15  CHAPMAN SUSTAINABILITY CURRICULUM AND ONLINE COURSE SEARCH TOOLS

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15.1  INTRODUCTION

Chapman University prides itself on being progressive and promoting global citizenship. One could argue that a component of being a global citizen is living sustainably for the benefit of generations to come. As such, sustainability should flow throughout Chapman’s curriculum in order to truly provide students with the opportunity to become environmentally conscious global citizens. As the Environmental Science & Policy program continues to grow so does the demand for more related course materials.

There is disconnection between majors and how they interact with each other at Chapman. Cross-listing classes can become difficult administratively. Students also are often unaware of classes outside of their department that fits their interests. To continue a path towards interdisciplinary education, Chapman should encourage cross-major partnerships. A great starting point would be with environmental curriculum.

The Sociology department and many other Wilkinson majors have already been discussing environmentalism in course materials from a sociological perspective. For that reason, this chapter will focus primarily on Wilkinson crossover curriculum. Increasing the presence of sustainability courses and making the online search easier for students and faculty would help Chapman live up to its mission of global citizenship.

15.2  HISTORY OF CHAPMAN SUSTAINABILITY CURRICULUM

In the 2013 Chapman University Environmental Audit students looked at the prevalence of sustainability and environmental classes on campus. Since then many Freshmen Foundation Courses have started to look at topics about sustainability and environmentalism. Here are some facts mentioned in that audit:

- The term “sustainability” did not appear in the course catalog until 2005
- The first class that explicitly mentioned sustainability was Philosophy 303: Environmental Ethics by Dr. Virginia Warren
- 2009 led to the B.S Environmental Science & Policy Program after the B.S/BA were discontinued in earlier years
- 2011 Chapman became involved with the ROOTS program (a milestone in creating cross-major environmental awareness)

The Chapman online course history is as follows:

- Summer 2015 registration was in webadvisor
Fall 2015 registration used the new People Soft campus solutions system

The People Soft system was supposed to continue to update over the following years

Few updates have been made to make navigation easier and less cluttered. Can search for classes by term, keyword, and professor name.

15.3 Current Status of Sustainability Curriculum

There are three current areas of study in the major: Ecology, Earth Systems, & Policy. One of the remarkable things about policy classes is the flexibility that many supply. For example, students in ES&P can often choose to write about sustainability for more broad projects. Faculty members can provide flexibility for students to write about special areas of interests in a variety of classes. Even in Italian 201, Professor Manu allowed an ES&P student to write about sustainability in Italy. This flexibility might allow sustainability to be further implemented in curriculum without changing the classes. Perhaps ES&P students should be encouraged to create projects about sustainability in unrelated courses to expose their professors to the demand for more material pertaining to environmentalism

The Earth Systems and Biology tracks lack course material in Wilkinson majors due to the technical nature of that track.

15.3.1 Wilkinson

A partnership already exists between the Wilkinson school and The Environmental Science & Policy major at Chapman. This is due to the policy component of the major, which offers Wilkinson courses as acceptable credit. Due to this, this research focused on strengthening this partnership and adding more sustainability related course material. First, a detailed search was done on my.chapman.edu to assess how easy it is for students to search classes with this resource based on a word alone. Lastly, current chapman professors Dr. Smith and Dr. Bostean were interviewed to provide input on how to strengthen this crossover and add more classes to keep Chapman competitive with aspiration schools.

15.3.2 Professor Interviews
Interview with Barbra Smith Anthropology Professor 4/17/17

When asked, “How do you feel about adding an advanced level archeology class that utilizes GIS and/or remote sensing” she replied,

“I think adding an advanced level archaeology class that utilizes GIS and remote sensing is a great idea. Remote sensing, such as satellite imagery, and GIS are increasingly important methodological techniques in archaeological research. These tools allow archaeologists to obtain unique data, discover new sites, and map out large scale regions in a completely non-invasive and non-destructive way. Students who become well acquainted with these tools will not only be able to apply them to archaeological research but will also gain a practical skill that can be applied to topics such as the environment, agriculture, climate, construction, geology, urbanization, and a whole host of other issues that are relevant in modern society.”
When asked, “You mention climate change in your Archeology class; do you believe more college courses should also talk about environmental impact?” She replied eagerly,

“Absolutely! Climate change poses one of the greatest threats to humanity in the 21st century. I think it’s critical for all individuals to have a basic understanding of the scientific reality, causes, and how we can hopefully slow it down. One way we can do that is by integrating more meaningful discourse into college classes. If we can ensure that students have a solid grasp on climate change and the issues it creates, we can hopefully have a positive impact on the future.”

Dr. Bostean GIS and Sociology professor on 2/20/17

Dr. Bostean also provided valuable feedback on areas of improvement.

- Her key comments included:
  - There is a lack of sociology & environmentally conscious faculty
  - Other institutions have classes about the impact of global development and population growth. She thinks this is an area that could potentially be cross listed
  - Faculty struggle with teaching load and outside research. This could be a potential deterrent at recruiting faculty to create new courses
  - My Chapman can be difficult for some professors to navigate as well as difficult for students to find classes within their interests outside their major
  - Cross listing can be difficult administratively. Which department covers the cost?

15.3.2 Student interviews

Two students who transferred into the ES&P program noted their concerns with searching for sustainability curriculum. They pointed at the existing issues with the online searching tools that were difficult to navigate.

“When I signed up for my classes as a transfer student it was difficult to know where to go. When I log-in I have to click too many options to get to the classes offered. The most frustrating being “student self services” and clicking it twice. It should also be cuter”

~ Jesse Galvez ES&P ‘19

“When I transitioned from SLU Madrid I was used to having a clearer search. I always have to redo my search options when I forget to put what terms I want. Then I have to use the back button and it just restarts everything”

~ Karina Rodriguez ES&P ‘19

15.2 Concluding Assessments about Survey Data & Other School Comparisons

15.3.3 Survey Data
Over half of the respondents were interested in learning about environmental sustainability. However, alarmingly 83% of faculty were unaware of classes within their department that incorporate sustainability. This shows a need for having easier search methods online to provide students and faculty with a resource to show sustainability curriculum.

15.3.3.a Neighboring and Aspiration Schools

Occidental College:

Occidental College has a list of all the sustainability-related courses across all departments. They saw a need for providing a database for all students to have access to a sustainability curriculum.

In addition to this they have an Urban & Environmental Policy program combines policy, planning, public health, sociology, and urban studies. This innovative program offers more areas of study within environmental studies that could serve as a good model for Chapman.

Figure 15.2 – Occidental College’s Sustainability Curriculum Webpage
Figure 15.3 – California Polytechnic State University’s Sustainability Curriculum Webpage

Cal Poly has a unique sustainability catalog. Anyone online can have access to all the sustainability courses offered. They also have a Sustainability Learning Objective included in the foundation of their University. Chapman could learn from Cal Poly’s PASS system that allows them to be directed to the Sustainability Learning Objective and Sustainability Course Catalog.

UCI Curriculum Comparison

UCI has a 39-page report of every class offered that has some sustainability component. Most cross-listed departments include: history, anthropology, sociology, and other scientific majors. Chapman could mirror this by also listing a PDF version of all the current ES&P classes online.

15.3 Recommendations about Sustainability Curriculum and Search Engines

15.3.1 Low Cost and/or Effort

- Ask professors in the Wilkinson school about their interests in teaching a course that involves sustainability.
- Survey students to see how they feel about my.chapman.edu and ask for their recommendations.
- Ask professors to add course descriptions that would include key words like “population” “Sustainability” and “environmentalism” for classes that touch on these materials

15.3.2 Medium Cost and/or Effort

- Survey students about what classes they want at Chapman.
- Create a new track in ES&P that cross-lists more Wilkinson classes
- Do an analysis on aspiration schools and their sustainability curriculum.
- Create a Sustainability Course Catalog for Chapman website
15.3.3 High Cost and/or Effort

- Hire web-developers to create a new website for easier class selection. The new website should be formatted in a way that students can search for classes using one word of interest. Ex “sustainability”
- Hire more faculty to teach about sustainability
- Hire an outside company to audit the sustainability curriculum and rank Chapman with aspiration schools
- Add Sustainability to Chapman University’s learning objectives and mission statement
- Require students to take a class to fulfill the sustainability learning objective

15.3.4 Future Areas of Research

- Investigate future openings for environmental/humanities cross over courses
- Consider the possibility of an Urban Planning Degree at Chapman
- Investigate the demand for sustainable business classes at Chapman
- Test out a sustainability course catalog and see what classes already offered would fit its requirements

15.4 Contacts

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15.5 References


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