Instructor:
Frank Gallagher Gallagher@sebs.rutgers.edu  
Cell Phone 973 919 4123  
Office Place/Hours – Meteorology Building, 80 Nichole Street, Tues. – 10-11:30, Thur. 12-1:30

Location:
Blake 148
Tuesday and Friday 3d Period (12:35-1:55)

Course Overview:
This course is an analysis of the interaction between land, people and the built environment. A broad spectrum of environmental issues are surveyed through lecture, group discussion and writings. The policy and regulatory framework driving environmental protection and natural resource management are examined. Most of the information covered during the course is current and cannot be found in a textbook.

Course Schedule:
January - class begins (Tues.21th)  
February - project proposal (Tues.18th)  
March - first paper due (thurs.4th) / midterm exam (Tues.11th)  
April - second paper due (Thurs.10th) / project due (Tues.29th)  
May - final exam (Fri. 9th) / course recollection (Tue.13th)

Required Texts:
The two required books for the course are:

A Sand County Almanac: With Essays on Conservation from Round River, A. Leopold (SCA)  
First Along the River, B. Kline (FAR)

Learning Goals:
1) Students will be able to apply basic concepts in the physical or biological sciences to current critical environmental issues.  
2) Students will be able to explain and assess the relationships between assumptions, method, evidence, arguments, and theory in social and historical analysis concerning the development of the environmental movement in the United States.

Objectives and Assessment:
Current environmental issues are reviewed and objectively analyzed using a class derived environmental ethic as the primary metric. Student will be asked to measure our current approach to each issue against this metric. Each lecture has a link to important information and lists the background reading that is required prior to each class.

Learning Objective I: Students gain an appreciation of our relationship with the land, one which is or should be driven by the land ethic. A land ethic is derived and the current context is developed.
Assessment: Elements of stewardship reflective of a land ethic, based upon ecological principles, will be present in the first discussion paper. An assessment of the existing and projected demographic the history of the environmental movement and demographic trends at the regional and global scale will be demonstrated within the midterm exam.

Learning Objective II: Students will gain a working knowledge of the policy and regulatory framework driving the management of natural resources.

Assessment: The laws and regulatory statues reflective of the environmental movement that regulate our consumption of forest, wildlife, and soil will be identified in the midterm exam. An awareness and knowledge of the industrial history and current land use trends will be reviewed in the essay section of the midterm exam.

Learning Objective III: Students will gain a working knowledge of the international initiatives and controversy surrounding climate change, and energy consumption.

Assessment: The characteristics of and the international agreements made concerning climate change and energy consumption will be identified in the midterm exam. A functional understanding of the history and current trends in climate change will be exhibited in the second discussion paper.

Learning Objective IV: Students will gain a practical understanding of use issues associated with water quality and quantity. In addition the students will synthesize all of the course elements through an examination of the concepts of sustainability and a sense of place.

Assessment: An ability to clearly articulate the state of the human/environment relationship will be examined in the essay section of the final exam.

**Lectures, Readings and Other Assignments:**

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<th>Wk</th>
<th>Date</th>
<th>Activity</th>
<th>Readings and Assignments:</th>
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<tbody>
<tr>
<td>1</td>
<td>1/20</td>
<td>Lecture: Introduction and Land Ethic</td>
<td>FAR Chapters 1,2,3&lt;br&gt;SCA, The <a href="#">Land Ethic</a>&lt;br&gt;What is your environmental ethic? (<a href="#">take the survey</a>)</td>
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<td>2</td>
<td>1/27</td>
<td>Lectures: Establishment of the Land Ethic, Population Dynamic</td>
<td>FAR-Chapters 4,5,6&lt;br&gt;<a href="#">Population Dynamics</a></td>
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<td>3</td>
<td>2/3</td>
<td>Lecture: Agriculture and GMO</td>
<td><a href="#">Soil and Sustainable Agriculture / GM Debate</a></td>
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<td>4</td>
<td>2/10</td>
<td>Lectures: Biological Communities, Biome, Landscape and Urban Ecology</td>
<td>FAR-Chapters 7,8,9&lt;br&gt;SCA-Arizona and New Mexico&lt;br&gt;[Biological Communities (pgs. 1-9)] Understanding invaded urban ‘wild lands’ as novel communities</td>
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<td>5</td>
<td>2/17</td>
<td>Lectures: Forestry Field Trip Heyler Woods</td>
<td>SCA-February, March, April and May&lt;br&gt;<a href="#">Forestry/ Sustainable Forest / Paper Wildlife / The Twins</a></td>
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<td>6</td>
<td>2/24</td>
<td>Lectures: Wildlife and Re-wilding</td>
<td>SCA-65290,Wildlife in America&lt;br&gt;SCA-The Deer Swath, Goose Music&lt;br&gt;<a href="#">Biodiversity Land Use</a></td>
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<td>7</td>
<td>3/3</td>
<td>Lecture: Biodiversity / Land Use and Open Space</td>
<td>SCA-The Sand Counties, Odyssey Open Space</td>
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<td>8</td>
<td>3/10</td>
<td>Lecture: Introduction to Wetland Design Site Visit II: Livingston Preserve</td>
<td>SCA-Wilderness Preserving Nature</td>
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<td>9</td>
<td>3/17</td>
<td>Spring Break</td>
<td>No Class</td>
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<td>10</td>
<td>3/24</td>
<td>Lecture: Air Pollution</td>
<td>SCA –June Air Pollution</td>
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<td>11</td>
<td>3/31</td>
<td>Lecture: Climate Change</td>
<td>Climate Change</td>
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<td>12</td>
<td>4/7</td>
<td>Lecture: Energy</td>
<td>Energy Carbon Calculator</td>
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<td>13</td>
<td>4/14</td>
<td>Lecture: Water Pollution / Site Visit III: Raritan River</td>
<td>Water Pollution Water Use and Management China’s Poisonous Waterways</td>
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<td>16</td>
<td>5/5</td>
<td>Reading days</td>
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<td>17</td>
<td>5/12</td>
<td>Final Exam</td>
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**Grade Calculation:**
Midterm Examine________100 pts.
Final Examine________100 pts.
Discussion papers
(2 @ 50 pts. each)_______100 pts.
Project/Term Paper_______200 pts.
Project Proposal_______50 pts.
Course Recollection_______50 pts.
Totals: 600-540 = A, 539-480 = B, 379-420 = C, D’s and F’s are not acceptable.

**Departmental Grading Guidelines:**
While the assignment of grades is ultimately the purview of the instructor, the department uses the following guideline for understanding appropriate grading in its courses:

A- Outstanding -This not only means fulfilling the requirements, but impressing and going beyond the initial expectations of the project. The student has demonstrated a superior grasp of the subject matter coupled with a high degree of creative or logical expression, and strong ability to present these ideas in an organized and analytical manner,

B- Very Good - The student has demonstrated a solid grasp of the material with an ability to organize and examine the material in an organized, critical, and constructive manner. The projects and in-class performance reveal a solid understanding of the issues and related theories or literature.
C- Acceptable - The student has shown a moderate ability to grasp concepts and theories for the class, producing work that, while basically adequate, is not in any way exceptional. This performance in class display a basic familiarity with the relevant literature and techniques.

D- Unacceptable - The work demonstrates a minimal understanding of the fundamental nature of the material or the assignment with a performance that does not adequately examine the course material critically or constructively. Students cannot graduate from the Landscape Architecture program with 2 D's in required SSO classes.

F- Failure - The student has demonstrated a lack of understanding or familiarity with course concepts and materials. Their performance has been inadequate. Failure is often the result of limited effort and poor attendance which may indicate that the student is not in the proper field of study.

**Academic Integrity:**
As an academic community dedicated to the creation, dissemination, and application of knowledge, Rutgers University is committed to fostering an intellectual and ethical environment based on the principles of academic integrity. Student participation in this course assumes a complete understanding of the Academic Integrity Policy. (http://academicintegrity.rutgers.edu/files/documents/AI_Policy_9_01_2011.pdf)

**Attendance:**
Class attendance is Mandatory. A minimum level of participation is defined as being in attendance for the entire duration of a class session. It is the student’s responsibility to be in attendance at all required classes and trips. All personal plans should be made in accordance with the class schedule.

Attendance and active participation in class is a fundamental part of design learning. The interaction, discussion, and design activity that takes place during class will be critical to both the development of your design for this class, but also your development as a designer. Unexcused absences are not permitted. If you miss class for illness or an emergency, please provide a written explanation of this absence to the instructor, preferably before the class missed, but no more than a week after the absence.

More than one unexcused absence will result in a reduction of half a letter grade with each absence. Should you be absent, you are responsible for following up with the course instructor and fellow students to find out any work that you have missed. An absence is not an excuse for not being prepared for the next class. The course requirements above are in addition to, and do not obviate any departmental requirements as are laid out in the departments Student Handbook (http://landarch.rutgers.edu/current_students/policies_st.html).

**Work Becomes Department Property:**
Submitted drawings, models, photographs, or written papers for any project assigned in Landscape Architecture courses are considered the property of the Department and may be retained in its archives for exhibition and accreditation purposes. All projects will be graded and returned to the student at a location designated by the instructor. Should your drawings be retained by the Department, you will be given the opportunity to obtain a print or photographic record of your work. Department files are OFF LIMITS to students.