INTRODUCTION TO THE COURSE
Catalog Description: Principles of interior lighting and daylighting. Electrical loading, evaluation of light sources for distribution, cost, and color.

PREREQUISITE
Admission to Upper Division in the School of Architecture

LEARNING OUTCOMES
At the successful completion of this course, combined with experiences from other classes, students should be able to demonstrate:

1. An awareness of:
   A. Using energy efficient lighting systems that are effectively integrated with other building systems.

2. An understanding of:
   A. Designing lighting systems to reinforce the psychological and physiological needs of users.
   B. Integrating lighting design into the architectural design process.
   C. How to develop design strategies using natural and artificial light sources; describe the technical details and performance issues for these design strategies.
   D. Calculating illuminance levels in interior spaces.
   E. Developing lighting design strategies using the appropriate technical literature and resources commonly used by the design professions. The student, in the context of the design studio, should be able to develop lighting design solutions without extensive faculty supervision and should also be able to justify the design decisions based on technical knowledge, design criteria, and independent research.
   F. Designing and communicating lighting systems through lighting related plans (reflected ceiling and electrical) and be able to interpret electrical and lighting plans.
   G. Current building and related codes.

3. Competency in:
   A. Applying the basic terminology and vocabulary of illumination.
   B. Conducting an objective analysis of lighting needs for architectural spaces; formulating criteria for the analysis.

COURSE MATERIALS
2. Selected readings on the web or on electronic reserve in the SOA Architectural Studies Library.
3. Other readings as required or recommended from the Supplementary Bibliography list or from materials the instructor may provide or recommend during the course. Students are required read at least one additional source per week to supplement the class readings. These student-selected readings should all be case study-based on lighting design solutions for projects. See assignments for further clarification.

THE CLASS

Our approach to the class will be collaborative in nature, in part team-based, in part individual-based, and in part instructor facilitated. The course should be rooted in our mutual desire to gain more knowledge and a sound foundation about lighting. The course requires extensive reading, field work and out-of-class investigation in lieu of examinations.

The goal is to explore, experience, and understand light in the context of spaces and places. We should be able to accomplish that by sharing, discussing, seeing, and collaborating. Your success in applying what you learn during and after the class (e.g. in future classes and in practice) will be the true test of your knowledge and understanding. While lighting is a technical topic, one objective is to make it experiential.

Attendance in the class is required and sign-in will be monitored by the instructor. Your attendance and participation is one measure of commitment and involvement and will be a consideration when final grades are determined. Deduction of up to ten points from your final average will result for excessive absences or lack of active participation in class discussions and activities. Absences from the class should be discussed with the instructor prior to the class date for them to be considered as excused. See University Policies and Information, later in this syllabus.

Students are asked to come to the class prepared for the discussion of the day. Bring textbooks and other required material to class. Reading assignments should be read prior to the day of discussion in class. Please recognize that much of the class discussion may cover content beyond reading assignments and that assignments may require extensive additional reading, research, and fieldwork by students. Good notes are essential!

The class is scheduled to meet from 4:00 p.m. to 6:45 p.m. on Tuesdays in ARCH 147. Please note that class time may be devoted to field trips as noted on the schedule or those to be announced. Students will be expected to participate in identifying field trip sites of note that would be great lighting experiences!

ASSIGNMENTS

Assignments and due dates are noted on your syllabus. The breakdown for grading purposes is outlined below, under GRADING. You will be assigned:

1. Readings as noted on syllabus and all additional assigned reading for the class.
2. A minimum of one additional reading source per week on the topic of the week -- preferably case study type information that provides you with practice knowledge about architectural lighting. Individual assignment. The reading should expand your knowledge of the topic of the week and provide information (verbal, visual) that you can share in class during open discussion. See schedule for due dates.
3. Students will sign up for open discussion dates during the second class session. The purpose of open discussion is to allow two-three students per week to lead a 20-minute discussion session on outside readings. Leaders for the day should discuss their readings
and seek input from other students on what they have read. There are no other guidelines for this informal session. **Counts 20% of your final grade (#’s 2 & 3 above).**

4. **Team Case Study** – Two-person assignment focusing on an existing indoor or outdoor space that the class can visit in Las Vegas. A separate handout will define the requirements for this assignment. Teams will present their selected project to the class during the assigned class day. In addition to a field survey and design overview, a PowerPoint or web-based presentation is required, including handouts that can be added to the class web page. A CD of your presentation should be provided to the instructor by the due date defined on your assignment handout. Your presentation will be added to the class web site the day you present, in most cases. (Schedule conflicts might delay this task for the instructor but the “goal” will be up on the site the same day as your presentation). **Counts 35% of your final grade.**

5. An individual presentation on a “**Local Case Study**”. You will be asked to select a local site to: a) identify, define, and describe lighting techniques employed and b) recommend lighting design changes that you would make through a “re-design” using the knowledge you gain from this, and other classes. A separate assignment sheet will define the details for you to sign-up for your choice of local site. A CD of your presentation should be provided to the instructor by the due date defined on your assignment handout. Your presentation will be added to the class web site, in most cases. (Schedule conflicts might delay this task for the instructor but the “goal” will be up on the site the same day as your presentation). **Counts 35% of your final grade.** A one sheet (24x36 approx.) printed presentation will be part of your assignment; we will “mount” in a location in the building then break into groups of 3-4 to review on the last day of class (exam day). We will leave the assignments up for others to “enjoy” and you to further review.

6. **Consistent attendance and active participation** in class and in teamwork. Counts 10% of your final grade.

7. **Graduate students** enrolled in ABS 643 will have **one additional extensive independent assignment** that shall be negotiated with the instructor. This assignment shall be due two weeks prior to the last class day. No exceptions! Students should meet with the instructor to discuss the additional assignment then develop a written outline and timetable for the assignment for approval by the instructor. Presentation of this assignment will be at a mutually convenient time for all graduate students and the instructor. Undergraduate students will be invited to the presentation. If, for any reason, you do not understand an assignment, it is your responsibility to see the instructor for clarification and assistance. All assignments must be completed to receive a passing grade in the class. You may be asked to evaluate your partners on the team assignments. This may impact final grades on team-based assignments.

**Late assignments shall receive no more than 1/2 credit. Assignments will not be accepted if more than five weekdays late.** When an official excuse exists (proven illness or family emergency) and, if accepted by the instructor, work will be graded without penalty. See additional information under UNLV Policies and Information, below.
**ABS 443 GRADING**

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<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
<th>Grade Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Readings Assignments</td>
<td>20%</td>
<td>100 - 90</td>
<td>A</td>
</tr>
<tr>
<td>Individual Case Study</td>
<td>35%</td>
<td>89 - 80</td>
<td>B</td>
</tr>
<tr>
<td>Team Case Study</td>
<td>35%</td>
<td>79 - 70</td>
<td>C</td>
</tr>
<tr>
<td>Attendance &amp; Participation</td>
<td>10%</td>
<td>69 - 60</td>
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**TOTAL 100%**

**GRADES**

A = Superior: represents comprehensive excellence. (Superior = 4.00)

B = Above Average: represents work that can be distinguished as being of truly “good” quality. (Good = 3.00)

C = Average – represents satisfactory and average work. (Average = 2.00)

D = Below average and substandard; not acceptable performance for SOA majors. (substandard = 1.00)

F = Failing: Represents substandard work that is not passable; not acceptable performance for SOA majors. (Failure = 0.00)

The +/- grading system is utilized and reflects the upper and lower limits of each of the above grade ranges; there is no A+ grade.

“Any course required for a major in which a grade of D+ or less is received must be retaken with an earned grade of C- or above. For design studio classes this must be accomplished prior to progressing to the next studio level”. (U/G catalog, p. 168).

**Class Web Page**

The ABS Interior Lighting Design web page will be available by the second class session. All course materials will be added to this page, including instructor-led discussions, student presentations, assignments, announcements, links to lighting web sites and other useful materials. Materials on the web site, including student work, will be maintained and archived for accreditation visit purposes.

**UNLV Policies and Information**

**Academic Misconduct** – “Academic integrity is a legitimate concern for every member of the campus community; all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility and professionalism. By choosing to join the UNLV community, students accept the expectations of the Academic Misconduct Policy and are encouraged when faced with choices to always take the ethical path. Students enrolling in UNLV assume the obligation to conduct themselves in a manner compatible with UNLV’s function as an educational institution.”

An example of academic misconduct is plagiarism: “Using the words or ideas of another, from the internet or any source, without proper citation of the sources.” See the “Student Academic Misconduct Policy” (approved December 9, 2005, located at <http://studentlife.unlv.edu/judicial/misconductPolicy.html>).

**Copyright** -- The University requires all members of the University Community to familiarize themselves and to follow copyright and fair use requirements. YOU ARE INDIVIDUALLY AND SOLELY RESPONSIBLE FOR VIOLATIONS OF COPYRIGHT AND FAIR USE LAWS. THE UNIVERSITY WILL NEITHER PROTECT NOR DEFEND YOU NOR ASSUME ANY RESPONSIBILITY FOR EMPLOYEE OR STUDENT VIOLATIONS OF FAIR USE LAWS. Violations of copyright laws could subject you to federal and state civil penalties and criminal liability, as well as disciplinary action under University policies. To familiarize yourself with copyright and fair use policies, you are encouraged to visit the following website: <http://www.unlv.edu/committees/copyright/>.

**Disability Resource Center (DRC)** – The Disability Resource Center (DRC) coordinates all academic accommodations for students with documented disabilities. The DRC is the official office to review and house disability documentation for students, and to provide them with an official Academic Accommodation Plan to present to the faculty if an accommodation is warranted. Faculty should not provide students accommodations without being in receipt of this plan.

UNLV complies with the provisions set forth in Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, offering reasonable accommodations to qualified students with documented disabilities. If you have a documented disability that may require accommodations, you will need to contact the DRC for the coordination of services. The DRC is located in the Student Services Complex (SSC), Room 137, and the contact
numbers are: VOICE (702) 895-0866, TTY (702) 895-0652, FAX (702) 895-0651. For additional information, please visit: <http://studentlife.unlv.edu/disability/>.

**Expected Learning Outcomes** – All syllabi should include discussion of learning outcomes for the course (see learning outcomes in this syllabus).

**Grading / Exams / Grade Posting** – All syllabi should clearly indicate processes for grading, exams and grade posting (see grading and assignments in this syllabus).

**Missed Class(es) / Student** – As a general rule, a student missing a class or laboratory assignment because of observance of a religious holiday shall have the opportunity to make up missed work. Students must notify the instructor of anticipated absences by the last day of late registration, August 31, 2007, to be assured of this opportunity. Faculty may give students an additional week, but are encouraged to set a clear deadline. NOTE: Students who represent UNLV at any official extracurricular activity shall also have the opportunity to make up assignments, but the student must provide official written notification to the instructor no less than one week prior to the missed class(es).

**Rebelmail** – By policy, faculty and staff should only e-mail students’ Rebelmail accounts. Rebelmail is UNLV’s official e-mail system for students. It is one of the primary ways students receive official university communication. All UNLV students receive a Rebelmail account after admission to the university. Non-admitted students should contact the Student Help Desk at (702) 895-0761, in the Student Union Room 231, or by e-mail: studenthelp@unlv.edu. See http://rebelmail.unlv.edu/ for information.

**UNLV Writing Center** – One-on-one or small group assistance with writing is available free of charge to UNLV students at the Writing Center, located in CDC-301. Although walk-in consultations are sometimes available, students with appointments will receive priority assistance. Appointments may be made in person or by calling 895-3908. The student’s Rebel ID Card, a copy of the assignment (if possible), and two copies of any writing to be reviewed are requested for the consultation. http://writingcenter.unlv.edu/

**Library Support**
The Architectural Studies Library has extensive materials to support your class work in the School of Architecture. These materials and the help the library staff provide can be a major factor in helping you succeed in your academic work.

The Architecture Studies Library provides assistance in a variety of ways. On the ASL web pages at http://www.library.unlv.edu/arch/: Guides in a variety of areas, including citation format, plagiarism, finding scholarly articles, using images on web sites, researching Las Vegas information, etc. are at http://www.library.unlv.edu/arch/instr/. Via email: You can contact the librarian [jeanne.brown@unlv.edu] directly, or submit a question via a web form at http://www.library.unlv.edu/arch/archquestions.html. In person: ask for assistance at the library’s service desk -- library staff are delighted to see you! Or drop by the librarian’s office! By phone: 895-1959.

In addition to the one-on-one and class assistance/instruction offered by the Architecture Studies Library, the University Libraries offer free, brief clinics and workshops in the Lied Library to help increase research skills and save time searching. Bring a topic to a Research Clinic for in-depth, one-on-one consultation with a research expert, or attend one of the more structured workshops on topics such as finding books and articles, successful search strategies, or Internet research. Check out the schedule at www.library.unlv.edu/inst/events.html or call 895-2123 for more information.

**Supplementary Reference Sources**
An extensive bibliography, in excess of 800 sources, is posted on the class web page. These sources are primarily textbooks; the bibliography does not include journal and professional magazine articles or web sites.

**CHANGES TO THE SCHEDULE**
The schedule is subject to change upon notification by the instructor! A revised schedule will be published on the class web site if there is significant change. Student teams may require frequent field trips for work on the class projects.