

ENVI 488
ENVIRONMENTAL STUDIES SENIOR SEMINAR

Macalester College, Spring 2008
TR 1-2:30, Olin-Rice 270

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Course Description:

In this seminar, students will explore the difficult and often controversial issues surrounding environmental problems. Through readings, discussions, guest speakers, field trips, independent research, writing, and oral presentations, students will develop a clearer understanding of the underlying causes and long-term implications of some of the environmental problems facing the world today. Taking advantage of the diverse academic backgrounds of the student participants, the seminar will bring together the knowledge, perspectives, and insights of the humanities, sciences, and social sciences. This year, the seminar will act as consultants to the Presidents Climate Commitment Committee, and will conduct the college's first full-fledged carbon inventory, charting the college's carbon emissions dating back to 1990. This inventory will provide the baseline data needed for the college to proceed with its plans to reduce its overall carbon footprint.

Grading: Your grade for the course will be calculated as follows:

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|------------------------|-----|
| In-Class Presentations | 15% |
| Individual Journals | 30% |
| Group-Authored Reports | 30% |
| Participation | 25% |

Regular attendance is required in order to receive a passing grade for the course, regardless of how well you do in all other areas of evaluation. More than one absence will significantly affect your grade. You are strongly encouraged to attend the weekly EnviroThursday lecture series.

Course Structure

During the first three weeks of class, we will familiarize ourselves with the larger campus sustainability movement, the institutional responses among American colleges and universities to climate change, and the role of carbon audits as a diagnostic and planning tool. At the same time, we will divide into multiple teams, each of which will take responsibility for conducting various parts of the data collection and analysis that make up Macalester's campus carbon audit.

The teams will devote weeks four through twelve to doing the detailed work of conducting the audit and to writing the results in a formal report. This nine-week period will be divided into three 3-week units. In the first two weeks of each 3-week unit, Chris and Suzanne will meet on a rotating basis with each team during our regularly scheduled class period. (Only the team/s scheduled to meet with us will need to attend; everyone else will have the class period free to meet with their teams to coordinate and conduct their work on the audit.) In each meeting with

us, teams will begin with a short formal presentation that summarizes and assesses their progress since our last meeting. We will then discuss where the team stands, evaluate its progress, strategize over its plans for the next three weeks, and make individual work assignments. We will spend the third week of each 3-week unit together as a class. During this third week, we will devote one class to a short field trip or guest speaker, and will discuss common problems and concerns. During the other class, each team will give a formal 15-minute presentation to the rest of the class covering their recent progress and their plans for the next three weeks.

We will devote the final two weeks of class to finalizing our report, meeting with the Presidents Climate Commitment Committee, and presenting our data to the larger campus community.

Activities and Assessment

In-Class Presentations to the full class (15%) are scheduled for March 4, April 1, and April 22. These 15-minute presentations should reflect your team's best efforts to put together a polished, professional, and carefully prepared summary of your progress to date and your plans for upcoming weeks. You are encouraged to use handouts, visual aids, or anything else that you think will augment the quality or effectiveness of these presentations. All class members will evaluate other teams' presentations using an assessment rubric that will be distributed in class on the day of the presentation.

Individual Journals (30%) are a cornerstone for the success of this project. Much of the information that we need to collect is buried deep in filing cabinets, sometimes underneath several layers of bureaucracy and others lost in a tangle of other data. Many of the people who collected the information we need no longer work at Macalester, and some of the relevant data-collection systems and reporting standards for crucial information have changed over the years. Finding (and interpreting) everything we need is likely to be hard work. Making matters even more difficult, it is crucial that all of the data we collect during this audit be verifiable—we must record our moves carefully, much as scientists must record their experiments so that they are repeatable by others. This means that you will be required to keep a detailed journal of all of your activities while conducting the audit, which should record all of your contacts, the content of every conversation, every data source you have analyzed (whether useful or not), the locations of all data sources, and any other information that is pertinent to the audit. You will turn in these journals periodically for our review during the semester, and at the end of the semester they will become part of the permanent supplementary files backing up our carbon inventory report. More information and details about your journals will be provided in class.

Group-Authored Reports (30%) will be combined as chapters to make up our final report to the Presidents Climate Commitment Committee. Each report will be assessed individually, and should be a polished, effective, compelling chapter for our final report. The report will be graded on its own, and that grade will be combined with confidential peer assessments of all team members and their contributions to produce individual grades for each report.

Participation is vital to this course (25%). Your ideas, contributions, enthusiasm, and hard work will all count towards this part of your grade. To help calculate this portion of your grade, all class members will be required to assess their own performance and that of their team members.

Class Schedule

WEEKS 1-3: CARBON AUDITS AND CAMPUS SUSTAINABILITY

- T 1/29 Introductions
- * What are carbon audits, and why do we need one?
 - * Discussion on the nuts and bolts of carbon audits: scopes, division of labor, planning, record-keeping, teamwork
 - * Assignment: short team-based research projects
- R 1/31 Full-class meeting
- * Reading assignment: *Clean Air-Cool Planet Carbon Calculator User's Guide*
 - * Meeting with President Rosenberg
 - * Attend Focus the Nation panels
- T 2/5 Full-class meeting
- * Reading assignment: *Presidents Climate Commitment Implementation Guide*
 - * Team presentations on last Tuesday's assignments
- R 2/7 Full-class meeting
- * Reading assignment: Carleton, Middlebury, Smith, and Wellesley carbon audits (available on our Moodle site)
 - * Discussion: group formation and project coordination
- T 2/12 Full-class meeting
- * Submit short written summaries on each section for the final report
 - * First journal submission
 - * Group work as necessary
- R 2/14
- * In-class group work
 - * Wrap discussion: final planning and problem resolution

WEEKS 4-12: CONDUCTING MACALESTER'S CARBON AUDIT

- 2/19-2/28: Rotating group meetings with Chris and Suzanne, detailed schedule TBA. (Be prepared to explain how the calculator translates your data into GHG emissions.)
- T 3/4 Group presentations
- R 3/6 Field trip: Touring Macalester's steam plant
- 3/11-3/27: Rotating group meetings with Chris and Suzanne, detailed schedule TBA. (Be prepared to explain how the calculator translates your data into GHG emissions.)
- T 4/1 Group presentations
- R 4/3 TBA: possible field trip to Eureka Recycling
- 4/8-4/17: Rotating group meetings with Chris and Suzanne, detailed schedule TBA. (Be prepared to explain how the calculator translates your data into GHG emissions.)

- T 4/22 Group presentations
R 4/24 Field trip: Touring Macalester's Dining Hall
Full draft of audit and accompanying report due

WEEKS 13-14: PUTTING IT ALL TOGETHER

- T 4/29 Formal report to the Presidents Climate Commitment Committee
R 5/1 Public Presentation to the Campus Community
* NOTE: This presentation will be part of the EnviroThursday series, from 12-1 on Thursday 5/1. Please reserve this time and date now for this required presentation. We will also hold our regular class afterwards from 1-2:30.
- T 5/1 Conclusions
Final audit and accompanying report due