la 114 - landscape analysis and planning (4) fall, 2003
la 213 - site and terrain analysis (4) fall, 2003

landscape architecture department, CAED, california polytechnic state university
la 114 course hours: tuesday/thursday - 8:10 to 12:30, bldg. 34 # 208
la 213 course hours: tuesday/thursday - 8:10 to 12:00, bldg. 34 # 134

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the universe contains at most $10^{51}$ grains of sand
Archimedes

course syllabus ...

introduction ...

LA 114 is an introductory course in site analysis. It's goal is to present certain environmental material, their interrelationships, and human interactions with that environment. The course will review certain biophysical components (e.g., soils, vegetation) that give a site its identity. We will also review built elements (e.g., roads, buildings) that should be considered when conducting a site analysis. The location of those elements and their relationship to each other create patterns in the landscape that provide clues about a place's complexity, fragility and potential. Natural and introduced elements typically come together at sites to create complex systems. These systems tell us stories about the ways that humans might interact there. Questions about a site can be answered only if we take the time to understand the land's complexities. Typical questions are:

• What is the "value" or "worth" of a site? To whom? Why?
• Is a landscape suitable for development? Is it not?
• Is it a sensitive place worth preserving?
• Are there opportunities and/or limitations that might restrict some activities?

Growth and Development creates varying degrees of environmental impacts that ultimately can cause environments to change. Undesired landscape change can occur when people do not take the time to fully understand the interrelationships of the various systems.
Our Objective ... therefore, is to learn as much as possible about complex site systems. By doing this, we can minimize negative disruptions through design principles based on ecological sustainability. In other words, we must develop a holistic approach. In summary, we are seeking to identify a process capable of producing a sense of fit between humans and a land's characteristics. That process need not be a standardized or inflexible approach. As landscapes are unique, we need to modify the process to fit a site, and a project's goals.

course objectives ...

1. study a landscape analytically and holistically so as to better understand the complex web of relationships that exist in biophysical systems,
2. use cognitive observation skills when studying a landscape at varying scales of investigation,
3. analyze and manipulate mapped information in a way that is useful for environmental design, planning, and decision making, and,
4. comprehend the requirements necessary to plan for the sustainability and biodiversity of an ecosystem in both rural and urban environments.

course structure ...

LA114/LA213 has been organized in a lecture-studio-site activity format. Lectures in the studio will generally present the bulk of the information. Some material will; however, be presented on-site, or around the campus. Therefore, it is critical that you attend all scheduled class activities.

Active Learning will be encouraged and expected. Our job will not be to give you knowledge related to site analysis. It will be to help you learn all you can about sites, so that in the future you can analyze places in the context of sound planning and design. We need to; therefore, become a learning team this quarter.

The course calendar identifies lecture topics, readings and due dates. Lectures will be followed by a studio period, where exercises can be developed. Studio time will be in the lab, or on-site. Be prepared to take walks! Studio time is not for lectures, but to support lectures. Studio time may include discussions, site visits, critiques, presentations and/or slides. As exercises will be developed during that period, it is imperative that students attend and participate in the studio.

course exercises ...

During the quarter, we will work on a series of exercises aimed at exploring ideas related to site analysis. We will usually take site tours before starting an exercise. For the first two weeks we will focus our energies on sites in and around Cal Poly
or San Luis Obispo. These will be individually reviewed on-site. After this review, students will be given assignments based on what was discussed on-site. After this first two-weeks, the quarter’s primary site, an area near the entrance of Poly Canyon, will be presented. This site is presently being used for several activities; however, it has been proposed as a location for a new dormitory facility that could house up to 2700 students. Our challenge this quarter will be: 1) to develop a good understanding of issues related to natural and built site elements, 2) to learn about site interrelationships, and 3) to document physical/cultural aspects that might make sites suitable for some intended use(s).

**course requirements ... * **

Exercise One: (individual) 5.00% of grade  
Exercise Two: (individual) 5.00% of grade  
Exercise Three: Soils and Slope (group) 10.00% of grade  
Exercise Four: Hydrology and Erosion (group) 10.00% of grade  
Exercise Five: Biotic Communities (group) 10.00% of grade  
Exercise Six: Microclimate (group) 10.00% of grade  
Exercise Seven: Site Context/Visual Character (group) 10.00% of grade  
Final Project (group) 10.00% of grade  
Test One (individual) 15.00% of grade  
Test Two (individual) 15.00% of grade

**total ..................................................** 100.00% of final grade

* The faculty reserves the right to revise the grade distribution.

**course reading material ...** The required text is Landscape Planning by William M. Marsh. Read it! Study it! A second text (recommended, not required) is Site Analysis by James A. LaGro. We will be handing out readings from this text. Both both are available at the El Corral Bookstore. Other good (optional) references are:

Forman, Land Mosaic  
Leopold, A Sand County Almanac  
Olgyay, Design with Climate  
Forman, Landscape Ecology  
McHarg, Design with Nature  
Simonds, Landscape Architecture

**submission of work ...** All work scheduled for submission is to be handed to the faculty at the time specified. If, for any reason, you are not capable of meeting a deadline you should contact me in advance of the submission date. If prior arrangements are not made, late assignments will be reduced at the rate of 10% per class day. Only documented illness or documented compassionate grounds will be accepted to excuse late submissions.
course evaluation criteria ...  Plus/Minus grading will be used this quarter. Each assignment will be graded based on the following:

**A**  Work that reflects a superior and creative project presentation. The project is logically thought out and very well presented. There is a coherent process exhibited. Work displays a very creative, well thought out visualization of project, with an excellent overall response to the project statement.

**B**  Work which shows a very good understanding of the project and/or technical issues related to that project. Submissions are graphically well presented.

**C**  Work which shows a satisfactory understanding and execution of the project's issues, with technical accuracy and graphic clarity.

**D**  Work which exhibits an inconsistent understanding and/or demonstration of the design and/or technical issues. Extensive revisions would be necessary.

**F**  Incomplete work and/or a project which shows a failure to comprehend or adequately present the subject matter.

This breakdown of scores/percentages will determine final course grades:

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2003 fall quarter course calendar ... *

* subject to change based on class progress and/or faculty adjustments

**September**

**Tuesday**

23rd

- **Course Introduction:** Syllabus and Course Calendar Review
- Site Visit
- **Assign Exercise #1**
- **Assign Readings:** LaGro: Ch.#1

**Thursday**

25th

- Review & Hand in Project #1
- Discussion: Site Analysis, Maps and Aerial Photographs
- **Assign Exercise #2**
- **Assign Readings:** LaGro Ch.#2, 5
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<tr>
<td>• Review &amp; Hand in Exercise #2</td>
<td>• Group Discussion: Soils &amp; Slope, and GIS Mapping</td>
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<td>• Group Site Visit: Poly Canyon</td>
<td>• Break into Teams</td>
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<td>• Review Readings</td>
<td>• Assign Exercise #3: Soils &amp; Slope</td>
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<td>• Assign Readings: Marsh: Ch.#4 &amp; 5 and the GIS handout</td>
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<td>• <strong>Kennedy Library:</strong> GIS, Soils and Slope</td>
<td>• <strong>Kennedy Library:</strong> Exercise #3</td>
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<td>• Discussion: Hydrology</td>
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<td>• Assign Readings: Marsh: Ch.#7, 9,</td>
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<td>• Assign Exercise #4: Hydrology</td>
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<tr>
<td>• Review &amp; Hand in Exercise #3</td>
<td>• <strong>Kennedy Library:</strong> Exercise #4</td>
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<td>• <strong>Kennedy Library:</strong> Hydrology</td>
<td>• Discussion: Biotic Systems</td>
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<td>• GIS Map Making Activity</td>
<td>• Assign Readings: Marsh: Ch.#18, 19</td>
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<td>• Assign Exercise #5: Biotic Systems</td>
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<tr>
<td>• <strong>Kennedy Library:</strong> Information Competence - Information Searches</td>
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<td>• Review &amp; Hand in Project #4</td>
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<td>• Review for Test One</td>
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<td>• Review &amp; Hand in Exercise #5</td>
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<td>• Group Discussion: Micro-Climate</td>
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<td>• <strong>Assign Project #6: Micro-Climate</strong></td>
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<td>• <strong>Assign Readings:</strong> Marsh: Ch.#15, 16</td>
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November

Tuesday

4th

• Review & Hand in Exercise #6
• Open Time

11th

Veteran’s Day

Tuesday

18th

• Review & Hand in Exercise #7 Planning
• Group Discussion: Ethics
• Assign Readings: Handout

25th

• Test Two
• Group Discussion: Campus Planning
• Assign Readings: LaGro: Ch.#3,4

Thursday

6th

• Group Discussion: Site Context
• Assign Exercise #7: Site Context

13th

• Group Discussion: Visual Relationships - Way-finding
• Assign Exercise #7b
• Assign Readings: Handout

December

Tuesday

2nd

Thursday

4th

Final Course Exercise: Site Analysis and Critical Assessment of Proposed Cal Poly Campus Housing Project. Due Thursday December 4th at 10:00 Noon. Discussion and Course Wrap up - Thursday Dec. 4th at 10:00.
discussing, doing and demeanor …

The studio will contain a mixture of lectures, presentations, discussions, and assignments. Ask questions when things are not clear. Many times in a group situation we do not want to ask questions for fear that our classmates will think that we are not intelligent. It has been our experience that the more a person asks questions, the more engaged they are. This is the time in your life to ask questions without fear of criticism. But, this does not mean that the studio should be a forum to vent your anger or to ask questions that put others on the spot.

One of the main reasons an instructor is hired is because he/she has some special talent in a given subject. This talent typically has been honed over years of experience. When one of us gives a student a grade and/or feedback on a project, it is given in the spirit of trying to help the student learn and to further develop their design skills. And, it is given in the spirit of honestly telling the student what we think about a submission. Critiques consist of not only finding areas where a student has not implemented certain principles, they also illustrate where design principles have been effectively implemented.

We want to help you this quarter. But you must understand that learning is a two-way street. Your interest and participation is a requirement for growth. When we offer criticism and/or advice this quarter you should take it in the spirit of academic exploration, and not try to make it more than it is intended to be. There should be mutual respect and professional courtesy given at all times to both faculty and to students during all classroom activities. Research has shown that positive classroom interaction provides a fertile field for learning.

class participation …

Active class participation is expected and will factor into your grade. You should expect the class to extend for the full period of time as published in the Class Schedule. The course is such that you will have assignments, due dates, lab exercises, etc. at a variety of times. This will require the transfer of information and potential schedule updates which may change the original due dates previously announced.

Through mutual agreement we may choose to modify some of the meeting times and due dates. It will be your responsibility to be in class during the agreed upon hours to hear of any changes and/or additions. It is imperative that you be in class to receive this information, as well as faculty feedback and reviews. We want this quarter to be both an informative and exciting part of your education. Your participation and interest will factor into the success or failure of this goal. **Lets all work to have a great quarter!**