

CRP 724: Planning for Sustainable Development, Envisioning a Sustainable OSU

Instructor: Maria Manta Conroy (Conroy.36@osu.edu, 292-8044, 225 Knowlton Hall)

Course Day/Time/Location: Tuesdays, 8:30am-11:30am, 177 Knowlton Hall

Office Hours: As posted or by appointment

Course Overview

Universities have an often unique relationship with the communities that surround them. They often serve to inform and assist their surrounding community through research and outreach. They also attempt to nurture healthy communities and economies through education. However, universities also serve as examples to their adjacent communities. Communities battle the negative impacts of sprawl, pollution, automobile dependency, Universities must set positive social, environmental, and economic examples for their societies to follow.

Course Goals

- To familiarize students with the concept of sustainable development, its major components and major critiques;
- To provide students with an opportunity to examine and clarify their own concept of sustainability and of what cities and communities could or should be;
- To provide students with a practical application for moving a community towards sustainability and to work with principle stakeholders and the general public;
- To provide students with a level of understanding from which to be able to examine land use related activities based on sustainability considerations and to propose actions to guide communities toward a sustainable future;
- To build upon students' analytical writing and presentation experience.

Course Focus

While the class will consider and discuss the full range of dimensions on which OSU is or could be a Sustainable University, teams will focus their analysis and work in four key areas:

1. Land Use and Urban Form (including Urban/Campus Ecology and Green Buildings)
2. Transportation and Mobility (CABs, COTA, cars)
3. Energy (and CO2 reduction) and Waste
4. Policy and Curriculum

Each of these topics will be assessed in detail by student teams. The class as a whole will determine a working definition of sustainability as it relates to OSU through readings and discussions. That definition will guide development of our vision statements, indicators, and analyses. Each team will formulate a vision for what a sustainable OSU would "look like" in terms of their topic, assess how current practices support or undermine the vision, and finally formulate a sustainability plan to progress toward the vision.

Analysis

Analyses will be conducted by the teams with guidance by the instructor. The potential scope of analysis is well beyond possible coverage in a 10 week course. Therefore, teams will necessarily

select one to three issues to analyze in detail. We will help determine team scope in class, but some of the following questions for teams to consider may help guide their selection:

Land Use and Urban Form

- What incentives if any are there for “green” buildings on campus?
- What opportunities exist to retrofit existing buildings to be more green?
- What are the current landscaping practices? How expensive are they?
- Is xeriscaping considered as a planting option?
- What does typical building maintenance cost? How could that cost be reduced going green?

Transportation and Mobility

- What percentage of students (faculty, staff) drive to/on campus? How well does CABs/COTA serve student needs?
- What are the most traveled routes for people on campus to drive/walk/bus?
- How convenient is it for physically challenged persons to get around campus?
- What linkages exist between the University and the City? What linkages should exist?

Energy (and CO2 Reduction) and Waste

- What is the distribution of energy usage by the University?
- What alternatives exist for diversification into nontraditional areas such as solar, wind, or geothermal?
- What is OSU’s ecological footprint?
- How much waste does OSU generate? What is the primary category of waste? What can be done to reduce waste?
- What is the level of recycling at the University? What impedes higher recycling rates?

Policy and Curriculum

- What sustainability related courses exist at the undergraduate/graduate level?
- What exposure should undergraduate/graduate students have to sustainability ideas in their required curriculum?
- Could there be a sustainable development major (undergrad/graduate)?
- What administrative level policy changes would support a more sustainable University?
- Could OSU have a sustainability office similar to that of the University of British Columbia?

Final Products

There are four primary deliverables for this course. First, students will prepare a vision for their team in terms of a goal oriented sustainable future for their area. Second, based on the vision, students will develop 5 key indicators that will be necessary to measure progress toward that vision. Indicators may or may not be based on existing available data, but needed data must be identified as part of the measure. More details about indicator development will be discussed in class. Third, teams will complete a written strategic assessment of the status of OSU as it embarks on becoming a sustainable campus. The assessment should be professional and based on both the opportunity and sustainable analyses in the quarter. The written assessment will

highlight the opportunities that exist and steps that can be taken to create a sustainable OSU; creativity is encouraged in this assessment as students should get beyond what is “politically feasible” to what is “possible.” It is the intent of this course that the report is a practical guide and serves as a resource for future activities. The fourth product is a public presentation and working session at the end of the term. The presentation and working session provide an opportunity to convey results to our client and the public at large, as well as to solicit feedback on our analyses. It is a professional presentation and meeting, and students will be held to corresponding standards.

Course Format

Students will work in teams in this studio. The instructor or guest (when available) will conduct lecture and discussion sessions on methodological and substantive issues. In addition, working sessions will allow students to deal with ongoing planning activities and present progress reports by teams to the class and instructor for critique and advice. Several working sessions will include formal presentations of project work. Field work may consist of activities such as client contact, data collection, reading, analysis, and plan formulation.

Course Evaluation

Students will be evaluated based upon participation (10%), vision statement (5%), indicators (15%), opportunity assessment (15%), sustainability analysis (20%), final report (25%), presentation (5%), and peer evaluations (5%). Additionally, I reserve the right to allocate up to 5 additional bonus points for consistent extra effort throughout the quarter, as well as for students taking on additional responsibilities.

Transformation of numerical grade to letter grade will be according to the schedule summarized below:

A	93-100	C+	77-79.9
A-	90-92.9	C	73-76.9
B+	87-89.9	C-	70-72.9
B	83-86.9	D+	67-69.9
B-	80-82.9	D	60-66.9
E	< 60		

Participation

Participation is a multifaceted and critical component of this studio. At a minimum, it includes in class discussions. You are also expected to participate by completing the following:

- In-person interviews with key stakeholders both in the University administration as well as student samples. Each student will be responsible for conducting field interviews pertaining to his or her area of analysis.
- At least one member from each team will be expected to attend one or more student/administrative public meetings, if available, to keep abreast of the details of their area.
- One or more students will also be responsible for course related public relations.
- Finally, all students are expected to participate fully in their group and in class. Each week a portion of the class time will be allocated to discussing your experiences.

Opportunity Assessment and Indicator Development

Student teams will conduct this analysis using University maps and documentation (e.g., policy statements, plans, and course listings) to assess the status of the University in pursuing a sustainable vision. Teams will examine efforts that currently exist on campus pertaining to their area. Teams will assess both where the University is doing well in pursuit of the vision, and what opportunities exist for improvement. This assessment will necessarily include interviews with key persons and possibly sample surveys of University “citizens.”

Student teams will also use this period to develop indicators of sustainability with respect to their study area. These indicators should be derived with input from relevant University persons, and must acknowledge whether data for indicator measurement currently exists – and if so, where and who is responsible for it. If data does not currently exist, students must determine how such data can be gathered and who should be responsible for gathering the data in the future.

Sustainability Analysis

Students teams will prepare a sustainability analysis based on the background information obtained in their area as well as on meetings with stakeholders. Teams will make recommendations for short (1-2 years), medium (3-5 years), and long (beyond 5 year) time frame. Recommendations should include a fiscal component wherever possible. Sustainability analyses must be driven by the vision developed by the teams; recommendations are to advance the University toward the vision. Additionally, the analysis will necessarily incorporate the indicators developed by the teams; recommendations are to advance measurable progress toward improving indicator standing.

Final Report and Presentation

Students will present results of their opportunity assessment and sustainability analysis to our primary contacts. Additionally, there may be an opportunity to present the results to a larger University audience; details will be given as this unfolds. The class will be responsible for developing a final report that summarizes both the assessment and analysis. The report is a *unified* document bringing together visions, indicators, assessments, analysis and conclusions. Teams will elect an editor responsible for coordinating the document. The class will also be responsible for preparing posters for each analysis area, as well as a summary poster, that will be used to illustrate the opportunities and recommendations. While the date for this presentation has not yet been finalized, it has tentatively scheduled for Tuesday, March 14 (scheduled day of class final exam). All students are expected to attend and participate in this final presentation.

Course Policies

This course is multifaceted, relying on lectures, discussions, and group work. It is a planning studio and works with stakeholders. Those who present to our class are both client and our main resource and therefore must always be treated professionally. Our final report will be submitted to the President’s Office and the University Architect/Planning Office.

Group work

Group work requires students to interact with each other as well as with external resources. All groups will likely have some interpersonal conflicts during the term. If there is an intractable dispute within a group, students are expected to first attempt resolution on their own. Should

such efforts prove unsuccessful, students should contact me for mediation efforts. Issues made known after February 7, 2006 will not be considered for mediation/grade implication. This class relies on participation in the form of class discussion, investigations, presentations, and the like. Alternative participation options can be made available to students with special needs. Please contact me for discussion on a case by case basis.

Grading

All grading will be done as fairly and as consistently as is reasonably possible. Assignments (paper drafts and final project) that are turned in late for any reason will have 15% taken off the first day late, 30 % the second day and 50 % after that point. All assignments are noted in the syllabus well in advance of the due date. We have a very tight schedule and must adhere to it. If you are ill then you can send your assignment in via e-mail. In some cases there are extenuating circumstances that lead to a late assignment. In such cases, I will consider requests on a case-by-case basis. Students wishing to appeal the grading of an assignment **must make the appeal in writing within 5 calendar days** after an assignment/exam is returned. In the case of a final grade, student **must make an appeal within 10 calendar days** of the start of the subsequent term.

All students are held responsible for knowing and abiding by the Department's policies on plagiarism and the University's policies on academic misconduct. These have been distributed to all C&RP students. If you have not received a copy, please obtain one from the graduate studies office in Room 100 of Knowlton Hall. Students are encouraged to share ideas in intellectual discussions relating to the class. **However, all papers MUST include proper citations within the text and proper references/bibliographies at the end; this includes attributing information gained through conversations with experts and committee members.** This is a critical component of any scholarly writing effort as well as any effort that uses other sources of information. Violations fall under academic misconduct regulations and can result in dismissal from the program and the University. If you do not know proper citation procedures, contact the OSU Center for Study and Teaching of Writing (<http://www.cstw.ohio-state.edu/writingcenter.html>) or see me during office hours.

ADA Policy Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Office of Disability Services at (614) 292-3307.

Course Communication

This course will use Carmen to enhance instructor-student communication, as well as student-student communication; smoke signals have been dropped as a means of communication due to their potential adverse environmental impact. Course lectures, discussions, course calendar, and emails will be available through Carmen. To log onto the class Carmen website go to <http://carmen.osu.edu> and use the same username (e.g., conroy.36) and password you use to check your OSU e-mail and online grades.

The course website includes discussion boards for you and your classmates to discuss assignments, readings, and news stories. It also includes class assignments and the course syllabus. All PowerPoint lectures will be made available prior to the class (with the exception of the first lecture). All homework and participation assignments/grades will use Carmen. Class announcements and similar information will be made using Carmen so it is critical that you check the system regularly. Grades will be posted throughout the term using Carmen so that you may follow your progress.

Course Readings

There are two main textbooks for the class: Barlett and Chase (eds), *Sustainability on Campus*; and Wheeler and Beatley (eds), *The Sustainable Urban Development Reader*. They are available from the bookstore or from most online book sellers (e.g., varsitybooks.com, amazon.com). Throughout the course, there will be supplemental readings available for specific topics; readings will be distributed in class, put on reserve at the Architecture Library, or made available in the readings folder on Carmen.

Readings are critical for your understanding and ability to put key concepts in context. They will not always, or even often, be the focus of lectures, however. You are welcome to raise any points or issues you may have had with the readings during class discussions.

Class Schedule

The class schedule as written is somewhat flexible, depending upon the needs of the groups as well as the availability of speakers' schedules. There are four project phases to be completed during the quarter: opportunity assessment and indicator development, sustainability analysis, and final project preparation.

Tuesday, January 3

Course introduction.

Course overview and project parameters. Discussion and definitions of sustainable development. Group preferences.

Readings

Barlett & Chase: Introduction, Chapter 1
Wheeler & Beatley: Leopold, Daly, World Commission on Environment and Development, United Nations

Tuesday, January 10

Guest Speakers: Tim Lawrence, Ph.D.

CampUshed Director, Ohio NEMO Project Director

Laura Shinn, MCRP

Facilities Plan & Development, Interim Director

Readings

Wheeler & Beatley: Part 3, Urban Sustainability Reporting, What Is an Ecological Footprint?, Seeing Change

Tuesday, January 17

Guest Speaker: Wallace Giffen

Ohio State University, Energy Programs Manager

Team visions due

Readings

Wheeler & Beatley: Part 2, Energy and Materials Use – The Metabolism of Cities

Tuesday, January 24

Land Use and Urban Ecology / LEEDS Discussion

Indicator drafts due

Readings

Barlett & Chase: Chapters 8, 12
Wheeler & Beatley: Part 2 – Land Use & Urban Design, Urban Ecology & Restoration, Green Architecture and Building.

Tuesday, January 31

Transportation Discussion

Opportunity Analyses due (electronic documents)

Readings

Wheeler & Beatley: Part 2, Transportation

Tuesday, February 7

Guest Speaker: Aparna Ravipaty

Director, Environmental Affairs, Office of Environmental Health & Safety

Energy and Waste Discussion

Readings

Wheeler & Beatley: Part 2, Energy and Materials Use – Waste as a Resource; Part 6, Urban sustainability at the building and site scale, Urban sustainability at the neighborhood or district scale.

Tuesday, February 14

Policy and Curricula Discussion

Readings

Barlett & Chase: Chapters 4, 6, 7

Sustainability Analysis draft due (electronic documents)

Tuesday, February 21

Working session

Sustainability Analysis draft returned

Readings Barlett & Chase: Chapter 13

Tuesday, February 28 **Progress update from all groups**

Draft of full report due

Tuesday, March 7 **Presentation prep**
Paper comment discussion
Poster drafts due

Tuesday, March 14 **Final Presentation (date/time TBF)**