

AAI 332 / 632 Interior Architectural Systems

Instructor:

Office Hours:

Grad. Assistant:

Office Hours:

Class Time:

Description: **AAI 332/632 Interior Architectural Systems (3 credit hours)**
Human comfort considerations in indoor thermal environment, air quality, ventilation, air conditioning, lighting and acoustics. Emphasis on the design applications of indoor environmental factors and the use of physical and computer modeling.

Prerequisites: PHYS 151.

UNLV Policies: **Academic Misconduct**
Academic integrity is a legitimate concern for every member of the Campus community; we 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 Student Academic Misconduct Policy, and are encouraged to always take the ethical path whenever faced with choices. Students enrolling at UNLV assume the obligation to conduct themselves in a manner compatible with UNLV's educational mission. An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another person, from the Internet or any other source without proper citation of the sources. See the Student Conduct Code, <https://www.unlv.edu/studentconduct/student-conduct>.

Auditing Classes

Auditing a course allows a student to continue attending the lectures and/or laboratories and discussion sessions associated with the course, but the student will not earn a grade for any component of the course. Students who audit a course receive the same educational experience as students taking the course for a grade, but will be excused from exams, assessments, and other evaluative measures that serve the purpose of assigning a grade.

Classroom Conduct

Students have a responsibility to conduct themselves in class and in the libraries in ways that do not interfere with the rights of other students to learn or of instructors to teach. Use of electronic devices such as pagers, cellular phones, or recording devices, or potentially disruptive devices or activities, are only permitted with the prior explicit consent of the instructor. The instructor may rescind permission at any time during the class. If a student does not comply with established requirements or obstructs the functioning of the class, the instructor may initiate an administrative drop of the student from the course.

Copyright

The University requires all members of the University Community to familiarize themselves with, 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. Additional copyright policy information is available at <http://www.unlv.edu/provost/copyright>.

Disability Resource Center (DRC)

The UNLV Disability Resource Center (SSC-A, Room 143, <https://www.unlv.edu/drc>, 702-895-0866) provides resources for students with disabilities. Students who believe that they may need academic accommodations due to injury, disability, or due to pregnancy should contact the DRC as early as possible in the academic term. A Disabilities Specialist will discuss what options may be available to you. If you are registered with the UNLV Disability Resource Center, bring your Academic Accommodation Plan from the DRC to the instructor during office hours, so that you may work together to develop strategies for implementing the accommodations to meet both your needs and the requirements of the course. Any information you provide is private and will be treated as such. To maintain the confidentiality of your request, please do not approach the instructor in front of others to discuss your accommodation needs.

Final Examinations

The University requires that final exams given at the end of a course occur on the date and at the time specified in the Final Exam schedule. The general schedule is typically available at the start of the semester, and the classroom locations are available approximately one month before the end of the semester. See the Final Exam Schedule, <https://www.unlv.edu/registrar/calendars>.

Identity Verification in Online Courses

All UNLV students must use their Campus-issued ACE ID and password to log in to WebCampus.

UNLV students enrolled in online or hybrid courses are expected to read and adhere to the Student Academic Misconduct Policy <https://www.unlv.edu/studentconduct/misconduct/policy>, which defines, "acting or attempting to act as a substitute for another, or using or attempting to use a substitute, in any academic evaluation or assignment" as a form of academic misconduct. Intentionally sharing ACE login credentials with another person may be considered an attempt to use a substitute and could result in investigation and sanctions, as outlined in the Student Academic Misconduct Policy. UNLV students enrolled in online courses are also expected to read and adhere to the Acceptable Use of Computing and Information Technology Resources Policy, <https://www.it.unlv.edu/policies/acceptable-use->

[computing-and-information-technology-resources-policy](#), which prohibits sharing university accounts with other persons without authorization.

To the greatest extent possible, all graded assignments and assessments in UNLV online courses should be hosted in WebCampus or another UNLV-managed platform that requires ACE login credentials for access.

Incomplete Grades

The grade of “I” (Incomplete) may be granted when a student has satisfactorily completed three-fourths of course work for that semester/session, but cannot complete the last part of the course for reason(s) beyond the student’s control and acceptable to the instructor, and the instructor believes that the student can finish the course without repeating it. For undergraduate courses, the incomplete work must be made up before the end of the following regular semester. Graduate students receiving “I” grades in 500-, 600-, or 700-level courses have up to one calendar year to complete the work, at the discretion of the instructor. If course requirements are not completed within the period indicated, a grade of “F” will be recorded, and the student’s GPA will be adjusted accordingly. Students who are fulfilling an Incomplete grade do not register for the course, but make individual arrangements with the instructor who assigned the “I” grade.

Library Resources

Librarians are available to consult with students on research needs, including developing research topics, finding information, and evaluating sources. To make an appointment with a subject expert for this class, please visit the Libraries’ Research Consultation website: <http://guides.library.unlv.edu/appointments/librarian>. You can also ask the library staff questions via chat and text message at: <http://ask.library.unlv.edu/>.

Missed Classwork

Any student missing class, quizzes, examinations, or any other class or laboratory work because of observance of religious holidays will be given an opportunity during that semester to make up the missed work. The make-up opportunity will apply to the religious holiday absence only. It is the responsibility of the student to notify the instructor within the first 14 calendar days of the course for Fall and Spring courses (except for modular courses), or within the first 7 calendar days of the course for Summer and modular courses, of their intention to participate in religious holidays which do not fall on state holidays or periods of class recess. For additional information, please visit the Policy for Missed Work, under Registration Policies, on the Academic Policies webpage, <https://catalog.unlv.edu/content.php?catoid=6&navoid=531>.

In accordance with the policy approved by the Faculty Senate regarding missed class time and assignments, students who represent UNLV in any official extracurricular activity will also have the opportunity to make up assignments, provided that the student provides official written notification to the instructor no less than one week prior to the missed class(es).

The spirit and intent of the policy for missed classwork is to offer fair and equitable assessment opportunities to all students, including those representing the University in extracurricular activities. Instructors should consider, for example, that in courses which offer a “Drop one” option for the lowest assignment, quiz, or exam, assigning the student a grade of zero for an excused absence for extracurricular activity is both contrary to the intent of the Faculty Senate’s policy, and an infringement on the student’s right to complete all work for the course. This policy will not apply in the event that completing the assignment or administering the examination at an alternate time would impose an undue hardship on the instructor or the

University that could reasonably have been avoided. There should be a good faith effort by both the instructor and the student to agree to a reasonable resolution. When disagreements regarding this policy arise, decisions can be appealed to the Department Chair/Unit Director, College/School Dean, and/or the Faculty Senate Academic Standards Committee.

For purposes of definition, extracurricular activities may include, but are not limited to: fine arts activities, competitive intercollegiate athletics, science and engineering competitions, liberal arts competitions, academic recruitment activities, and any other event or activity sanctioned by a College/School Dean, and/or by the Executive Vice President and Provost.

Rebelmail

Rebelmail is UNLV's official email system for students, and by University policy, instructors and staff should only send emails to students' Rebelmail accounts. Rebelmail is one of the primary ways students receive official University communications, information about deadlines, major Campus events, and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the University. Emailing within WebCampus is also acceptable.

Tutoring and Coaching

The Academic Success Center (ASC) provides tutoring, academic success coaching, and other academic assistance for all UNLV undergraduate students. For information regarding tutoring subjects, tutoring times, and other ASC programs and services, please visit the ASC website, <https://www.unlv.edu/asc>, or call 702-895-3177. The ASC building is located across from the Student Services Complex (SSC). Academic success coaching is located on the second floor of SSC A, Room 254. Drop-in tutoring is located on the second floor of the Lied Library, and on the second floor of the College of Engineering building (TBE A 207).

UNLV Writing Center

One-on-one or small group assistance with writing is available free of charge to UNLV students at the Writing Center, <https://writingcenter.unlv.edu/>, located in the Central Desert Complex, Building 3, Room 301 (CDC 3–301). Walk-in consultations are sometimes available, but students with appointments receive priority assistance. Students may make appointments in person or by calling the Center, 702-895-3908. Students are requested to bring to their appointments their Rebel ID Card, a copy of the instructions for their assignment, and two copies of any writing they have completed on their assignment.

School of Architecture Policies:

All work produced within the UNLV School of Architecture becomes and remains the property of the school for use in documenting student achievement in accreditation visits. All work must be documented for your personal use prior to its final submittal.

Any course required for a major in which a grade of D+ (C+ for graduate level courses) or less is received must be retaken with an earned grade of C- (B- for graduate level courses) or above. For design studio courses this must be accomplished prior to progressing to the next studio level.

The School of Architecture is a professional school. While in class and in the studio, students are expected to conduct themselves in a professional manner. This means showing respect for property and for other individuals. Actions which might be offensive to another individual are to be avoided. Language and attire should be appropriate for a professional environment. Materials displayed within the classroom, the studio, or on a computer screen should also be appropriate to a professional environment. Please refer to the UNLV School of Architecture Student Handbook for other policies applying to the School of Architecture.

Course Overview

The AAI 332/632 *Interior Architectural Systems* class addresses the **relationship that exists between people and buildings**, and **between buildings and their environment**. Therefore, it combines the study of physical phenomena (e.g., light, sound, etc.) that influence people's comfort and safety with the study of environmentally appropriate technologies to provide optimum indoor environmental conditions.

AAI 332/632 *Interior Architectural Systems* combines the three major influences on architectural design: **aesthetic, social, and technical**. This course is intended to help you to quickly test your design ideas to see if they meet basic comfort, safety, and energy/resource conservation criteria; the assigned readings, class exercises, and the material covered in lectures present you these criteria. Although these criteria are stated in a *technical* (easy-to-calculate) way, they carry with them significant opportunities for *social* and *aesthetic* development.

Some of the most interesting ways in which people interact with buildings involve lighting, heating, cooling, and acoustics. Buildings are considered "successes" or "failures" in large part by how effectively they provide both the comfort and the inspiration required/desired by our senses of sight, sound, touch, and smell. All these senses are involved in the person/building interaction.

The emphasis on multiple choice, machine graded exams is in part due to the size of this class, but also to prepare you for the NCIDQ Exam. The questions are not simple, and frequently require sorting carefully through several seemingly attractive alternatives. This isn't intended to "trick" you, but to present you a slice of life as a designer; where you will often be evaluating several attractive alternatives and will be responsible for choosing the most rewarding option. If you do well on the AAI 332/632 *Interior Architectural Systems* exams, you should be well prepared for the corresponding section of the NCIDQ Exam.

Lastly, AAI 332/632 *Interior Architectural Systems* also provides you with opportunities to explore innovative environmental solutions that can help mitigate the environmental impact of buildings. This aspect of the course will place you in an advantageous position since ASID, AIA, USGBC and our society as a whole have recognized and embraced the importance of addressing sustainability issues in the design professions. I hope that by the end of this semester, this class will have excited you by its richness of design criteria, and its many opportunities for creativity and expression!

Course Objectives

At the end of AAI 332/632 *Interior Architectural Systems* you are expected to:

- *Identify* the implications of architectural design decisions on resource consumption and environmental impact.
- *Recognize* the use of environmental control systems as architectural form determinants.
- *Understand* and *use* adequate selection criteria for choosing appropriate environmental control systems early in the design process.
- *Layout and size* components of environmental control systems in small to medium scale buildings.

Required and Recommended Texts + Materials

- Mechanical and Electrical Equipment for Buildings, 12th Edition
Grondzik, Kwok, Stein, and Reynolds (TH6010.S74 2015) – **REQUIRED**
- Ductulator® (<http://www.trane.com/bookstore>) – **REQUIRED**
- The Architect's Studio Companion: Rules of Thumb for Preliminary Design, 6th Edition
Edward Allen and Joseph Iano (NA2750 .A556 2017) – **RECOMMENDED**
- Building Codes Illustrated: A Guide to Understanding the 2012 International Building Code
Ching and Winkel (TH420.C49 2012) – **RECOMMENDED**

School of Architecture Letter Grade Description

- A Superior:** Represents comprehensive excellence. Not only does the work fulfill all requirements in an excellent and professional manner, but goes beyond the given requirements aiming at standards higher than requested. The student is an active and engaged participant in all class activities and intellectual progress and development have been demonstrated by the timely preparation of thoughtful work on a regular basis. This work is of a quality that is instructive to the teacher and exemplary to the rest of the class and sets a standard for the exercise and/or the course.
- B Above Average:** Represents work that can be distinguished as being of truly “good” quality. The work is free of significant flaws, is comprehensive in scope and exceeds all minimum requirements. The student is an active and engaged participant in all class activities and intellectual progress and development have been demonstrated by the timely preparation of work on a regular basis. This work is of a quality that is exemplary for the exercise and/or the course.
- C Average:** Represents satisfactory and average performance. The work is free of major flaws, is comprehensive in scope, and meets all minimum requirements. Intellectual progress and development have been demonstrated by the timely preparation of work on a regular basis. The student and instructor can take “satisfaction” in the average resolution of the exercise and/or course.
- D-F Failing:** *Represents substandard work that is not passable. The work has not fulfilled requirements, or has not been completed on time, or does not appropriately address the issues raised by the exercise and/or course and is unacceptable.*
- I Incomplete:** An “incomplete” on a **project** can only be given in exceptional cases in which failure to complete the assignment is a result of illness or injury requiring a visit to a doctor, a death in the immediate family, military or legal obligations, or other equally serious reasons that can be documented in acceptable written form (such as medical records or legal notification). When possible, all outstanding circumstances that might impact the completion of a project should be brought to the instructor’s attention in advance of the class(es) that may be missed. In addition, **documentation for excused absences must be provided no later than the third class meeting following the event** or the absence(s) will be counted as unexcused and no *Incomplete* can be given. All incomplete work is subject to late penalties as per the instructor’s policy.

An “incomplete” in a course is only given in exceptional cases where there is/was a serious excusable reason for not completing course requirements (see above). The quality of work in the course up to that point has been satisfactory and passing (see Academic Policies section of the Undergraduate Catalog for further details).

Instructors are permitted to assign + or – to grades. However, there is no grade of “A+” within these guidelines.

Grading

As stated on page 4 of this syllabus, School of Architecture policies stipulate that “any course required for a major in which a grade of D+ (or C+ for graduate level courses) or less is received must be retaken with an earned grade of C- (or B- for graduate level courses) or above.” The grading criteria for this course are explained in detail on the following two pages:

Your Basic Grade:

Your “basic grade” is determined as follows:

Class exercises (six team assignments)	36 points (6 points each)
Midterm Exams (two)	32 points (16 points each)
Comprehensive Final Exam	<u>32 points</u>
	100 points

Grading Scale:

The university +/- grading scale will be used in this course. The following standard cutoffs will be used to determine your final “basic grade”:

93.3 +	A
90.0 +	A-
86.7 +	B+
83.3 +	B
80.0 +	B-
76.7 +	C+
73.3 +	C
70.0 +	C-
66.7 +	D+
63.3 +	D
60.0 +	D-
< 60	F

Team Assignments:

The six team assignments will be graded based on completeness and accuracy of the proposed solution. In order to obtain the 36 points assigned to these assignments you have to:

- Turn in all assignments *completely finished*, with *all requirements accurately and correctly answered*, and with graphic content *neatly presented* by the **beginning** of the class in which the assignments are due. Late submissions (within 24 hrs. of due date) will result in a grade reduction of 2 points per assignment. Submissions made after 24 hours of the due date will not be accepted and will receive a “0” grade.
- Graded assignments can be resubmitted with corrections for ½ of all missed points and must be turned in at the beginning of the following class in which they were returned. **No late submissions will be accepted on corrections.**
- Turn in your six exercises in a binder with a CD containing the digital files (PDF only). **Failure to submit the binder at the end of the semester will result in a final grade reduction of 10 points.**

Exams:

The following information applies to the two midterm exams as well as the **comprehensive final exam**:

- Exams will be given on a scheduled basis; make-ups will not be provided except in the case of a valid medical condition or any of the situations described in the “UNLV Policies” section of this syllabus.
- Exams will cover **all** assigned readings, lecture presentations and class exercises.
- Exams **will NOT be open book/open notes**. An 8½ “ x 11” study guide (one-sheet, both sides) individually prepared by each student will be permitted and must be turned in with the exam.
- Exams will have a multiple-choice format.

Your Modified Grade:

Your basic grade may be raised or lowered depending on your performance and participation in the course. Please read all the rules described below, as they can affect your final grade!

A. You can raise your basic grade:

By doing **remarkably good work** in the six assignments. If an assignment goes above and beyond the stated requirements, or demonstrates mastery on the integration of class content, the assignment will receive **up to two additional points**. Notice that by doing exceptionally good work in all your assignments you could raise your final "basic grade" **twelve points** (e.g. you can raise your grade from a "C-" to "B"). Keep in mind that typically, **less than 5% of the assignments** receive this extra credit. These additional points will only be available on the original submission, not the make-up submission.

B. You can lower your basic grade:

By having **two** unexcused absences to the class, in this case your final "basic grade" will drop **1/3 of a letter grade** (e.g., from "C-" to "D+").

By having **three** unexcused absences to the class, in this case your final "basic grade" will drop by **one whole letter grade** (e.g., from "C" to "D").

C. You can fail this class by any of the following reasons:

- Having **more than three** unexcused absences to the class.
- **Missing any of the exams** without a legitimate reason acceptable to the instructor.

Course Materials on Reserve at the Architecture Studies Library:

The following books are fundamental references for this course. For your convenience, they have been placed on two-hour reserve at the Architecture Studies Library:

1. Mechanical and Electrical Equipment for Buildings, 12th Edition
Grondzik, Kwok, Stein, and Reynolds (TH6010 .S74 2015)
2. Building Codes Illustrated: A Guide to Understanding the 2012 International Building Code
Francis D.K. Ching and Steven R. Winkel (TH420 .C49 2012)
3. The Architect's Studio Companion: Rules of Thumb for Preliminary Design, 6th Edition
Edward Allen and Joseph Iano (NA2750 .A556 2017)
4. Architectural Acoustics
M. David Egan (TA365 .E33 1988)
5. Architectural Lighting
M. David Egan and Victor W. Olgay (TH7703 .E3297 2002)
6. Plumbing, Electricity, Acoustics: Sustainable Design Methods for Architecture
Norbert Lechner (TH6031 .L43 2012)
7. Heating, Cooling, Lighting: Sustainable Design Methods for Architects, 4th Edition
Norbert Lechner (TH7222 .L33 2015)
8. The Green Studio Handbook: Environmental Strategies for Schematic Design
Alison G. Kwok and Walter T. Grondzik (TH880 .K87 2018)

The 2012 International Building Code is also available at the ASL and may be used as reference, but it cannot be removed from the library. As such, this material has not been placed on course reserve.

Required and Recommended Readings:

MEEB (Mechanical and Electrical Equipment for Buildings, 12th Edition) – **REQUIRED**

SC (The Architect's Studio Companion, 6th Edition) – **RECOMMENDED**

BCI (Building Codes Illustrated) – **RECOMMENDED**

Readings should be done before coming to lecture on the week indicated.

WEEK 1: **MEEB** Sections 25.1 (pp. 1141-1153), 25.3 Parts A and B (pp. 1158-1163), 25.16 - 25.19 (pp. 1197-1207), and 25.22 - 25.24 (pp. 1209-1211).

SC Section 1 (pp. 3-18) and Section 5 (pp. 267-278 and 287-292).

BCI Chapter 1 (pp. 1-8) and Chapters 9 - 11 (pp. 169-286).

WEEK 2: **MEEB** Review Chapter 32 (pp. 1445-1507).

SC Section 4 (pp. 163-173).

BCI Review Chapters 9 - 11 (pp. 169-286).

WEEK 3: **MEEB** Sections 4.1 - 4.3 (pp. 109-127), 5.1 - 5.2 (pp. 129-134), and 12.1 - 12.3 (pp. 421-424).

WEEK 4: **MEEB** Sections 12.4 - 12.12 (pp. 424-490), 12.15 - 12.18 (pp. 495-556), and 7.1 - 7.9 (pp. 193-230).

WEEK 5: **MEEB** Section 12.19 (pp. 556-560).

SC Section 4 (pp. 174-184).

WEEK 6: **MEEB** Review Sections 12.4 - 12.12 (pp. 424-490) and 12.15 - 12.18 (pp. 495-556).

WEEK 7: **Material from weeks 1-6 will be covered in MIDTERM EXAM 1.**

MEEB Chapter 18 (pp. 793-835), Sections 19.1 - 19.3 (pp. 837-847), and 19.7 - 19.8 (pp. 888-902).

WEEK 8: **MEEB** Sections 19.9 - 19.12 (pp. 902-925), 20.1 - 20.2 (pp. 927-937), and 20.4 - 20.9 (pp. 944-989).

WEEK 9: **MEEB** Chapter 22 (pp. 1015-1041).

WEEK 10: **MEEB** Sections 23.1 - 23.18 (pp. 1043-1072), 24.1 (pp. 1073-1074), and 24.7 - 24.32 (1083-1128).

WEEK 11: **Material from weeks 7-10 will be covered in MIDTERM EXAM 2.**

MEEB Chapter 8 (pp. 241-293) and Sections 13.1 - 13.12 (pp. 583-607).

SC Section 3 (pp. 139-157)

WEEK 12: **MEEB** Sections 13.13 - 13.28 (pp. 607-637) and Chapter 14 (pp. 639-669).

WEEK 13: **MEEB** Chapter 15 (pp. 671-695) and Sections 16.18 - 16.26 (pp. 728-741).

WEEK 14: **No readings assigned during Thanksgiving Holiday.**

WEEK 15: **Semester review of all materials in preparation for the Comprehensive Final Exam.**

WEEK 16: **COMPREHENSIVE FINAL EXAM**

WEEK	DATE	OTHER EVENTS & INFORMATION	LECTURE PRESENTATIONS	EXERCISES & TASKS	
1	M	26-Aug	Part 1: Introduction; Part 2: Egress + Fire Safety + ADA		
	T	27-Aug			
	W	28-Aug			
	U	29-Aug			
	F	30-Aug			Last day to withdraw (100% refund)
2	M	2-Sep	Building Core Design	Ex. 1 Assigned	
	T	3-Sep			Labor Day Recess
	W	4-Sep			
	U	5-Sep			
	F	6-Sep			
3	M	9-Sep	Part 1: Thermal Comfort; Part 2: HVAC Design Principles	Ex. 1 Due	
	T	10-Sep			
	W	11-Sep			
	U	12-Sep			
	F	13-Sep			
4	M	16-Sep	Part 1: Thermal Zoning; Part 2: Heating & Cooling Load Calculations	Ex. 2 Assigned	
	T	17-Sep			
	W	18-Sep			
	U	19-Sep			
	F	20-Sep			
5	M	23-Sep	HVAC Design & Component Layout	Ex. 2 Due / Ex. 3 Assigned	
	T	24-Sep			
	W	25-Sep			
	U	26-Sep			
	F	27-Sep			
6	M	30-Sep	Part 1: HVAC Systems; Part 2: Midterm Exam Review	Ex. 3 Due	
	T	1-Oct			
	W	2-Oct			
	U	3-Oct			
	F	4-Oct			Last day to withdraw (50% refund)
7	M	7-Oct	MIDTERM 1 (16% of total grade); Part 2: Water & Architecture		
	T	8-Oct			
	W	9-Oct			
	U	10-Oct			
	F	11-Oct			
8	M	14-Oct	Water Supply & Wastewater Systems	Ex. 4 Assigned	
	T	15-Oct			
	W	16-Oct			
	U	17-Oct			
	F	18-Oct			
9	M	21-Oct	Part 1: Sound Perception; Part 2: Sound Transmission	Ex. 4 Due	
	T	22-Oct			
	W	23-Oct			
	U	24-Oct			
	F	25-Oct			Nevada Day
10	M	28-Oct	Room Acoustics	Ex. 5 Assigned	
	T	29-Oct			
	W	30-Oct			
	U	31-Oct			
	F	1-Nov			Last day to withdraw
11	M	4-Nov	MIDTERM 2 (16% of total grade); Part 2: Lighting Principles	Ex. 5 Due	
	T	5-Nov			
	W	6-Nov			
	U	7-Nov			
	F	8-Nov			
12	M	11-Nov	Day and Electric Lighting Guidelines		
	T	12-Nov			Veterans Day Recess
	W	13-Nov			
	U	14-Nov			
	F	15-Nov			
13	M	18-Nov	Lighting Systems Design & Layout	Ex. 6 Assigned	
	T	19-Nov			
	W	20-Nov			
	U	21-Nov			
	F	22-Nov			
14	M	25-Nov			
	T	26-Nov			
	W	27-Nov			
	U	28-Nov			Thanksgiving Recess
	F	29-Nov			
Study Week	M	2-Dec	Final Exam Review Session	Ex. 6 Due	
	T	3-Dec			
	W	4-Dec			
	U	5-Dec			
	F	6-Dec			
Exam Week	M	9-Dec	COMPREHENSIVE FINAL EXAM (32% of total grade)		
	T	10-Dec			
	W	11-Dec			
	U	12-Dec			
	F	13-Dec			