan Spierre Clark

Email: [susan.spierre@asu.edu](mailto:susan.spierre@asu.edu)

Office Location: ISTB4 345

Office Hours: Tues 10:30 – 11:30 am; Thurs 1:30 – 2:30 pm, or by appointment

Course Webpage: [myasucourses.asu.edu](http://myasucourses.asu.edu)

Twitter handle: @sspierre23

Semester hours: 3

Pre-requisites: None

Co-requisites: None

Graduate Teaching Assistants, TAs (email, office hours and location, Twitter handle):

Angela Cazel-Jahn: [acazelja@asu.edu](mailto:acazelja@asu.edu), 12-1:30pm, WGHL 318, @acazelja

Megan Barry: [Megan.E.Barry@asu.edu](mailto:Megan.E.Barry@asu.edu), Tues 12:00-1:00PM WGHL 318, @mebarry14)

Kayce Flowers: [klflower@asu.edu](mailto:klflower@asu.edu), Wed 10:30-12:30, Hayden Library, @Kayce110

Neda Movahed: [nmovahed@asu.edu](mailto:nmovahed@asu.edu), Mon 10am-12pm, WGHL 318, @nemovahed

Jaishri Srinivasan : [jaishriS@asu.edu](mailto:jaishriS@asu.edu), Wed & Fri 8am-9am, WGHL 318, @Jay110S

### **Course Overview**

*Sustainable World* will introduce you to the field of sustainability and explore the fundamental question of how human and natural systems interact. *Sustainable World* focuses on how the environment functions, but also addresses how humans interact with the environment: how we shape the environment and how it shapes us. This class will also focus on a general approach to solving sustainability problems that come from an emerging field known as Sustainability Science. Using real world issues and problems such as biodiversity loss, agriculture, and climate change, you will learn about the fundamental Earth systems on which we depend and how people interact with these systems.

### **Sustainability Literacy:**

*All courses* in the School of Sustainability are designed to build and deepen your understanding of the following key concepts:

- *Systems Dynamics*: Human systems and natural systems are linked. Changes in any part of any system have multiple consequences that reach far beyond the initial change.

- *Tradeoffs*: Solving almost all problems related to sustainability involves tradeoffs. There are rarely perfect solutions with no costs, and there are often winners and losers.
- *Cascading Effects and Unintended Consequences*: There are cascading effects (positive and negative, intended and unintended) of human policies, decisions and actions, all of which have implications for sustainability.
- *Scale*: Problems of sustainability exist at multiple scales. Solving a problem at a local level is a very different thing than solving a problem across international boundaries.
- *Transdisciplinarity*: There is no one “solution” to address sustainability – no one person or field of study has the answer. We need scientists and social scientists from all disciplines plus politicians, entrepreneurs, artists, farmers, business and community leaders, and *you* to work towards a sustainable future.

### **Learning Outcomes for *Sustainable World*:**

After taking *this course*, you should be able to:

1. Describe and recognize what is meant by a sustainability and ‘wicked’ problems;
2. Outline a general approach to framing and collaboratively solving sustainability problems.
3. Be more aware of your own personal perspectives on sustainability and what role you might play as a ‘change agent’ in a societal sustainability transformation.
4. Explain the biogeochemical cycles (carbon, nitrogen, sulfur and phosphorous) that are most relevant to sustainability;
5. Describe the water cycle and its relevance to sustainability;
6. Explain energy flow and relate it to current issues in sustainability;
7. Outline the basic concepts of ecosystem science, such as ecosystem structure and function, evolution and population dynamics;
8. Define and give examples of ecosystem services;
9. Outline the state of the world’s renewable and non-renewable resources;
10. Discuss the role of human values, aesthetics, preferences and patterns of consumption in understanding and making decisions about sustainability;
11. Discuss the relationships among poverty, inequality and security, and understand the concept of environmental justice;
12. Describe how social and political institutions (local to global) affect sustainability;
13. Discuss the current and potential role of business and economics in creating a sustainable future;
14. Evaluate the interconnectedness of ecological, economic and social systems within the context of specific cases;
15. Demonstrate effective interpersonal communication and presentation skills;



## **Assessment and Evaluation:**

There are a total of 1370 points in this course. About half of the points are earned from weekly lectures and the other half are earned during weekly breakout sessions. The detailed point breakdown for this class is shown next and then each is explained in more detail further below:

### **Points from Lecture**

Worldview Survey	20
Twitter Participation	100
Exam 1	250
Exam 2	250

### **Points from Breakout**

Individual Essay	50
Participation	100
Quizzes (11 @ 10 pts each; 1 quiz drops)	100
Group Assignments (5 @ 25 pts each; 1 drops)	100
Part 1 of Final Report	75
Group Annotated Bibliography	50
Final Group Project Presentation	50
Final Group Project Report	200
Peer Evaluation	25

Your final grade will be calculated using the scale in the table shown below. For example, if you earn 1000 out of 1370 total points then your percentage grade is  $(1000/1370) \times 100 = 73\%$ . This means that you earned a C in the course.

<b>Percentage</b>	<b>Letter Grade</b>
> 93 – 100	A
> 90 – 93	A-
> 87– 90	B+
> 83 – 87	B
> 80 – 83	B-
> 77 – 80	C+
> 73 – 77	C
> 70 – 73	C-
> 60 – 70	D
> 50 – 60	E
< 50	F

**Survey:** The Worldview Survey is an anonymous online survey taken outside of class. The anonymous results of this survey will be integrated into the Human Dimensions course lecture. There are no right or wrong answers to these questions, as they are focused on values and ethics. As long as you fill out the online survey by the posted due date, credit is awarded. This survey will also give you a chance to become aware of your own personal perspectives on Sustainability.

**Twitter Participation:** We will be using Twitter in this class to communicate both in and outside the classroom. You will be able to tweet questions about the class content and assignments to Dr. Clark, any teaching assistant, and/or your classmates asynchronously. The idea is to keep classroom discussions, ideas, and concepts continuing after class, to provide an opportunity for you to share your thoughts and bring in outside information into the classroom, as well as a way to get help from your teachers and peers. This means you will need to have an active Twitter account for this class and you will earn points for the number and quality of your tweets. A tweet that asks an interesting question, answers or provides information to a question that is already posted, or contributes an interesting link or critical thought that adds to the class will be considered a quality tweet and will earn you points. You will be providing your Twitter handle to your TA for grading purposes but it may remain anonymous to other students if you like. Inappropriate language, links, pictures, materials and/or

disrespectful tweets will not be tolerated. Please refer to the Twitter help center ([https://support.twitter.com/groups/50-welcome-to-twitter#topic\\_204](https://support.twitter.com/groups/50-welcome-to-twitter#topic_204)) to find out how to create a Twitter account and how to get started using Twitter. Make sure to include #SOS110 in every tweet related to this class so that you get credit for it. Refer to the staff information at the beginning of this document to find out the Twitter handles of the teaching team.

**Exams:** There will be two exams given during the semester. There is no Final Exam for this class during the scheduled finals week. The exams will not be cumulative, meaning that the second exam will not contain information from the first exam. Exams will be a mix of multiple choice, short answer, and essay and will include material from both lecture and breakout components of this course. Each is a significant portion of your course grade (**about 40% of your semester grade**) and so they should not be taken lightly.

**Essay:** You will be completing an **individual essay** in which you will begin to research the wicked sustainability problem that you and your group will be exploring this semester. You are expected to research the topic in depth and provide at least 3 credible sources of information (other than your textbook and other readings used in class). You need to submit a list of these information sources in **APA format** (see the ASU tutorial on APA formatting at <http://flash1r.apa.org/apastyle/basics/index.htm>). We will spend time in breakout reviewing appropriate research methods and citation techniques early in the semester in preparation for this essay. A detailed grading rubric for this essay assignment will be provided by your TA on the Blackboard site. This essay is meant to guide you through the research, writing, and citation process before you apply it to your final project report. The individual essays will be revised and merged to form a much more focused introduction to your group's final report in Group Assignment 1.

**Participation:** Your breakout session classes have in-class discussions, problem-solving activities, debates, or case studies nearly every week. Each breakout session class will be overseen by a TA, and will be further split into discussion groups of 3 – 5 students. Your participation in these discussions and in presentations of in-class group work to the greater breakout group will be monitored by your TA. The means by which your participation in breakouts is monitored is left up to each individual TA. This grade will also reflect your participation in and contribution to the semester-long group project. It is crucial that you actively participate in all of these activities. Note that your failure to attend breakout guarantees you the worst participation score possible!

**Quizzes:** Short quizzes will be given at the beginning of each breakout session for which there is a required reading. These quizzes pose general (rather than very detailed) questions about the main points in the reading that you should be able to answer as long as you've done the reading (and paid attention while you were doing it!). The quizzes are meant to encourage you to do the breakout readings before each class session because the success of discussions, groups work, and other activities occurring during the breakout sessions will depend on all students doing assigned readings.

**Group Assignments:** During the breakout session, you will be broken down into groups of 4 – 6 students to complete a semester-long group project. The Group Assignments are meant to help you complete your group project in manageable bits. They will be completed either in-class or outside of class, depending on the specific assignment. Also, your TA will comment on your groups work for each assignment so that you can improve on it for your group's final presentation and report due at the end of the semester. **It is absolutely imperative that you complete assigned readings prior to breakout sessions on the days that you will be working on Group Assignments, as it will be very difficult if not impossible to successfully complete these assignments without having done the readings.** Each concept relevant to your group project is first explored during one breakout session and then you will apply that new concept to your group project topic in a breakout session soon after. You will have the opportunity to choose a topic of interest based on a list of topic description that we will provide. Group Assignments are handed in as a group and each student who worked on the assignment will receive the same grade. However, if you are in a group, but did not contribute to the assignment then you will receive a 0 for that particular Group Assignment.

**Part I of Final Report:** This assignment allows you to complete the first part of your group's final Sustainability Assessment report, which will reduce the workload at the end of the semester. Your group will submit complete and formal write-ups of Group Assignments 1, 2, & 3 in APA format. The goal is to show us that your group has a focused problem that you are studying, a clear understanding of what the problem is and who the major players are, as well as its impact on our ecosystems.

**Group Annotated Bibliography:** During the final breakout session when you give your group presentation, your group will hand in an annotated bibliography summarizing the research that you did throughout the entire semester. In the bibliography, you will list (**in APA citation style**) each information source that your group used for the project and also describe how each source contributed to your project. The exact format for the annotated bibliography will be described during your breakout session. Each student

from each group will be required to do his or her own individual research that contributes a minimum of 5 useful references to the group's research. **\*Do not wait until the end of the semester to start your individual research. If you do, you will find that you have a lot of work to do in a very short time. It can also be frustrating for your group members if they have to wait for you to complete your individual research at the last minute. Instead, it is HIGHLY RECOMMENDED that you steadily work on your individual research throughout the semester.\*** It is possible that different group members may receive different grades for the annotated bibliography. For example, if the research contribution of one group member was weak, then that student may receive a lower grade than another student in the same group who contributed significantly more.

***Final Group Project Presentations:*** During your presentation, you will present a summary of the group project work completed throughout the semester during Group Assignments. Essentially, you will be presenting the work that you completed during your Group Assignments plus any additional research you did outside of class as part of the Annotated Bibliography and improvements that you made to your Group Assignments based on suggestions from your TA. The format for group presentations will be described during your breakout sessions. Every member of the group must participate in the presentation and its preparation in a way that is clear to the TA and the professor. A rubric for these assignments, including grading criteria, will be provided on the Blackboard site.

***Final Group Project Report (Sustainable Assessment):*** As the final component to the group project, you will write up the information that you presented during your Final Group Project Presentation in a report format. You will have already submitted Part I of your Final Report at this point, which includes Group Assignments 1, 2, & 3. Now you will add write-ups of Group Assignments 4 & 5 to create a complete final report. The format for group reports will be described during your breakout sessions. Every member of the group must participate in report preparation. The report should read like a cohesive document that flows from one section to another. This will require that your group work together to create the final report and not individually tackle different sections. Do not take this report lightly, as it is **15 % of your course grade**. You will have plenty of opportunities from Group Assignments, the Group Annotated Bibliography, and the Final Group Project Presentation to receive feedback and improve on your group project before this report is turned in at the end of the semester. If you do not take advantage of these opportunities to work steadily on the group project throughout the semester, then you will most likely inherit a very heavy workload at the end of the semester.

## Readings:

(1) Required Textbook: Remington-Doucette, S. (2013). *Sustainable World: Approaches to Analyzing and Resolving Wicked Problems* (1st ed.). Kendall Hunt.

Note: You may purchase a hard copy of this text at the ASU Bookstore, or you can purchase the hard copy or e-version format directly from the publisher via the following link: <http://www.kendallhunt.com/author.aspx?id=93203>

(2) Individual readings. You will also be required to occasionally read chapters from other books, academic journal articles, and/or educational blogs for this course in place of textbook chapters. These will be posted on our course Blackboard website.

The due dates for all of the required readings and other assignments can be found in the Tentative Schedule table at the end of this syllabus. The class textbook is abbreviated as 'RD' in the schedule table.

## Course Websites:

This course has two accompanying myASU websites. To access these sites, log in at <http://myasucourses.asu.edu> using your ASURITE ID and password. You should see a link to the main SOS 110 course under the "My Courses" heading. The website contains PowerPoint presentations and readings for the lecture portion of the course. There is another separate Blackboard site for the breakout section of the course that will be managed by your TA and contains assignments, readings, and other materials for your breakout session. **Note: myASU acquires your e-mail address directly from ASU's EPO. This means that you will have to check your ASU e-mail, or have it forwarded to your preferred account** to get information sent from instructors or from your classmates. For tutorials to assist you, go to: <http://help.asu.edu/node/1712>

## Course Policies and Expectations:

- *Assignments*. Written assignments must be word-processed and spell-checked. Your name and student number should appear at the top of each assignment. Please submit your work electronically as a pdf (preferred) or a *Word* (.doc) document using the Assignment feature on Blackboard. **Late assignments will not be accepted.**
- *Academic Misconduct*. Cheating on exams, plagiarism (the use of another person's words, ideas or data without giving that person recognition), and other forms of academic misconduct will result in immediate dismissal from the class with a failing grade. Your graduate teaching assistants and professor will be using very sophisticated anti-plagiarism software to check all assignments (and

you should note that this software is very good at identifying Google-copying and other forms of web plagiarism). Don't do this! See ASU's general policies on academic misconduct at <http://www.asu.edu/studentlife/judicial/index.html>

- *Classroom Civility.* We will often talk about controversial topics in this class. We will ALWAYS do so in a professional manner and convey respect to all members of our classroom community, *especially* when we disagree with and challenge their ideas.
- *Email.* When school is in session, it is good practice to **check email every 24 hours**. We will be checking email during weekdays, Monday through Friday from 8 – 6 pm, and will get back to you with 24 hours during that time period.
- *Disability Accommodations.* If you need disability accommodations for this class, please see me as soon as possible so that I may work with the Disability Resource Center (<http://www.asu.edu/studentaffairs/ed/drc/>) to meet your needs. Information regarding disability is confidential.
- *Study and Preparation Time.* The Arizona Board of Regents specifies that students are expected to spend at least two hours per week on course-related research and scholarly activities per course credit. **This means that each week you should expect to spend at least six hours preparing for class.**

### **Majoring or Concentration in Sustainability:**

Sustainability majors and concentration students: Welcome to our new and exciting field! If you have any questions, please feel free to drop by during office hours to introduce yourself and talk about your interests and plans. We encourage you to make an appointment with our Undergraduate Advisors who are located in Student Services on the 1st floor of the WGHL building. Our advisor is Bill Dyer ([Bill.Dyer@asu.edu](mailto:Bill.Dyer@asu.edu)). He will help you make choices about general studies courses and electives that are appropriate for the challenge area or track that you wish to study. Even if you do not have specific questions at this time, we encourage you to make an appointment with him to make sure that you are on track.

*Maintaining your major.* Sustainability Majors should refer to the appropriate catalog year of your major for information about grade requirements for SOS 110 and SOS 111. You must earn a particular grade for this course, so make sure you understand what the grade expectations are. If you are unsure what they are, please send an email with your questions to [sosadvising@asu.edu](mailto:sosadvising@asu.edu) along with your full name and 10 digit ID number.

*Preparing for your career through internships.* For students majoring in Sustainability, the School of Sustainability has its own Internship Coordinator (Sada Gilbert, [Sada.Gilbert@asu.edu](mailto:Sada.Gilbert@asu.edu)) dedicated to helping Sustainability students find internships.

Please contact her if you are interested. Doing an internship as soon as possible will help you begin building your professional skill set early so that you will be competitive on the job market after you graduate. If you are not sure of your career path, internships can help you figure this out by providing professional experience that you may or may not enjoy!

**Sustaining Yourself:** Freshman year can be tough! ASU is a huge school and can sometimes seem impersonal. Fortunately, there are numerous support units on and off campus that provide training, tutoring, advocacy or just someone to talk to. Here are a few.

- *Computer Help Desk* – Provides assistance with computer-related problems and computer accounts. [https://techbase.asu.edu/wiki/index.php/UTO\\_Help\\_Desk](https://techbase.asu.edu/wiki/index.php/UTO_Help_Desk)
- *ASU Writing Center* – If you need assistance with improving your writing skills, this center is available to you. You may seek their help yourself or you may be referred to the Writing Center by your Graduate Teaching Assistant or the professor. <http://studentsuccess.asu.edu/writing>
- *Counseling and Consultation* – Provides confidential mental health and career counseling services for all ASU students. [http://www.asu.edu/counseling\\_center/](http://www.asu.edu/counseling_center/)
- *Disability Resources Center* – Provides a comprehensive range of academic support services and accommodations for qualified students with disabilities. <http://www.asu.edu/studentaffairs/ed/drc>
- *Student Financial Aid Office* – Offers information and applications for student funding such as grants, loans, scholarships and student employment. <http://www.asu.edu/fastt/>
- *Student Health and Wellness Center* – Provides non-emergency medical health care to all ASU students regardless of insurance status. Most visits with a physician or nurse practitioner are free of charge, but fees will be incurred for x-rays, lab results, etc. <http://www.asu.edu/health/>
- *Student Recreational Center* – Offers individual and group fitness opportunities, as well as information on nutrition and wellness, and massages. Use of the general facilities (weights, circuit training and cardio machines) are free. Other services (yoga classes, massages) are fee-based. <http://www.asu.edu/src>
- *Student Legal Assistance* – Provides legal advice and counsel free of charge to all ASU students in areas such as landlord-tenant law, credit reports and collection issues, taxability of scholarships and grants, etc. Notary service is also available at no charge. <http://www.asu.edu/mu/legal>
- *EMPACT Crisis Hotline* – Offers free 24-hour support for mental health crises. Call (480) 784-1500 in the Phoenix area, (866) 205-5229 for the toll-free number



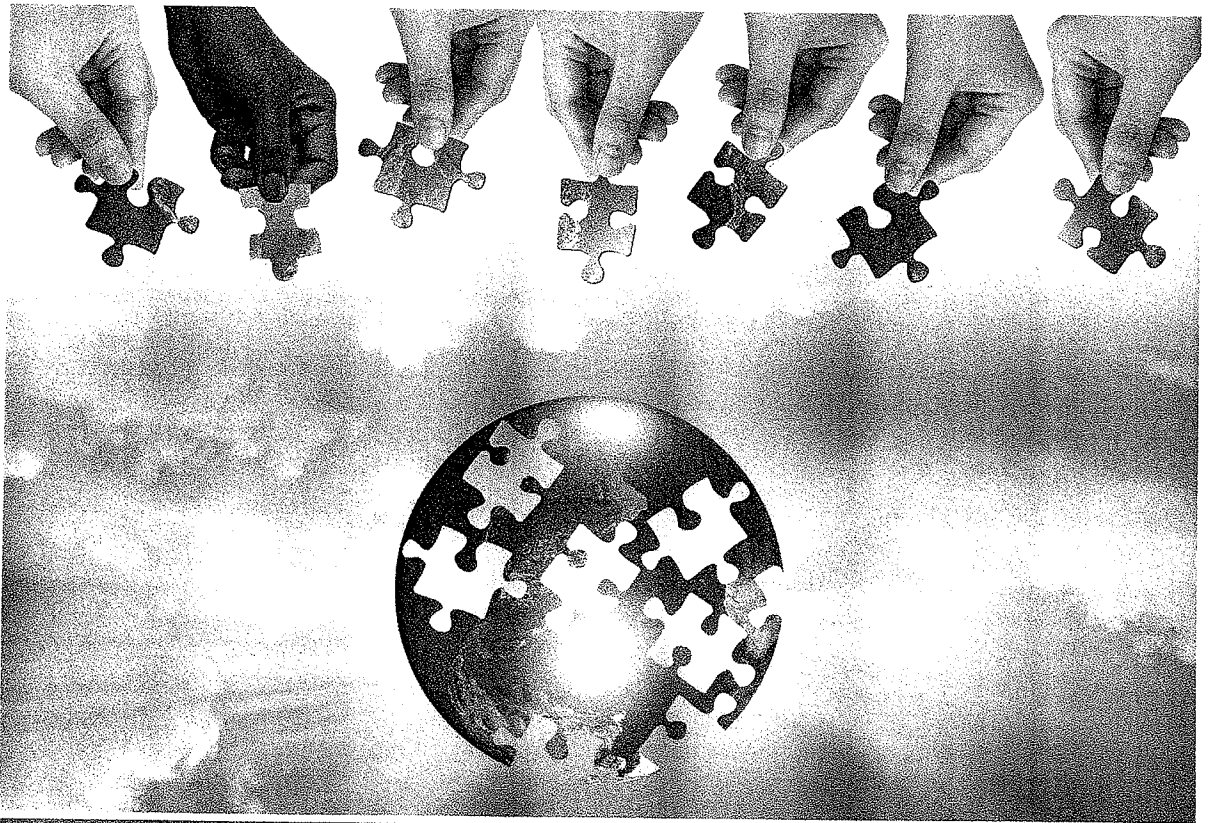
outside Phoenix and (480) 736-4949 for the sexual assault hotline. All services are free and confidential. <http://www.empact-spc.com/>

### Tentative Schedule (Subject to Change)

Wk	Date	Topic	Readings/Assignments Due
1	Aug 25	<b>Lecture 1:</b> Review Syllabus, Introduction to Sustainability and Wicked Problems	<i>RD Chapter 1, sections 1.1 &amp; 1.4 only</i>
1	Aug 26	<b>Breakout:</b> Project Overview, semester layout, Research Methods, Syllabus Quiz	<i>RD Ch. 2 section 2.1 only</i>
2	Sept 1	<b>NO LECTURE: Labor Day</b>	<i>None</i>
2	Sept 2	<b>Breakout:</b> choose group topic and team, team dynamics, individual essay assigned, Quiz 1	<i>RD Ch. 2 section 2.2 only Complete World Values Survey (link on Blackboard under Lecture 2)</i>
3	Sep 8	<b>Lecture 2:</b> Human Dimensions, Ecosystem Services, Current State Analysis	<i>RD Ch. 1 sections 1.2 &amp; 1.3</i>
3	Sep 9	<b>Breakout:</b> Group Project Work 1 – Current State Analysis of Problem, Quiz 2 (*One person per working group must bring a laptop to this breakout)	<i>RD Ch. 3 section 3.3 only Individual Essay due</i>
4	Sept 15	<b>Lecture 3:</b> Ecosystem Ecology, Biogeochemical Cycles, Stock and Flow Models	<i>Review webpage on Biogeochemical Cycles from Colorado.edu (link posted on Blackboard under Lecture 3)</i>
4	Sept 16	<b>Breakout:</b> Group Project Work 2 – Thinking About Sustainable Resource Use With Stock-and-Flow Models, Quiz 3	<i>Group Assignment # 1 Due</i>
5	Sept 22	<b>Lecture 4:</b> Biodiversity, Intro to Indicators	<i>Read 'Why Is Biodiversity Important? Who Cares?' (link on Blackboard under Lecture 4)</i>
5	Sept 23	<b>Breakout:</b> Variables & Indicators Workshop, Quiz 4	<i>RD Ch. 4 section 4.1 only; Group Assignment #2 Due</i>
6	Sept 29	<b>Lecture 5:</b> Resilience	<i>RD Ch. 5 section 5.1 only</i>
6	Sept 30	<b>Breakout:</b> Indicator Review, Group Project Work 3.1– Drivers; Quiz 5	<i>Read Ch. 3 section 3.1 &amp; 3.2 only</i>
7	Oct 6	<b>Lecture 6:</b> Earth Systems, Nonrenewable Resources, & System Feedbacks	<i>RD Ch. 5 section 5.2 only</i>
7	Oct 7	<b>Breakout:</b> Group Project Work 3.2 Indicators; Quiz 6	<i>Read pdf on sustainable energy indicators (link on BB)</i>

8	Oct 13	<b>NO LECTURE:</b> Fall Break	<i>Study for exam</i>
8	Oct 14	<b>NO BREAKOUT:</b> Fall Break	<i>Group Assignment #3 due</i>
9	Oct 20	<b>Lecture 7:</b> Exam 1	<i>Study for exam</i>
9	Oct 21	<b>Breakout:</b> Group Project Work 4.1 Scenarios , Quiz 7	<i>RD Chapter 7 section 7.1 only;</i>
10	Oct 27	<b>Lecture 8:</b> Natural Resources, the Tragedy of the Commons, & Commute Game	<i>Read Blog on ToC (link posed on Blackboard)</i>
10	Oct 28	<b>Breakout:</b> Group Project Work 4.2 Visioning, Quiz 8	<i>RD Chapter 7 section 7.2 only Part I of Group Project Due</i>
11	Nov 3	<b>Lecture 9:</b> Economics – The Invisible Hand	<i>Costanza et al 1997 (posted under 'Lectures 10' on Blackboard)</i>
11	Nov 4	<b>Breakout:</b> Group Project Work 5 - Transitions, Quiz 9	<i>RD Ch. 8, section 8.1 only Group Assignment #4 due</i>
12	Nov 10	<b>Lecture 10:</b> Government – Policy & Politics	<i>Read Pages 1-19 of Promoting Sustainable Consumption (pdf on Blackboard)</i>
12	Nov 11	<b>NO BREAKOUT:</b> Veteran's Day	<i>None</i>
13	Nov 17	<b>Lecture 11:</b> Ostrom & Community-Based Management	<i>RD Chapter 9</i>
13	Nov 18	<b>Breakout:</b> Group Project Work 5 – Transitions Continued, Quiz 10	<i>RD Ch. 8 section 8.2 only Group Assignment #5 due</i>
14	Nov 24	<b>Lecture 12:</b> Exam 2	<i>Study for exam</i>
14	Nov 25	<b>NO BREAKOUT:</b> Thanksgiving Week	<i>None</i>
15	Dec 1	<b>Lecture 13:</b> Sustainability Research Presentations	<i>None</i>
15	Dec 2	<b>Breakout:</b> Group Presentations	<i>Group Annotated Bibliography Due; Submit Powerpoint presentation to TA before class; Group Evaluations Due</i>

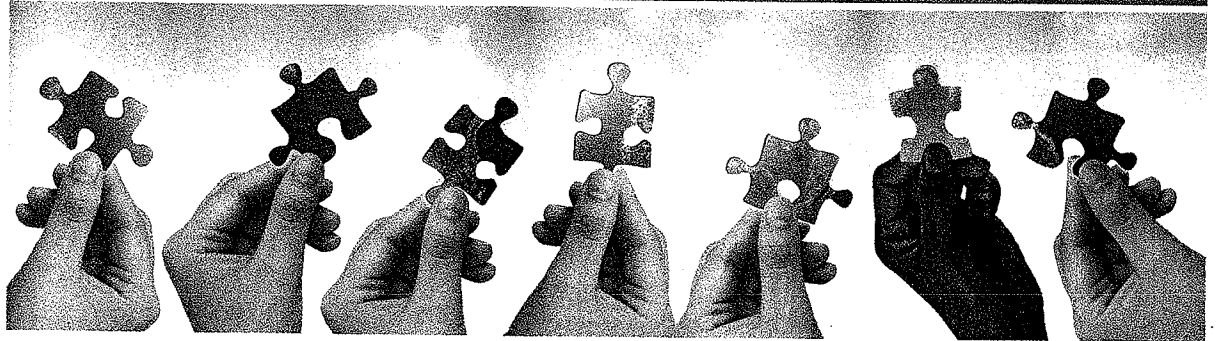
**\*\*Dec 10: Final Report Due at 11:59 pm via SafeAssign (unless TA tells you otherwise)**



# SUSTAINABLE WORLD

Approaches to Analyzing and  
Resolving Wicked Problems

Sonya Remington-Doucette



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publishing company

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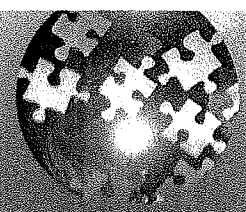
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