Instructor: Dr. Mitzi R. Perritt

Office: Human Sciences South
Room 102C

Office Phone: 936-468-2155 Voice mail available

Other Contact Information: 936-468-4502 (secretary)

Course Time & Location: TR 11-12:15
HMSS 107

Office Hours: M/W 9:30-12:00

Credits: 3 semester hours

Prerequisites: 312

I. Course Description:

Study of lighting sources, techniques, installations, and specifications for residential and commercial interiors. Graphic presentations of lighting concepts.

II. Intended Learning Outcomes/Goals/Objectives:

The content of HMS 316 relates to the James I Perkins College of Education’s Mission to prepare competent, successful, caring and enthusiastic professionals from diverse backgrounds who are dedicated to responsible service, leadership, and continued professional and intellectual development.

Furthermore, the HMS 316 course content contributes to the College of Education’s commitment to:

• Academic excellence through critical, reflective and creative thinking
• Lifelong learning
• Collaboration and shared decision-making
• Openness to new ideas, culturally diverse people, innovation and change
• Integrity, responsibility, diligence and ethical behavior
• Service that enriches the community.

This course is a junior-level course in the interior design curriculum. Student learning from HMS 316 Interior Lighting enhances student performance in the junior studio HMS 312 Graphics II and the senior studios of HMS 412 Commercial Design I and HMS 414 Commercial Design II. These courses require lighting plans and reflected ceiling plans as key components in the overall goal of protecting the health, safety, and welfare of the public.

As with all interior design courses, concerted effort is made in HMS 316 to prepare students for excellence in the design profession and knowledgeable contributions to the interior design professional organizations such as ASID, IIDA, and IES. In particular, HMS 316 explores lighting design as a specialty area which, in and of itself, can provide a career direction for the design graduate. Many professional designers view lighting as both a functional necessity and an aesthetic embellishment for a space.

Program Learning Outcomes.

The Program Learning Outcomes for the Interior Design Program are listed below. The content of HMS 316 addresses student development in all outcomes, but in particular, items 3 and 4.
1. Students will be able to reflect, demonstrate and be aware of professional *dispositions* relative to their chosen profession.
2. Students will have a clear understanding of the *professional behavior* required for their discipline.
3. Students will demonstrate competence in their specific discipline through work samples required for that discipline.
4. Students will be able to demonstrate strong communication skills, a professional image, a good work ethic, and the ability to be prepared for their job.
5. Students will demonstrate satisfaction with their experience in the School of Human Sciences.
6. Graduates will be able to pursue professional interior design goals successfully.

**Student Learning Outcomes:**

Course content and objectives satisfy the following components from the current *Professional Standards* of the Council for Interior Design Accreditation (CIDA). Upon completion of the course, the student will:

<table>
<thead>
<tr>
<th>Standard 2. Global Context for Design</th>
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<tbody>
<tr>
<td>a) understand the concepts, principles, and theories of sustainability as they pertain to building methods, materials, systems, and occupants</td>
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<tr>
<td>d) gain exposure to contemporary issues affecting interior design</td>
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<tr>
<th>Standard 3. Human Behavior</th>
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<tr>
<td>b) understand how to apply theories of human behavior</td>
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<tr>
<th>Standard 5. Collaboration</th>
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<tr>
<td>a) become aware of team work structures and dynamics</td>
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<tr>
<th>Standard 9. Space and Form</th>
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<tr>
<td>b) apply the elements, principles, and theories of design to three-dimensional design solutions</td>
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<tr>
<td>c) analyze and discuss spatial definition and organization</td>
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<tr>
<th>Standard 10. Color and Light</th>
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<tr>
<td>b) understand the interaction of light and color and the impact they have on one another and interior environments.</td>
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<tr>
<th>Standard 12. Environmental Systems and Controls</th>
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<tr>
<td>a) understand the principles of natural and electrical lighting design</td>
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<tr>
<td>b) competently select and apply luminaires and light sources</td>
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<tr>
<th>Standard 14. Regulations</th>
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<tr>
<td>a) gain awareness of sustainability guidelines</td>
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In general, HMS 316 explores artistic lighting techniques, various lighting sources, lighting calculations for quantity and spacing of luminaires, and other types of graphic lighting communication.

**III. Course Assignments, Activities, Instructional Strategies, Use of Technology:**

Course assignments include the **Lighting Model Design** which encourages intellectual and creative discovery and the **Lighting Specification Project** in which lighting quantities for a space are calculated, documented in both a lighting and reflected ceiling plan, and the luminaires specified. Both projects provide application opportunities for content discussed in readings and class lectures.

Student activities involve readings, worksheets, diagram analysis, sketching lighting plans, model-building, computer lighting calculations, selection and documentation of luminaires, and completion of quizzes and exams.
Instructional strategies involve lecture, demonstration, slide/Power Point presentation, audio/visual presentation, and written evaluation.

Computer calculations using lighting software, study of audio-visual materials, lighting product searches on the internet, and the use of D2L are the primary examples of technology integration in HMS 316.
IV. Evaluation and Assessments (Grading):

**HMS 316**
**Semester Scoresheet**
*Tentative*

### Part A. Comprehension
(350 pts)

**Exams:**
- Exam I (Daylighting, Lamps, Luminaires, & Controls) (100 pts)
- Exam II (Design Tools, Calculations, & Communication) (100 pts)
- Exam III Comprehensive (Lighting Profession, Health, Design Process) (150 pts)

**Daily Quizzes:**
- Quiz 1 (Daylighting, Incandescent/Specialty Lamps) (75 pts)
- Quiz 2 (Design Tools/Calculations) (25 pts)
- Quiz 3 (Profession, Background, Problem, Design Goals) (25 pts)

**Daily Work Exercises/Reviews:**
- Daily Work 1 (25 pts)
- Daily Work 2 (150 pts)
- Daily Work 3 (15 pts)
- Daily Work 4 (15 pts)
- Daily Work 5 (15 pts)
- Daily Work 6 (15 pts)
- Daily Work 7 (15 pts)
- Daily Work 8 (15 pts)
- Daily Work 9 (15 pts)
- Daily Work 10 (15 pts)

### Part B. Application
(200 pts)

**Team Lighting Model** (3d scaled model depicting interior space with general, task, and accent lighting simulated) (100 pts)

**Lighting Project Specification Notebook** (team project involving the lighting design of a small original space which is communicated graphically through the appropriate drawings and schedules) (100 pts)

**TOTAL** (775 pts)

### Bonus Points for Professionalism:
No Absences (except excused university events) (10 pts)

Course Online Evaluation (10 pts)
Design Center Lecture (submit to D2L) (15 pts)

**SEMMESTER TOTAL**

| Grading Scale: | 698-775 = A | 620-697 = B | 543-619 = C | 465-542 = D | 0-464 = F |
V. Tentative Course Outline/Calendar:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
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<tbody>
<tr>
<td>1/19</td>
<td>Orientation to course.</td>
</tr>
<tr>
<td>1/21</td>
<td>Ch. 1. Introduction to Lighting Techniques.</td>
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<tr>
<td>1/26</td>
<td>Ch. 3a: Daylighting—Benefits/problems/control. Introduction to Lighting Model Project.</td>
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<tr>
<td>1/28</td>
<td>Ch. 3b: Lamps (Incandescent, Halogen)—Types of lamps, advantages/disadvantages, uses. Energy Act.</td>
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<tr>
<td>2/02</td>
<td>Ch. 3c: Lamps (Specialty: Remote Source Illumination Systems)—New lighting types and their application.</td>
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<td>2/04</td>
<td><strong>Quiz 1</strong> Ch. 1, 3a, 3b, 3c, Ch. 3d – Lamps (Fluorescent)—advantages/disadvantages, uses.</td>
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<tr>
<td>2/09</td>
<td>Ch. 3e: Lamps (HID)—Types of lamps, advantages/disadvantages, uses.</td>
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<tr>
<td>2/11</td>
<td>Ch. 3: Lamps—Conclude and review chapter. Compare/contrast natural and artificial light sources.</td>
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<td>2/16</td>
<td><strong>Light Model due.</strong> Informal presentations. Peer evaluations.</td>
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<td>2/18</td>
<td>Ch. 6: Luminaires—Types of lighting fixtures, aesthetic considerations, and installation types.</td>
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<td>2/23</td>
<td>Ch. 7: Controls—Types of lighting switches and other lighting control products. Lutron speaker.</td>
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<td>2/25</td>
<td><strong>Exam I</strong> (Ch. 1,3,6,7).</td>
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<tr>
<td>3/01</td>
<td>Introduction to Lighting Specification Project. Ch. 8: Design Tools to plan lighting.</td>
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<td>3/03</td>
<td><strong>Tentative all-day field trip (out-of-town).</strong></td>
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<tr>
<td>3/08</td>
<td>Ch. 8: Quantity of Light—Key terms, formulas, calculations, practice exercises.</td>
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<tr>
<td>3/10</td>
<td>Ch. 8: Quantity of Light, <strong>Quiz 2</strong> (Ch. 8).</td>
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<td>3/14-18</td>
<td><strong>Spring Break</strong></td>
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<tr>
<td>3/22</td>
<td>Ch. 8: Calculation demonstration for Lighting Specification Project.</td>
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<tr>
<td>3/24</td>
<td>Easter Holiday</td>
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<td>3/29</td>
<td>Ch. 10: Lighting Design Process — Lighting symbols and types of electrical/lighting plans.</td>
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<tr>
<td>3/31</td>
<td>Ch. 10: Lighting Design Process — Exercises in drawing lighting plans, reflected ceiling plans, and schedules.</td>
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<tr>
<td>4/05</td>
<td>Ch. 10: Lighting Design Process — Conclusion of exercises.</td>
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<tr>
<td>4/12</td>
<td><strong>Exam II</strong> (Ch. 8 &amp; 10).</td>
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<tr>
<td>4/14</td>
<td>Exam return. The Lighting Profession.</td>
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<tr>
<td>4/19</td>
<td>Ch. 5 – Illumination, Human Health, and Behavior.</td>
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<td>4/21</td>
<td>Ch. 2 – Color and Directional Effects of Lighting.</td>
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<td>4/26</td>
<td>Ch. 9—Lighting Design Process.</td>
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<tr>
<td>4/28</td>
<td>Lighting Concept Analysis. <strong>Quiz 3</strong> (Ch. 1-4).</td>
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<tr>
<td>5/03</td>
<td>Review.</td>
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<tr>
<td>5/05</td>
<td>Review.</td>
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<tr>
<td>5/10</td>
<td><strong>Exam III</strong> (Comprehensive), Tuesday, 10:30 am – 12:30 pm</td>
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</table>
I. Lighting Types (30 pts) __
   A. Team Cover Sheet (be sure to identify the space, ie: museum, master suite, etc.)
   B. Lighting Specification Summary Sheet
   C. General Lighting
      . Correct number of luminaires
      . Appropriate spacing
      . UPD less than/equal 1.2
   D. Task Lighting
      . Recessed lighting over desks should be spaced equidistantly in two’s
      . Portable lamps should be of sufficient height for beam spread (usually 27” H)
   E. Accent Lighting Techniques
      . Wallwashing
      . Highlighting
      . Backlighting
      . Scallop玲
      . Shadow play
      . Silhouetting
      . Grazing
      . Sparkle
      . Beam play
      . Uplighting
   * Label each decorative technique with an architectural note on the Electrical/Lighting Plan (ie. scalloping)
   F. Safety Lighting
      . Emergency light
      . Exit light

II. Electrical/Lighting (20 pts) ___
   A. Plan
      . Poche walls
      . Switching patterns
         - S, S₂, S₃
         - Lettering direction
         - Selective switching (task vs. general vs. accent)
         - One main switching location
         - No overlapping switching patterns
      . Correct lighting symbols (use standard symbols introduced in class)
      . Dedicated computer outlet (data port)
      . Dark symbol/switching pattern line weights
      . Thermostat
      . Telephone
   B. Schedule
      . Title (in largest lettering, use caps)
      . Symbol
      . Quantity
      . Description (include in this order: installation, luminaire size, manufacturer, model, source, luminaire type, trim)
      . Specify outlet mounting height (subscript for unusual heights)
III. Reflected Ceiling (20 pts) ___
   A. Plan
      - Balanced grid layout (2’x4’ or 2’x2’)
      - Furr downs (doors and windows)
      - Poche walls only (not door and window openings)
      - HVAC
         - Supply (one 2’x2’ register per 450 sq. ft.), central location
         - Return air (1 per office – 2’x4’), rear location
      - Lighting symbols
         - Correct symbols
         - Symbols to scale
      - Dark line weights of luminaire, HVAC
   B. Schedule
      - Title (in largest lettering; use caps)
      - Symbols
      - Quantity
      - Description (installation, luminaire size, manufacturer, model, source, luminaire type, trim)

IV. Product Literature (20 pts) ___
   A. Photographs of luminaires
   B. Photometrics for each luminaire selected from the Luxicon library
      - Highlight relevant information including candlepower distribution charts, finish and trim options, installation, etc.
   C. Luxicon Reflected Ceiling Plan (layout page produced on Luxicon)
      - 1.2 UPD met
      - spacing criteria
      - centered ceiling grid (adjust in Step 1)
      - centered luminaires (adjust in Step 3)

V. Graphic Presentation (10 pts) ___
   A. Stapled packet (no folders, please)
   B. Professional appearance
   C. Neatness of assembly of materials
   D. Quality of attachments

TOTAL (100 pts) ___
VI. Readings

**Required:**

**Supplemental:**
Faulkner, Sarah. *Inside today’s home*.
Gordon, G. & Nuckolls, J. *Interior lighting for designers*.
Helm, Ronald N. *Illumination engineering for energy efficient luminous environments*.
Halo Lighting publications.
Nuckolls, James L. *Interior lighting for environmental designers*.
Sylvania Industrial/Commercial Lighting. *Color is how you light it*.

VII. Course Evaluations:

Near the conclusion of each semester, students in the Perkins College of Education electronically evaluate courses taken within the PCOE. Evaluation data is used for a variety of important purposes including:

1) Course and program improvement, planning, and accreditation;
2) Instruction evaluation purposes; and
3) Making decisions on faculty tenure, promotion, pay, and retention.

As you evaluate this course, please be thoughtful, thorough, and accurate in completing the evaluation. Please know that the PCOE faculty is committed to excellence in teaching and continued improvement. Therefore, your response is critical.

In the College of Education, the course evaluation process has been simplified and is completed electronically through MySFA. Although the instructor will be able to view the names of students who complete the survey, all ratings and comments are confidential and anonymous and will not be available to the Instructor until after final grades are posted.

VIII. Student Ethics and Other Policy Information:

**Attendance:**
Regular, punctual attendance, documented participation, and submission of completed assignments are expected at all classes, laboratories, and other activities for which the student is registered. Based on university policy, failure of students to adhere to these requirements shall influence the course grade, financial assistance, and/or enrollment status. The instructor shall maintain an accurate record of each student’s attendance and participation as well as note this information in required reports and in determining final grades. Students may be excused from attendance for reasons such as health, family emergencies, or student participation in approved university-sponsored events. However, students are responsible for notifying their instructors in advance, when possible, for excusable absences.

**Additional Interior Design/Merchandising Attendance Criteria:**
Removal of absences recorded due to tardiness is the student’s responsibility. The student should speak with the professor at the end of the class period on the same day the absence may have been recorded prematurely.

**Excused Absence:** Students are responsible for providing the professor with satisfactory documentation for an excused absence as explained above. Such documentation may include forms verifying visits to the Student Health Service, statement from a private physician, obituary, or official University listing of excused absences. Prior notice of an impending excused absence should be made in writing and given to the professor for acknowledgement and dating.

**Missed Work:** As per University policy, students with an excused absence will be permitted to make-up missed work for absences totaling no more than a maximum of three weeks in a long semester or one week in a summer term. Design students shall request a conference with the professor to make the necessary arrangements. Students will be held accountable for work missed in their absence and all assignments made. For all absences, the student must
assume the responsibility for securing all handouts, lecture notes, and other class information, and for meeting established deadlines.

*Unexcused Absence:* In interior design classes, students with unexcused absences will forfeit the make-up of lecture notes, critiques, demonstrations, field trips, handouts, quizzes, exams, or other class activities or materials. In the event that a grade is recorded on the date of an unexcused absence, a grade of "0" will be entered. Students will be held accountable for all work missed, all assignments made, and all assignment due dates established in their absence. Each student is allowed THREE unexcused absences for a MWF class in a long semester, TWO for a TR class in a long semester, and ONE for a summer semester; thereafter, a letter grade will be deducted from the semester grade for each additional unexcused absence.

**Academic Accommodation for Students with Disabilities:** Policy 6.1 and 6.6

To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilitieservices/.

**Student Academic Dishonesty:** Policy 4.1

Abiding by university policy on academic integrity is a responsibility of all university faculty and students.

**Definition of Academic Dishonesty**

Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to:

1. using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class;
2. the falsification or invention of any information, including citations, on an assigned exercise; and/or
3. helping or attempting to help another in an act of cheating or plagiarism.

Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are:

1. submitting an assignment as if it were one’s own work that has been purchased or otherwise obtained from an Internet source or another source; and
2. incorporating the words or ideas of an author into one’s paper without giving the author due credit.

Please read the complete policy at [http://www.sfasu.edu/policies/academic_integrity.asp](http://www.sfasu.edu/policies/academic_integrity.asp)

**Penalties for Academic Dishonesty**

Penalties may include, but are not limited to reprimand, no credit for the assignment or exam, re-submission of the work, make-up exam, failure of the course, or expulsion from the university

**Student Appeals**

A student who wishes to appeal decisions related to academic dishonesty should follow procedures outlined in Academic Appeals by Students (6.3).

**Withheld Grades:** Policy 5.5

At the discretion of the instructor of record and with the approval of the academic unit head, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F, except as allowed through policy [i.e., Active Military Service (6.14)]. If students register for the same course in future semesters, the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

**Student Code of Conduct:** Policy 10.4

Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable or
disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the iCare: Early Alert Program at SFA. Information regarding the iCare program is found at https://www.sfasu.edu/judicial/earlyalert.asp or call the office at 936-468-2703.

Additional Interior Design/Interior Merchandising Student Conduct Criteria:
Unacceptable conduct includes but is not limited to the following:
- Ringing cell phones during class– turn phones off or set to silent
- Talking on cell phone in any class
- Texting in class (even in your lap)
- Checking email or blogs (ie. facebook, myspace) in class – computers are for classroom activities only
- Head phones/ear buds discourage studio interaction/synergy; do not utilize these items during class.
- Doing homework for other courses in class
- Bringing children to class – this is against University policy
- Discussing grievances in front of class or in hall – make appointments to talk with professors in their offices
- Dominating professors’ time in class – it is important that all students get equal time.
- Missing class excessively
- Arriving tardy to class – this is disruptive
- Coming to class unprepared – pay attention to the class schedule and professor announcements. Check D2L before class for course updates.
- Taking long breaks during studios – it is acceptable for students to get a beverage or take a restroom break during studios if the professor is not lecturing; these breaks should not exceed 5 minutes in length. If the professor allows, beverage may be brought into the studio but eating food is not allowed during class.
- Missing deadlines for assignments and projects is not allowed. Students should consult the professor in special circumstances.
- Having beverages in class without knowing the professor’s policy.

IX. Other Relevant Course Information:

Late Work: Late work in interior design classes will be accepted within a one-week grace period following the initial due date of the assignment. Prior notice should be given the professor when a late submittal is imminent. The late work will receive a penalty of one letter grade. Work will not be accepted beyond the one-week extension, and a grade of "0" will be entered for the assignment. Exceptions are possible only with professor approval; however, work is subject to further penalty. Promptness and maturity are encouraged in preparation for successful practicum and work experiences.

Project Reworks: Students electing to rework major studio projects may resubmit them the first day of Dead Week. The projects will be regraded, and the new grade for each project, averaged with the prior grade, will determine a final project grade.

Professional Standards:
1. Students should prepare themselves adequately for class by completing assignments and securing necessary supplies. Professors are not able to provide effective student critique when student work is unavailable for review or student effort is lacking.
2. Students should maintain their individual work areas by returning materials to assigned locations and leaving work stations clean and orderly. In particular, effort should be made to retrieve broken leads to preserve floor finish.
3. Students are expected to work in the class area for the duration of the class period unless further instructions are provided by the professor.
4. Per university policy, smoking is prohibited in Human Sciences South.
5. Students should exhibit professional courtesy and conduct. Examples include a positive attitude, sensitivity to others, attentiveness, and cooperation.
6. Design faculty are committed to provide informative and prompt class sessions, return student work in a timely fashion, honor posted office hours, provide feedback on student progress, and allow work time as possible in design studios. Student creativity and input are welcomed; instructor training and experience will guide critiques.

7. If a student dissatisfaction arises, the design program considers a student's request for a private conference with the professor as the first step toward resolution. The next step will involve a meeting of the student and professor with the program coordinator. If necessary, a follow-up meeting of student, professor, coordinator, and department chair may be scheduled.

**Supplies:**
- highlighter
- notepaper
- white colored pencil for light rendering highlights
- small triangle or straigntedge
- French curve for drawing switching patterns
- small circle templates for drawing lighting symbols
- graphic pencil for shading
- drafting supplies or CAD for project drawings
- calculator
- white matboard, glue, and exacto knife