University of Colorado Denver, College of Architecture and Planning  
Department of Landscape Architecture

LDAR 5572

Landscape Ecology
Lecture Course  
Fall Semester 2016  
3 Credits  
Mondays, 9:30am – 12:15pm  
Room 340, 1250 14th Street

Instructors: Susan K. Sherrod, Ph.D., Andi Rutherford, PLA  
Teaching Assistant: Matthew Bossler, PLA  
susan.sherrod@ucdenver.edu, andrea.rutherford@ucdenver.edu, matthew.bossler@ucdenver.edu

Office hours: by appointment. At least one instructor will also be in the classroom at least 30 minutes before classes start every week.

University Course Catalog Description
“Course emphasizes continuity and change in the ecology of the natural and man-made landscape. Focuses on biological, geophysical, cultural, and perceptual factors involved in landscape, spatial organization, and urban and regional structure. Introduces field ecology for landscape architecture.” This course is part of the Master in Landscape Architecture first year core curriculum.

Course Overview
The goal of this Landscape Ecology course is to familiarize students with basic landscape ecology concepts and to apply these concepts to the field of landscape architecture. Lecture material will address both disciplines in light of analysis, planning, and stewardship of the land, while exercises will explore how to integrate this process into a design so that the resultant work properly approaches the complex relationships between the built and natural environments. Concepts will be weighted toward landscape ecology in the early part of the semester and more heavily toward landscape architecture applications in the latter part of the semester, although all material will build on previous weeks’ instruction. Instruction will be supplemented with one or two field trips.

Course Goals and Learning Objectives
This content will blend the two disciplines of landscape ecology and landscape architecture. Upon completion of the course, students should be conversant in the major concepts and terminology of both fields as they apply to creating ecologically sensitive designs, and able to apply these skills to both theoretical and actual scenarios. Further, students should be able to critically evaluate systems both dominated and not dominated by human influence from an ecological viewpoint. This includes, but is not limited to:  
- Finding appropriate sources of relevant data  
- Understanding the importance of choosing an appropriate scale for analysis

The instructors reserve the right to change the schedule at any time to accommodate learning opportunities and needs; or conflicts with departmental and university events.
• Creating overlays to analyze the different elements found on and surrounding the project site
• Critically translating data analyses into an ecologically sensitive design

In addition to the independent skills cultivated with this course, students will garner skills necessary to collectively working on a project. Students will collaborate on exercises and case studies, thus engaging in peer review, constructive communication, and team coordination to produce an assigned deliverable.

**Required Texts and Materials**

The bulk of readings for the course will be provided throughout the semester and accessed via Canvas. Unless otherwise noted in the Course Schedule, these will be assigned the week before they are due to be discussed in class. *Landscape Ecology Principles in Landscape Architecture and Land-Use Planning* by Dramstad, Olson, and Forman (Island Press, Washington D.C. 1996) will be read in its entirety. Some classes will require students to bring trace paper and drawing supplies to class. These will be announced the week before the supplies will be required in class.

**Course Schedule**

For both the students’ convenience as well as the instructors’, few if any changes will be made to the schedule as presented below. However, unforeseen developments (e.g., weather preventing a field trip, opportunity for a guest speaker) may result in beneficial changes to the schedule. The instructors will give advance notice when such changes occur.

<table>
<thead>
<tr>
<th>#</th>
<th>Date</th>
<th>Lecture topic</th>
<th>Quiz/Assignment due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aug 22</td>
<td>Overview of Landscape Ecology concepts. Read: Dramstad, Olson, and Forman Foundations and Part I: Principles</td>
<td>-</td>
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<tr>
<td>2</td>
<td>Aug 29</td>
<td>Introduction to Case Studies. Read: Dramstad, Olson, and Forman Part II: Practical Applications and Summary &amp; Conclusion</td>
<td>Quiz</td>
</tr>
<tr>
<td>3</td>
<td>Sept 12</td>
<td>Scale incl. Watersheds</td>
<td>Assignment</td>
</tr>
<tr>
<td>4</td>
<td>Sept 19</td>
<td>Rural-Urban Gradients</td>
<td>Quiz</td>
</tr>
<tr>
<td>5</td>
<td>Sept 26</td>
<td>Seasonal Dynamics, Climate, and Soils</td>
<td>Assignment</td>
</tr>
<tr>
<td>6</td>
<td>Oct 3</td>
<td>Mid-term presentations</td>
<td>Quiz</td>
</tr>
<tr>
<td>7</td>
<td>Oct 10</td>
<td>Functional, Structural, &amp; Compositional Diversity</td>
<td>Assignment</td>
</tr>
<tr>
<td>8</td>
<td>Oct 17</td>
<td>Trophic Interactions: Among the Living and the Dead</td>
<td>Quiz</td>
</tr>
<tr>
<td>9</td>
<td>Oct 24</td>
<td>Disturbance</td>
<td>Assignment</td>
</tr>
<tr>
<td>10</td>
<td>Nov 7</td>
<td>Succession and Maintenance of Designed vs. Natural Landscapes</td>
<td>Quiz</td>
</tr>
<tr>
<td>11</td>
<td>Nov 14</td>
<td>Planting</td>
<td>Assignment</td>
</tr>
<tr>
<td>12</td>
<td>Nov 28</td>
<td>Cultural Landscapes</td>
<td>Quiz</td>
</tr>
<tr>
<td>13</td>
<td>Dec 5</td>
<td>Review and open forum</td>
<td></td>
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</tbody>
</table>

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Assignments
Except for classes in which projects are due, quizzes or short assignments are due every week. These will be based on the previous lecture and reading assignment(s). **All assignments are due on Canvas before class on their due date or at the beginning of class if a hard copy is required.** Field trips will also have specific assignments to evaluate students’ visual understanding. There will be one mid-semester case study and presentation (by individual students), and the semester will culminate with a final design project and presentation (teams of 2-3). Evaluation forms for the mid-term and final projects will be distributed two weeks before each presentation.

### Basis for Final Grade

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Points possible</th>
<th>Number of assessments</th>
<th>Total</th>
<th>Percentage of Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance</td>
<td>2</td>
<td>15</td>
<td>30</td>
<td>7</td>
</tr>
<tr>
<td>Weekly quizzes or short assignments</td>
<td>10</td>
<td>11 (will drop lowest grade of 12)</td>
<td>110</td>
<td>25</td>
</tr>
<tr>
<td>Mid-term project</td>
<td>100</td>
<td>1</td>
<td>100</td>
<td>23</td>
</tr>
<tr>
<td>Final project</td>
<td>200</td>
<td>1</td>
<td>200</td>
<td>45</td>
</tr>
</tbody>
</table>

**Grading Scale**

- 94-100% A
- 90-93 A-
- 87-89 B+
- 84-86 B
- 80-83% B-
- 77-79 C+
- 74-76 C
- 70-73 C-
- 67-69% D+
- 64-66 D
- 60-63 D-
- 0-59 F

**Grade Dissemination**

All quizzes and assignments will be returned to the student once graded, and grading will also be recorded via the Canvas course shell. Students can access their scores at any time within the Canvas gradebook, once the instructors have posted scores. Canvas is accessed through UCDAccess. Assignments, mid-term and final projects will be graded with a score sheet itemizing graded components (e.g., presentation, writing, graphics), to be returned to each student. In the case of group projects, each student will receive a copy of the score sheet.

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Communication
All official course-related communication will be sent to students’ university email accounts. The instructors will check their respective university email daily and recommend that students do the same.

Course Policies
1. Please be polite with your cell phone (i.e., don’t use it during class meetings and turn off the ringer). Students will be asked to leave class when excessive cell phone use is noted and will be counted as absent for the day.
2. All methods of drug intake are prohibited in class. This includes, but is not limited to, the use of e-cigarettes and vape pens. Students will be asked to leave class if drug intake is noted, resulting in an absence for the day, and will be referred to the Department Chair.
3. Please use your laptop only for LDAR 5572-related work during class meetings. This does not included late assignments.
4. Lecture material is the instructors’ intellectual property. Any use of recording devices must be cleared by the instructors prior to use.
5. Please attend class. One day is a full week of material. If you know that you will not be in class for any reason, let the instructors know in advance.
6. Turn in work on time. Unless otherwise instructed, all assignments are due before class through Canvas. Exceptions are made only for extenuating circumstances (defined in the Student Handbook) and with advance agreement from the instructors. Without such agreement, the instructors will assume that the student’s work is unsatisfactory, and a grade of F will be assigned. If special arrangements are made, the student will be assigned the grade I (incomplete). All incomplete work must be completed within the time agreed between the student and the instructors.
7. Quizzes are only given on the day indicated on the class schedule unless prior notice is given. No make-up quizzes will be given.
8. Group projects: All members of a group receive the same score, based on the rubric handed out two weeks prior to submittal.
9. PLEASE communicate with the instructors as soon as you feel you have problems of any sort that may impede your progress. The earlier the discussion, the better arrangements can be made to accommodate or resolve any impacts on your coursework and performance. Please do not wait until the end of the course or until you have several outstanding late assignments.

University Wide Policies
• Student Code of Conduct
  http://www.ucdenver.edu/life/services/standards/Documents/CUDenver-CodeofConduct.pdf

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• Student Academic Honor Code (Appendix A)
• Accommodations
  http://www.ucdenver.edu/student-services/resources/disability-resources-services/accommodations/Pages/accommodations.aspx
• Academic Freedom
• Attendance
  http://www.ucdenver.edu/faculty_staff/employees/policies/Policies%20Library/OA A/StudentAttendance.pdf
• Discrimination and Harassment Policy and Procedures
  http://www.colorado.edu/policies/discrimination-and-harassment-policy-and-procedures
• Grade Appeal Policy
  http://www.ucdenver.edu/academics/colleges/ArchitecturePlanning/StudentResources/Documents/Policy-Student%20Grade%20Appeals%202012_15.pdf

Disability Access
The University of Colorado Denver is committed to providing reasonable accommodation and access to programs and services to persons with disabilities. Students with disabilities who want academic accommodations must register with Disability Resources and Services (DRS) in Academic Building 1, #2116, Phone: 303-315-3510, Fax: 303-315-3515. The instructors will be happy to provide approved accommodations, once you provide us with a copy of DRS’s letter.

DRS requires students to provide current and adequate documentation of their disabilities. Once a student has registered with DRS, DRS will review the documentation and assess the student’s request for academic accommodations in light of the documentation. DRS will then provide the student with a letter indicating which academic accommodations have been approved.

Academic Honesty
Students are expected to know, understand, and comply with the ethical standards of the university, including rules against plagiarism, cheating, fabrication and falsification, multiple submissions, misuse of academic materials, and complicity in academic dishonesty.

Plagiarism is the use of another person’s ideas or words without acknowledgement. The incorporation of another person’s work into yours requires appropriate identification and acknowledgement. Examples of plagiarism when the source is not noted include: word-for-word copying of another person’s ideas or words; the “mosaic” (interspersing your own words here and there while, in essence, copying another’s work); the paraphrase (the rewriting of another’s work, while still using their basic ideas or theories); fabrication (inventing or counterfeiting sources); submission of another’s work as your own; and neglecting quotation marks when including direct quotes, even on material that is otherwise acknowledge.
Cheating involves the possession, communication, or use of information, materials, notes, study aids, or other devices and rubrics not specifically authorized by the course instructor in any academic exercise, or unauthorized communication with any other person during an academic exercise. Examples of cheating include: copying from another’s work or receiving unauthorized assistance from another; using a calculator, computer, or the internet when its use has been precluded; collaborating with another or others without the consent of the instructor; submitting another’s work as one’s own.

Fabrication involves inventing or counterfeiting information—creating results not properly obtained through study or laboratory experiment. Falsification involves deliberate alteration or changing of results to suit one’s needs in an experiment or academic exercise.

Multiple submissions involves submitting academic work in a current course when academic credit for the work was previously earned in another course, when such submission is made without the current course instructor’s authorization.

Misuse of academic materials includes: theft/destruction of library or reference materials or computer programs; theft/destruction of another student’s notes or materials; unauthorized possession of another student’s notes or materials; theft/destruction of examinations, papers, or assignments; unauthorized assistance in locating/using sources of information when forbidden or not authorized by the instructor; unauthorized possession, disposition, or use of examinations or answer keys; unauthorized alteration, forgery, fabrication, or falsification of academic records; unauthorized sale or purchase of examinations, papers, or assignments.

Complicity in academic dishonesty involves knowingly contributing to or cooperating with another’s act(s) of academic dishonesty.

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Students are prohibited from selling, or being paid by any person or commercial firm for taking notes or recording class lectures without the advance express written permission of the instructors teaching this course. Exceptions are permitted for students with a disability who are approved in advance by Disability Resources and Services for note-taking or tape recording as an academic accommodation.