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

Academic Unit: School of Geographical Science and Urban Planning

| Subject | PUP | Number | 190 | Title         | Sustainable Cities | Units: 3 |

Is this a cross-listed course? Yes
If yes, please identify course(s)
SOS 111

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

Course description:
Sustainable Cities
Introduces technological, social, and cultural principles and innovations for cities under the notion of sustainability and sustainable development within the global, regional, and local contexts.
Allow multiple enrollments: No
Repeatable for credit: No
Primary course component: Lecture
Grading method: Student Option
Offered by: College of Liberal Arts and Sciences -- School of Geographical Sciences and Urban Planning
Credit is allowed for only PUP 190 or SOS 111

Requested designation: (Choose One)
Note - a separate proposal is required for each designation requested

Eligibility:
Permanent numbered courses must have completed the university's review and approval process.
For the rules governing approval of omnibus courses, contact the General Studies Program Office at (480) 965-0739.

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, Fine Arts and Design core courses (HU)
- Social and Behavioral Sciences core courses (SB)
- Natural Sciences core courses (SQ/SG)
- Global Awareness courses (G)
- Historical Awareness courses (H)
- Cultural Diversity in the United States courses (C)

A complete proposal should include:
- Signed General Studies Program Course Proposal Cover Form
- Criteria Checklist for the area
- Course Syllabus
- Table of Contents from the textbook and list of required readings/books

Contact information:
Name: David Pijawka
Phone: 7-7319
Mail code: 5302
E-mail: pijawka@asu.edu

Department Chair/Director approval: (Required)
Rationale and Objectives

The humanities disciplines are concerned with questions of human existence and meaning, the nature of thinking and knowing, with moral and aesthetic experience. The humanities develop values of all kinds by making the human mind more supple, critical, and expansive. They are concerned with the study of the textual and artistic traditions of diverse cultures, including traditions in literature, philosophy, religion, ethics, history, and aesthetics. In sum, these disciplines explore the range of human thought and its application to the past and present human environment. They deepen awareness of the diversity of the human heritage and its traditions and histories and they may also promote the application of this knowledge to contemporary societies.

The study of the arts and design, like the humanities, deepens the student’s awareness of the diversity of human societies and cultures. The fine arts have as their primary purpose the creation and study of objects, installations, performances and other means of expressing or conveying aesthetic concepts and ideas. Design study concerns itself with material objects, images and spaces, their historical development, and their significance in society and culture. Disciplines in the fine arts and design employ modes of thought and communication that are often nonverbal, which means that courses in these areas tend to focus on objects, images, and structures and/or on the practical techniques and historical development of artistic and design traditions. The past and present accomplishments of artists and designers help form the student’s ability to perceive aesthetic qualities of art work and design.

The Humanities, Fine Arts and Design are an important part of the General Studies Program, for they provide an opportunity for students to study intellectual and imaginative traditions and to observe and/or learn the production of art work and design. The knowledge acquired in courses fulfilling the Humanities, Fine Arts and Design requirement may encourage students to investigate their own personal philosophies or beliefs and to understand better their own social experience. In sum, the Humanities, Fine Arts and Design core area enables students to broaden and deepen their consideration of the variety of human experience.

Revised October 2008
Proposer: Please complete the following section and attach appropriate documentation.

### ASU - [HU] CRITERIA

**HUMANITIES, FINE ARTS AND DESIGN [HU]** courses must meet *either* 1, 2, or 3 *and* at least one of the criteria under 4 in such a way as to make the satisfaction of these criteria **A CENTRAL AND SUBSTANTIAL PORTION** of the course content.

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>Identify Documentation Submitted</th>
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| ☑️ | ☐️ | Textbook:  
1. Understanding Sustainable Cities - Table of Contents  
2. Biophilic Cities (T. Beatley) - Table of Contents, Assignments in textbook chapter |
| ☐️ | ☑️ | - Class syllabus  
- Textbook:  
Understanding Sustainable Cities - Table of Contents |
| ☑️ | ☐️ | - Class syllabus  
- Textbook:  
Biophilic Cities - Table of Contents |
| ☑️ | ☐️ | - Class syllabus  
- Textbook:  
Understanding Sustainable Cities - Table of Contents |
| ☑️ | ☐️ | - Class syllabus  
- Textbook:  
Biophilic Cities - Table of Contents |

1. Emphasize the study of values, of the development of philosophies, religions, ethics or belief systems, and/or aesthetic experience.

2. Concerns the comprehension and interpretation/analysis of written, aural, or visual texts, and/or the historical development of textual traditions.

3. Concerns the comprehension and interpretation/analysis of material objects, images and spaces, and/or their historical development.

4. In addition, to qualify for the Humanities, Fine Arts and Design designation a course must meet one or more of the following requirements:

   a. Concerns the development of human thought, including emphasis on the analysis of philosophical and/or religious systems of thought.

   b. Concerns aesthetic systems and values, literary and visual arts.

   c. Emphasizes aesthetic experience in the visual and performing arts, including music, dance, theater, and in the applied arts, including architecture and design.

   d. Deepen awareness of the analysis of literature and the development of literary traditions.

**THE FOLLOWING ARE NOT ACCEPTABLE:**
### ASU - [HU] CRITERIA

- Courses devoted **primarily** to developing a skill in the creative or performing arts, including courses that are **primarily** studio classes in the Herberger College of the Arts and in the College of Design.

- Courses devoted **primarily** to developing skill in the use of a language – **However, language courses that emphasize cultural study and the study of literature can be allowed.**

- Courses which emphasize the acquisition of quantitative or experimental methods.

- Courses devoted **primarily** to teaching skills.
<table>
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<tr>
<th>Criteria (from checksheet)</th>
<th>How course meets spirit (contextualize specific examples in next column)</th>
<th>Please provide detailed evidence of how course meets criteria (i.e., where in syllabus)</th>
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| Study of values, ethics, belief systems, aesthetic experience | - We introduce environmental values+ethics through naturalist writings and discussions  
- Role of nature in cities (Biophilia book) and importance of aesthetic through nature.  
- Belief systems covered as a basis for issues in sustainability such as the emergence of suburbia and its adverse impacts on ecological systems and the carbon footprint  
- Several assignments directly centers around consumption and ecological footprints and class covers ethical issues dealing with environmental justice throughout the course. | - Values and ethics are found in chapters of the main textbook (Understanding Sustainable Cities) and in many of the lectures. Evidence is found as follows:  
Week 1 - Ecological footprints, meaning of sustainability, environmental ethics. Values, ethics, justice is discussed in week 4 on environmental justice.  
We show movies/documentaries on sustainability issues dealing with global poverty.  
Week 2 has a documentary on environmental footprints showing the huge costs and ethical issues in consuming one pound of hamburger.  
Week 6 - Film on ethics concerning animal rights+food production.  
Week 10 specifically deals with the concept of Values in Sustainability  
Week 11 focuses on Naturalist writings and Ethics with a discussion of Leopold's "The Land Ethic".  
Week 12 looks at American Indian cultural values about land and its treatment.  
- Chapter 2 (Understanding Sustainable Cities)- The History of Sustainability covers images of city and structure over time and the impacts to livability, culture, and the environment. |
| Comprehension and analysis of images and spaces and their historical development | - Early history+evolution of cities-overconsumption: conflict resource use  
- City structure and form, and environment impacts  
- Understanding footprints-ecological and carbon footprints  
- Impact of suburbia on urban environments  
- We look at the development of the cities over time and their environments. This includes historical images, photos, literature.  
- For example, the Dust Bowl era looks at photos, writings, music and article analysis | Images and spaces and their historical development are covered in the Understanding Sustainable Cities textbook, particularly in Chapter 2: History of Sustainability (images throughout)  
Chapter 3: Earliest Urbanism - explores culture and cities, role of religion, etc.  
Chapet 6: Making Desert Cities Sustainable, written by an architect and designer. This chapter deals directly with design aesthetics and its cultural underpinnings. |
|------------------|---------------------------------|--------------------------------------------------|
| Aesthetic systems+Values  
Aesthetic experience in architecture+design | - Biophilic concepts  
- Carbon footprints/transportation  
- Urban adaptation- Design  
- Role of local food systems in life of cities  
- Early city structures and evolution of cities  
- Course has a significant amount of subject matter on environmental/natural systems, aesthetics and values of particular importance in the class textbook by Beatley on nature in cities and the importance of aesthetics.  
- We also cover the writings of the naturalists from perspectives that include aesthetics, values and ethics. e.g. Leopold and Thoreau  
- The course also covers subject matter that includes city form and its relationship with architecture and neighborhood design. Urban design and designing constructed ecological services is covered throughout this course, and we cover the socioeconomic impacts of such design and its meaning for sustainability. | - Aesthetics systems and Values are covered in many places but the Biophilic Cities book is centered around the role of nature and values as well as urban design.  
- The HU Committee should be aware that there is a Barrett Honors section of the 190/111 course focused on the Naturalists' writings. (See Barrett Honors syllabus) Their assignment emphasizes values and public perception of nature.  
- Design and Architecture are explored throughout and covered in the main text, Understanding Sustainable Cities and "Sustainable Design" is highlighted throughout the course, especially chapters 2 and 6. |
PUP 190 - Sustainable Cities

Course description: Introduces technological, social, and cultural principles and innovations for cities under the notion of sustainability and sustainable development within the global, regional, and local contexts.
**Fall 2013 Sustainable Cities**, PUP 190/SOS111. Course Instructors: Drs. Pijawka and Redman

**Honors Syllabus.** Teaching Associate: Craig Thomas cfthomas@asu.edu
Wednesday Classroom: 5635 COOR Hall; Office: 5643D

**Week 1:** Meet-up for 5 min. after class—introduce TA/ hand out syllabus
- **Reading:** first ten pages of *Walden* (1854); read more, if you like
- Write a ~250 word response (half page to a page, single or double space)
- 8-15 page report, group term paper due at the end of term

**Week 2:** Labor Day Week
- Meeting (1), walk to COOR classroom immediately after normal class ~ 5:30pm
  - Transdisciplinarity slides (10 minutes)
  - Introductions and purpose of class

**Week 3:** Meet (2) September 11th, **6:00 pm:** *Henry David Thoreau: The early socio-ecological systems-thinking of naturalists.*
- Be prepared to discuss first part of *Walden* in class
- **Individual Deliverable 1:** Hand in hard copy of Thoreau response
- **Group Deliverable 1:** Form groups of 3-7 students
- **Reading:** Listen to, or read, “Thinking like a Mountain” and “Wilderness” from *A Sand County Almanac*

**Week 4:** No Honors Class

**Week 5:** Meet (3) September 25th, **4:40pm:** *Aldo Leopold: Environmental pragmatism as linking academic theory to real-life practice.*
- **Ind. Deliverable 2:** Hand in hard copy of *Sand County Almanac* response
- **Group Deliverable 2:** Hand in hard copy listing all group members, and outlining group’s area, problem statement and thesis (or hypothesis)
- Finish discussing about *Walden*; be prepared to discuss “Thinking like a Mountain” and “Wilderness” from *A Sand County Almanac* (1954) in class
- **Reading:** “The Other Road” from *Silent Spring* (1962)

**Week 6:** No Honors Class

**Week 7:** No Honors Class

**Week 8:** Meet (4) October 16th, **4:40pm:** *Rachel Carson: A plea for science and ethics in decision-making.*
- **Honors Midterm Exam Review**
- **Ind. Deliverable 3:** Hand in hard copy of Carson response
- **Group Deliverable 3:** Hand in one-page, single-space prospectus. Be ready to present your topic in 2 minutes or less
- Be prepared to discuss “The Other Road” from *Silent Spring Wilderness*
o **Reading:** “The Ionian Enchantment” and “The Great Branches of Learning” from *Consilience: The Unity of the Knowledge* (1998)

**Week 9:** Midterm Exam: Monday, October 21st, in class. No Honors Class

**Week 10:** Meet (5) October 30th, **4:40 pm:** *Edward O. Wilson: How to solve for complexity in the 21st century.*

- Ind. Deliverable 4: Hand in hard copy of Wilson response
- **Group Deliverable 4:** Hand in one to three-page outline of group project.
- Be prepared to discuss “The Ionian Enchantment” and “The Great Branches of Learning” from *Consilience: The Unity of the Knowledge*
- **Re-reading:** “The Importance of Nature in Our Urban Lives” from *Biophilic Cities* (2011)

**Week 11:** No Honors Class

**Week 12:** No Honors Class

**Week 13:** Meet (6) November 20th, **4:40 pm:** *Tim Beatley: Ecological urbanism and Biophilic Cities.*

- Ind. Deliverable 5: Hand in hard copy of Beatley response
- **Group Deliverable 5:** Be present to work on projects in class!!
- Be prepared to discuss “The Importance of Nature in Our Urban Lives” from *Biophilic Cities*

**Week 14:** Meet (7) November 27th, **4:40 pm:** Present Final Project

- **Group Deliverable 6:** Present projects in 5 minutes or less in class.

**Week 15:** Hard Copies of Final Projects are Due in Class on Monday, December 2nd: No Honors Class

**Week 16:** Final Exam: **Date to be announced.** No Honors Class
**Sustainable Cities**  
Course Syllabus and Policies  
PUP 190/SOS 111  
Spring 2014  
Mondays and Wednesdays, 4:30 - 5:45 pm  
Murdock Lecture Hall 201 (Tempe)

**Legend: Criteria for HU**

1. Study of values, ethics, belief systems, and aesthetic experience
2. Comprehension and analysis of images and spaces
3. Aesthetic systems and values, literary arts
4. Aesthetic experience - Applied arts in architecture and design
Sustainable Cities

Course Syllabus and Policies

PUP 190/SOS 111

Fall 2013

Mondays and Wednesdays, 4:30 - 5:45 pm

Murdock Lecture Hall 201 (Tempe)

Instructors:

K. David Pijawka, Ph.D.
Professor and Associate, School of Geographical Sciences and Urban Planning;
Senior Sustainability Scholar, Global Institute of Sustainability
Email: pijawka@asu.edu
Office: COOR 5632
Phone: (480) 727-7319
Office Hours: By appointment

Charles L. Redman, Ph.D.
Professor and Founding Director, School of Sustainability; Distinguished Sustainability Scientist, Global Institute of Sustainability
Email: charles.redman@asu.edu
Office: Wrigley Hall, Rm. 356
Phone: (480) 965-8654
Office Hours: By appointment

Teaching Assistants:

Kayce Flowers kayce.flowers@asu.edu
James Gardner james.gardner@asu.edu
Wesley Pittman wpittman@asu.edu
Brandon Stocksdale brandon.stocksdale@asu.edu
Craig Thomas cftthomas@asu.edu

Course Structure:

This is a hybrid course. This means that both in class and online components are being incorporated. On Mondays, lectures will be in person in Murdoch Hall starting at 4:30 pm. On some Wednesdays, lectures will found be online at the Blackboard site. The syllabus indicates when there will be in-class lectures on Wednesdays, and we will also make an announcement in the prior class regarding Wednesday lectures.
About half of the Wednesday on-line classes will be films, documentaries and/or webinars (e.g. “Ted talks”). Be sure to check your email and the Blackboard site regularly, as the syllabus is subject to changes. All lectures, in person and online, are mandatory. Examinations will contain questions from both in person and online lectures. Mondays will be primarily for in class lectures, but may also be used for Q&A sessions on readings and lectures, study sessions for exams, and group assignment meetings. Questions can be taken after class, as well: feel free to come up to the podium after class with prepared questions.

**Attendance:**

Attendance will be taken during class. Your appearance in all Monday, and designated Wednesday classes, is mandatory; you may lose a letter grade for every two absences from the class. Leaving class early will be counted as an absence. Absences, including leaving early, must be approved by your TA prior to class. Unexcused absences may negatively impact your final grade.

**Course Description and Objectives:**

This course is an undergraduate course introducing the student to the concept of sustainability and its principles and the sustainable development of cities in the global and local contexts. The course will cover the environmental, socio-economic, structural and health problems of contemporary cities and their consequences on natural systems and built communities. Of particular importance is the integration of ethical and equity issues as part of sustainability thinking. After an introduction to the history, framework and philosophy of sustainability and the city itself, students will learn about sustainable alternatives and mechanisms in current and future urban structures and dynamics. Technological, social, and cultural innovations for sustainable cities throughout the globe will be demonstrated during the course. The instructors and guest speakers will discuss and present state-of-the-art theory and practice of urban sustainability topics such as sustainability concepts and principles, history of sustainability, earliest urbanism, environmental and social justice, and global climate change, among others. Some key terms that students will become familiar with include: ecological footprint; urban resiliency; food miles; life-cycle assessments; LEED-ND (Leadership in Energy and Environmental Design for Neighborhood Development) rating systems; ecosystem services, adaptation responses, scenario-based planning, offshoot, natural capital, greenhouse gases, and more!

This course will focus on:

- Appreciation of interdisciplinary and transdisciplinary learning through a focus on sustainability
- Basic knowledge of planning issues and practices of sustainability
- Urban systems and resiliency
- Understanding global to local issues
- Connecting the concepts and theories to the practice of urban sustainability
- Connections between individual behavior and global outcomes
- Critical thinking and collaboration among the students connecting theory to problem-solving
Expectations

- Students are expected to attend all Monday, and all designated Wednesday classes, listen to online lectures posted on Wednesdays, and complete all course assignments. Also, please turn off your cellphones, smart phones, and all other electronic devices prior to each class. Laptops are an exception; they may be turned on and open, but should only be used to take class notes or for other in class-related activities.
- Attendance will be taken. Attendance is required on Monday classes and designated Wednesday classes which means arriving at the beginning of class (4:30 pm) and not leaving until the end of class (5:45 pm). Unexcused absences and leaving early may negatively impact your final grade. If you cannot attend class, you must contact your TA before class. Leaving early creates noise and disturbances for both the students and the speakers. Please avoid doing this.
- Students must be prepared to participate, ask questions, and engage in discussions based on the readings, individual assignments, and lectures even with a very large class.
- Students should recognize the importance of producing projects of excellence. The assignments must be well written, complete, well-documented and well-illustrated, and presented according to APA citation style. Team projects will first team graded, and then graded by the TAs and instructors. Late assignments will not be accepted.
- Materials may include readings that are pertinent to the lecture for the day. You are expected to have read the available document(s) and article(s) BEFORE you attend class. Most of the readings this semester will be from the texts.
- Sustainability majors are required to achieve at least a B grade in this course to remain in that major. Urban Planning majors also require a minimum of a B grade.


Handouts and PowerPoints: required .pdfs and .ppts will be made available on Blackboard under the “Day-by-Day Schedule” tab. Click on “Day-by-Day” and then on the corresponding date for the lecture, and inside will be readings and Power Points (PP) required for that day.

Guest Lecturers: Some of the lectures in this course will be given by ASU professors and Ph.D. students who have written chapters for the textbook and are the top experts in their respective fields and within sustainability. As with ALL guest lectures, please show respect by remaining seated until the class has concluded. Because some lecturers might not make their PowerPoint files available afterwards, we suggest that you take notes in class. Remember, all of the material presented by guest lectures is eligible to be on the exams.
Online Lectures: Online lectures will be made available on Blackboard under the “Class Content” tab. Click “Class Content” and then the corresponding date for the lecture, and inside will be the .ppt file required for that week. Again, these are required and material therefore may be on the midterm and final exams.

Blackboard: Please check Blackboard frequently through your MyASU account (my.asu.edu) for announcements, new course material, and study guides for examinations, and assignments. Quizzes, study guides, and exam results will be posted on blackboard throughout the semester. Consult the IT help-desk services for assistance in using Blackboard technology. It is highly recommended that you learn how to navigate Blackboard quickly. Help with Blackboard can be found in the Computer Commons and through other means.

Student Code of Conduct:

Please read and familiarize yourself with the University’s Student Code of Conduct and Academic Integrity Policy:

http://azregents.asu.edu/rrc/Policy%20Manual/5-308-Student%20Code%20of%20Conduct.pdf

https://provost.asu.edu/academicintegrity/students

Prohibited Conduct includes, but is not limited to:

- All forms of student academic dishonesty, including but not limited to cheating, fabrication, facilitating academic dishonesty, and plagiarism. We will check for plagiarism through ASU’s Safe Assign software. Plagiarism will result in zero points (0%) awarded for the assignment, and possible dismissal from the course.
- Impersonation of another, using another person’s identity, or furnishing materially false information, including manufacturing or possession of false identification.
- Interfering with or disrupting university or university-sponsored activities, including but not limited to classroom related activities, studying, teaching, research, intellectual or creative endeavor, administration, service or the provision of communication, computing or emergency services.
- Disruptive behavior of any type in this course will not be tolerated, and will be reported to the proper authorities.

Plagiarizing another’s work will eliminate the entire grade of that assignment or project and result in further academic review. Cheating of any kind will be immediately addressed and all remedies available will be used up to and including expulsion from the class and your program. We have computer programs to detect plagiarism. Students are also NOT allowed to have any electronic devices in their immediate vicinity during any test. Foreign Exchange students may ask for permission to use pocket translators during the exam. You risk receiving a failing grade by not following this policy. International students who have problems in English proficiency should consider taking advantage of the many writing courses and tutoring services available at ASU.

SC Syllabus Fall 2013 p. 4
Barrett Honors Students

There will be an Honors class on approximately every other Wednesday starting September 11th for 50 minutes in COOR Hall 5635. Honors students will form groups and ultimately write and present an 8-15 page paper addressing a socio-ecological problem in a specific area of Phoenix. The honors students will look at the ideas, concepts, and principles of American naturalists, in order to see how naturalist thinking can make an area or areas of a city not only more “biophilic,” but more “sustainable.” Instead of relying on a traditional and common sustainability framework of three pillars (“environment, society, and economy”), students will first design their own sustainability framework(s) for the group. From there, subgroups will address a long term sustainability problem in a designated area, asking how would American naturalists like Henry David Thoreau, Aldo Leopold, Rachel Carson, or E.O. Wilson look at this particular sustainability problem, using the competencies of transdisciplinary theory (e.g. system-thinking, connecting academic theories to real-life problems and solutions, community building over the long term, etc.) highlighting the thinking of a particular naturalist. Assuming these authors can provide a basis for transdiciplinary thinking the student will design an intervention based on long-term sustainability principles in their area of Phoenix, keeping the following questions in mind:

- To what degree is your socio-ecological problem (i.e. wicked problem) the same or different from a traditional conservation, restoration, or preservation problem?
- Are the biggest needs for the solution social, economic, scientific? Educational, economic, or ethical, etc.? Collectively what disciplines are required in addressing both the problem and the solution?
- How does your solution address the biggest real-life problems in the area?
- How can you elicit expertise and mastery for mutual community benefits?
- What will the future urban environment look like? What is the community’s vision for the future? How can we elicit the community’s creativity and mastery in the problem areas?
- What is the long natural history of the area? How has the natural history and the cultural history of your area coevolved to make this place unique? How will this unique context affect how we approach the problem?
- What are the potential future challenges 5 years down the road? 50 years? 100 years? Could your area’s ecosystem be very different than from now?
- How can we capitalize upon new technologies to be cheaper, faster, and more efficient; as well as elicit historical, cultural and ethical values and inspire community monitoring and reporting?
- What are the main systems involved that affected past decision-making? Are they economic, ethical, they right ones? What will be the major future systems involved?
- How can we elicit community-monitoring and reporting?
- What set of tools would they use to fix the problem? What is the larger perspective of the problem?
- Keeping Beatley’s indicators on page – in mind, how can we expand these ideas (p. 47-49) without making them more complex?

The honors group will meet as an extension of the regular class and have additional expectations and coursework, whose final work will culminate in a group project at the end of the semester. The students’
community-based project(s) will meet all the competencies of transdisciplinary research. Attendance is mandatory and missing this class may negatively impact your final grade.

ASSIGNSMENTS:

All assignments will be posted on Blackboard. Class time may be devoted to discussing assignments allowing for clarification and any questions that students may have. Assignments must be turned in on time through Blackboard. Any late assignments must be discussed with one of teaching assistants before the due date. Late assignments will not be accepted.

All assignments are due by 10:00 pm on the due dates.

Assignment Specifics:

Four Written Assignments – Instructions will be posted on Blackboard

1. The Ecological Footprint (p.253)
2. Sustainable Indicators (p.249)
3. Urban Resiliency and Adaptation (To Be Developed)
4. Sustainable Plans, Programs, and Design: A Team-Based Approach (p.259)

Grade Structure:

Four Written Assignments: 50% of your final grade (the first three writing assignments are worth 10% each and the final assignment is worth 20%)

Midterm Exam: 25% of your final grade

Final Exam: 25% of your final grade

Exams will be multiple choice/short answer based entirely on the readings and lectures, both in class and online – the content of the assignments will not be on the exams, although the information in them will help you to put the concepts into context. You are encouraged to take notes during every lecture.

Bonus Points: (Not Required): You can earn a yet undisclosed amount of points by writing up a one page response for each of the four movies we will watch online on Wednesdays this semester.

Class Schedule

This schedule is subject to change so please check Blackboard regularly for any updates.

NOTE: the abbreviation “USC” below refers to the Understanding Sustainable Cities book

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**Week 1:**

**Monday, August 26:** Sustainability and Sustainable Cities: Dr. Pijawka and Dr. Redman

Readings: 1) USC Text Foreword and Introduction; 2) Course Syllabus and Policies; 3) Pijawka: Disasters – Technology is not always the answer PP in-class, short lecture; Dr. Redman: Sustainability in-class, short lecture

**Wednesday, August 28:** In Class; An Introduction to Sustainability Concepts and Principles: Dr. Pijawka


**Week 2:**

**Monday, September 2:** Labor Day Holiday Observed - University Closed

**Wednesday, September 4:** In Class; Cities and Sustainability (Hamburger Documentary): Dr. David Pijawka

Reading: 1) Changes to Cities and the Need for Sustainability

**Week 3:**

**Monday, September 9:** History of Sustainability, and Urbanization: Dr. David Pijawka

Reading: 1) USC Chapter 2

**Wednesday, September 11:** In Class; Earliest Urbanism and Collapse: Dr. Charles Redman

Readings: 1) USC Chapter 3; 2) “The Ends of the World as We Know Them” by Jared Diamond

**Week 4:**

**Monday, September 16:** Sustainability and Environmental Justice: Dr. Chris Boone

Readings: 1) USC Chapter 4; 2) Chapter 4 - Connecting environmental justice, sustainability, and vulnerability by Christopher G. Boone and Michail Fragkias

**Wednesday, September 18:** Online; View “Collapse: Based on the Book by Jared Diamond”

**Week 5:**

**Monday, September 23:** The Urban Heat Island Effect: Dr. Brazel

Reading: USC Chapter 9

SC Syllabus Fall 2013 p. 7
**Wednesday, September 25:** Online; Measuring Sustainability: Dr. Pijawka (you **must** download Adobe Reader, AND Adobe Flash Player, AND **not** be in “Preview” mode (you must be in reader mode)

Readings: 1) The Encyclopedia of Earth website, 2) Indicators of sustainable development

**Week 6:**

**Monday, September 30:** Securing Water Resources: Ray Quay

Reading: USC Chapter 5

**Wednesday, October 2:** Online; **view Food, Inc.**

**Week 7:**

**Monday, October 7:** Local Food Systems: Katherine Crewe

Reading: USC Chapter 10

**Wednesday, October 9:** Online; View “An Inconvenient Truth”

**Week 8:**

**Monday, October 14:** Fall Break – Classes Excused

**Wednesday, October 16:** In class; Midterm Exam review

**Week 9:**

**Monday, October 21:** Midterm Exam

**Wednesday, October 23:** In class; Freiburg, the Renewable Energy City: Dr. Bjoern Hagen


**Week 10:**

**Monday, October 28:** Central Arizona-Phoenix Long-Term Ecological Research: Dr. Charles Redman

Readings: 1) "Integrated Approaches to Long-Term Studies of Urban Ecological System" by Grimm, Pickett, Grove, and Redman; 2) review the Central Arizona-Phoenix Long-Term Ecological Research website; 3) review The U.S. Long Term Ecological Research Network website; 4) CAP LTER: patterns and processes of a socio-ecosystem PP

**Wednesday, October 30:** Online; Values of Sustainability: Dr. David Pijawka (you **must** download Adobe Reader, AND Adobe Flash Player, AND **not** be in “Preview” mode (you must be in reader mode))

**Week 11:**

SC Syllabus Fall 2013 p. 8
**Monday, November 4:** Coping with Global Climate Change: Dr. Bjoern Hagen  
Reading: USC Chapter 8

**Wednesday, November 6:** In class: A Naturalist History: Ecology, Sustainability, and Transdisciplinarity Thinking  
Reading: “The Land Ethic” by Aldo Leopold

**Week 12:**  
**Monday, November 11:** Veteran’s Day Observed - University Closed  
**Wednesday, November 13:** In class; Culture and Sustainability: The Navajo Nation Project: James Gardner  
Reading: To Be Announced

**Week 13:**  
**Monday, November 18:** Rapid Urbanization in the Developing World: Mexico City: Dr. Charles Redman  
**Wednesday, November 20:** Online; Risk, Vulnerability, and Resilience: Dr. David Pijawka (you must download Adobe Reader, AND Adobe Flash Player, AND not be in “Preview” mode (you must be in reader mode))  
Readings: 1) review USC Chapter 1 p. 11-15; 2) review Resilience Alliance website; 3) Review Building Resilient Regions website

**Week 14:**  
**Monday, November 25:** Urban Ecology Networks: Dr. Edward Cook  
Reading: 1) USC Chapter 11

**Wednesday, November 27:** Online; “The Suzuki Diaries: Future City” by David Suzuki

**Week 15:**  
**Monday, December 2:** Sustainability at ASU: Sustainable Design: Dr. Patricia Olson  
Reading(s): Article from “Made for Walking” by Julie Campoli

**Wednesday, December 4:** In class; Review for Final Exam

**Week 16:**  
**Monday to Friday, December 09-15:** Final Exam; In class; 12:10 - 2:00 pm; Date To Be Announced

SC Syllabus Fall 2013 p. 9
1 An Introduction to Sustainability Concepts and Principles by K. David Pijawka and Martin A. Gromulat
2 History of Sustainability by K. David Pijawka and Martin A. Gromulat
3 Earliest Urbanism by Charles Redman
4 Environmental and Social Justice by Martin A. Gromulat and K. David Pijawka
5 Managing Water and Its Use: The Central Issue for Sustaining Human Settlements by Ray Quay
6 Making Desert Cities Sustainable by John Meunier
7 Sustainable Transportation by Aaron Golub
8 Coping with Global Climate Change by Bjoern Hagen
9 The Urban Heat Island Effect and Sustainability Science: Causes, Impacts, and Solutions by Darren Ruddell, Anthony Brazel and Winston Chow
10 Sustainable Agricultural Systems for Cities by Rimjhim M. Aggarwal and Carissa Taylor
11 Urban Ecology and Green Networks by Edward Cook
12 Examining Urban Sustainability through Urban Models by Subhrajit Guhathakurta
13 Course Assignments: Learning Outcomes in Sustainability Education