School of Human Sciences  
HMS 314.050 Lab - Building Construction Systems  
Spring 2016

<table>
<thead>
<tr>
<th>Instructor:</th>
<th>Course Time &amp; Location:</th>
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<tbody>
<tr>
<td>Mitzi R. Perritt</td>
<td>T/R 2-4:30 pm, HMSS 105</td>
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<tr>
<th>Office:</th>
<th>Office Hours:</th>
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<tbody>
<tr>
<td>HMSS 101B</td>
<td>MW 9:30-12:00</td>
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<tr>
<td></td>
<td>Other times by appointment</td>
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<table>
<thead>
<tr>
<th>Phone:</th>
<th>Credits:</th>
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<tbody>
<tr>
<td>Office: (936) 468-2155</td>
<td>3 hrs</td>
</tr>
<tr>
<td>HMS Office: (936) 468-4502</td>
<td>1 hr lecture / 2 hr lab</td>
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<tr>
<th>Other Contact Information:</th>
<th>Email:</th>
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<tbody>
<tr>
<td>HMS Fax (936) 468-2244</td>
<td>Please use D2L for course related matters. Otherwise use <a href="mailto:mperritt@sfasu.edu">mperritt@sfasu.edu</a>.</td>
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Prerequisites: HMS 206, 310, 312, AG or HRT 325

I. Course Description:

Computer-based study of structures, building materials, construction techniques, mechanical and electrical systems, model building, working drawing problems, and specifications.

II. Intended Learning Outcomes/Goals/Objectives:

In preparing students with a foundation for success, the goal of this course is to accomplish a knowledge base of codes, construction, and sustainability issues used in the interior design industry. Students will use the textbook and lecture notes to create an understanding of different types of building construction used in interior design. In addition, the student will learn different components in building construction. Building construction terminology will be expanded. The lectures and presentations are presented so that students will have a better understanding of construction and how it is changing with new sustainable/green design. It also reinforces programming techniques used in the design process. Three-D volumetric studies/models will be used to illustrate how the interior and exterior components of spaces interact.

The content of HMS 314 relates to the College of Education’s Conceptual Framework and Vision, Mission, Goals and Core Values. As with all interior design courses, concerted effort is made in HMS 314 to prepare students for excellence in the design profession. In addition, the study of structural, mechanical, electrical systems, contract document content, building and zoning codes and humanistic design principles in 314 encourages the development of caring and compassionate designers.

<table>
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<tr>
<th>Program Learning Outcomes</th>
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<tbody>
<tr>
<td>The student will display the professional dispositions (academic excellence, life-long learning, collaboration, openness, integrity, and service) relative to the field of Human Sciences.</td>
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<tr>
<td>The student will exhibit the professional behavior (strong communication skills, a professional image, a good work ethic and adequate preparation for employment in his/her specific discipline) expected in the field of Human Sciences.</td>
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<tr>
<td>The student will demonstrate competence in his/her specific discipline using oral and written forms.</td>
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The student will be able to identify basic design fundamentals such as the elements and principles of design.

Students will be able to graphically convey a perspective drawing in 3 dimensions.

### Student Learning Outcomes

Course content and objectives satisfy specific components from the *2011 Professional Standards* of the Council for Interior Design Accreditation (CIDA). Through completion of the course, the student will:

**Standard 2. Global Perspective for Design**

a) the concepts, principles, and theories of sustainability as they pertain to building methods, materials, systems and occupants.
b) The implications of conducting the practice of design within a world context.
c) exposure to contemporary issues affecting interior design.

d) the concepts, principles, and theories of sustainability as they pertain to building methods, materials, systems and occupants.

c) The implications of conducting the practice of design within a world context.

d) exposure to contemporary issues affecting interior design.

**Standard 3. Human Behavior**

a) students understand that social and cultural norms may vary from their own and are relevant to making appropriate design decisions.
b) apply theories of human behavior in the built environment.
c) ability to select, interpret, and apply ergonomic and anthropometric data
d) ability to appropriately apply universal design concepts.

e) opportunities to solve simple to complex design problems.
f) exposure to a range of design research and problem solving methods.
g) opportunities for innovation and creative thinking
h) opportunities to develop critical listening skills (write programs/ matrix/ verbal interpretation)

**Standard 4. Design Process**

a) identify and define relevant aspects of a design problem (goals, objectives, performance criteria).
b) gather appropriate and necessary information and research findings to solve the problem (pre-design design investigation).
c) synthesize information and generate multiple concepts and/or multiple design responses to programmatic requirements.
d) demonstrate creative thinking and originality through presentation of a variety of ideas, approaches, and concepts.
e) opportunities to solve simple to complex design problems.
f) exposure to a range of design research and problem solving methods.
g) opportunities for innovation and creative thinking
h) opportunities to develop critical listening skills (write programs/ matrix/ verbal interpretation)

**Standard 5. Collaboration**

a) gain awareness of team work structures and dynamics.
b) gain awareness and nature and value of integrated design practices.
c) multi-disciplinary collaboration, consensus building, leadership, and team work.
d) interaction with multiple disciples representing a variety of points of view and perspectives.

**Standard 6. Communication**

a) apply a variety of communication techniques and technologies appropriate to a range of purposes and audiences.
b) express ideas clearly in oral and written communication.
c) express ideas clearly through visual media (ideation drawing and sketches).
d) produce competent presentation drawings across a range of appropriate media
f) produce competent contract documents including coordinated drawings, schedules, and specifications appropriate to project size and scope and sufficiently extensive to show how design solutions and interior construction are related.
g) integrate oral and visual material to present ideas clearly.

**Standard 7. Professionalism and Business Practice**

j) public and community service.

**Standard 8. History**

a) understand the social, political and physical influences affecting historical changes in design of the built environment.

**Standard 9. Space and Form**

a) apply two-dimensional design solutions.
b) apply three-dimensional design solutions
c) students able to analyze and communicate theories or concepts of spatial definition and organization.

**Standard 12. Environmental Systems and Controls**

c) understand appropriate principles for acoustical design.
   (includes noise control, sound distribution, speech privacy.)
d) appropriate strategies for acoustical control
   (examples include material selection; white noise; space planning; floor, wall and ceiling systems.)
e) the principles of thermal design
f) how thermal systems impact interior design solutions
g) how the selection and application of products and systems impact indoor air quality.

**Standard 13. Interior Construction and Building Systems**

a) demonstrate structural systems and methods (examples of wood-frame and steel-frame)
b) non-structural systems including ceilings, flooring, and interior walls.
c) Distribution systems including power, mechanical, HVAC, data/voice telecommunications, and plumbing
d) Understanding of energy, security, and building controls systems; examples include energy management of HVAC, safety and security.
f) vertical circulation systems; examples include stairways and elevators.
g) students are able to read and interpret construction drawings and documents.

**Standard 14. Regulations**

b) industry-specific regulations (government projects, regulations for education projects, historic districts, etc.)
c) apply compartmentalization; fire separation and smoke containment.
d) movement; access to the means of egress including stairwells, corridors, exitways.
e) detection: active devices that alert occupants including smoke/heat detectors and alarm systems
f) suppression: devices used to extinguish flames including sprinklers, standpipes, fire hose cabinets, extinguishers, etc..
g) apply federal, state/provincial and local codes (IBC)
i) apply accessibility guidelines.

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

In preparing students for a foundation for success, the goal of this course is to provide a knowledge base of codes, construction, and sustainability issues used in the interior design industry. Students will use the textbook and lecture notes to understand the different types of building construction used in interior design. In addition the student will learn different components used in building construction. Building construction terminology will be expanded. The lectures and presentations are presented so that student will have a better understanding of construction and how it is changing with new sustainable/green design. It also reinforces programming techniques used in the design process. Three-dimensional volumetric studies will be used to illustrate how interior and exterior components of spaces interact. In addition, the student will gain the following:

1. Development of an understanding of structural, mechanical, and electrical systems.
3. Understanding building codes in relation to project development, including zoning, plan submittals, and the review process by code officials.

Student activities include readings, design process activities (researching, space planning, sketching, drafting, sections, models, etc.), production of CAD construction documents, specifying finishes, reflection, illustration drawings of construction detailing, team building activities, peer evaluations, and oral/visual/digital/model presentation.
Instructional strategies involve lectures, demonstrations, Power Point presentations, audio/visual presentations, individual critiques, and written evaluations.

Computer-aided design (CAD), models, D2L course management, internet design resources, and audio-visuals are primary means of technology integration in this course.

IV. Evaluation and Assessments (Grading):
Evaluation is based on participation, attitude, attendance, punctuality, presentation skills, and design merit. Semester evaluation form will be located on D2L. Overall components will include items such as the following:

- Attendance
- Progress checkpoints
- Peer evaluations
- Project presentations
- Project documents
- Model or 3D
- Process notebook
- Sketches
**Notes:** 1) The student must retake the course if a semester grade of less than A-C is earned in either the lecture or lab. 2) All assignments and projects completed in the semester are due Dead Week on a memory stick with student name identified. Files should be arranged in the order of the semester. 3) You will receive a Lab Grade and a Lecture Grade, and the two are averaged together to derive your semester grade in each.

**HMS 314**  
**TENTATIVE SEMESTER SCORESHEET**

### Lab

<table>
<thead>
<tr>
<th>Part I. Projects</th>
<th>(400 pts)</th>
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<tr>
<td>Project 1: Residential Project (individual working drawing)</td>
<td>(200 pts)</td>
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<tr>
<td>Project 2: Commercial Project (team process booklet)</td>
<td>(200 pts)</td>
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<tr>
<th>Part II. Peer Evaluation</th>
<th>(50 pts)</th>
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<tr>
<th>Part III. Team Checkpoints (Commercial Project)</th>
<th>(100 pts)</th>
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<tr>
<td>Checkpoint #1</td>
<td>(20 pts)</td>
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<tr>
<td>Checkpoint #2</td>
<td>(20 pts)</td>
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<tr>
<td>Checkpoint #3</td>
<td>(20 pts)</td>
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<tr>
<td>Checkpoint #4</td>
<td>(20 pts)</td>
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<tr>
<td>Checkpoint #5</td>
<td>(20 pts)</td>
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<tr>
<th>Part IV. Three-Dimensional Projects</th>
<th>(150 pts)</th>
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<tbody>
<tr>
<td>Study Model or 3D images (Sketchup, preliminary sketches)</td>
<td>(50 pts)</td>
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<tr>
<td>Framing Model (Individual)</td>
<td>(100 pts)</td>
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<tr>
<th>Part V. Team Power Point Presentation (all participate)</th>
<th>(100 pts)</th>
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<tr>
<th>Part VI. Community Service</th>
<th>(50 pts)</th>
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<tr>
<td>Volunteer 6 hrs at selected community activities</td>
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**Lab Total**  
(850 pts)  

**Bonuses: (Lab)**  
+10 No Absences
V. Tentative Schedule

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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Orientation. Residential Project initiation. Floor plan identification, development, or revision.</td>
</tr>
<tr>
<td>Week 2</td>
<td>Begin Revit drawing of floor plan</td>
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<tr>
<td>Week 3</td>
<td>Complete Revit floor plan</td>
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<td>Week 4</td>
<td>Site plan</td>
</tr>
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<td>Week 5</td>
<td>Stairs and roofs.</td>
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<td>Week 6</td>
<td>Foundation. Section. Wall detail.</td>
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<td>Week 7</td>
<td>Interior and exterior elevations. Door and window schedules.</td>
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<td>Week 8</td>
<td>Project completion. Dimensioned floor plan. Printing to scale. Sheet list. Title blocks.</td>
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<tr>
<td>Week 9</td>
<td>Commercial Project initiation. Team formation. Floor plan development.</td>
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<tr>
<td>Week 10</td>
<td>Floor plan creation.</td>
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<td>Week 11</td>
<td>Wall section. Plumbing plan.</td>
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<td>Week 12</td>
<td>Electrical and lighting.</td>
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<td>Week 13</td>
<td>Interior perspectives.</td>
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<tr>
<td>Week 14</td>
<td>Exterior perspective and cover sheet development.</td>
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<td>Week 15</td>
<td>Spec booklet development.</td>
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<tr>
<td>Week 16</td>
<td>Thursday, 1-3 pm</td>
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Final Thursday, 1-3 pm
VI. Readings

Required

Referenced
Space Planning Basics. Karlen. Van Nostrand Reinhold Publisher.
Architectural Lighting. Steffey.
The Codes Guidebook for Interiors, Harmon,

FEM Statement:
In this course you must purchase and activate the LiveText add-on, Field Experience Module (FEM), PRIOR to your first day of field experience/clinical teaching. Failure to purchase and activate the account and/or submit the required assignment(s) within the FEM system may result in course failure. FEM must be purchased from www.livetext.com for a fee of $20.00. (Not used in HMS 314 but will be used in HMS 413, 414 & 420)

LiveText Statement:
This course uses the LiveText data management system to collect critical assessments for students who are Perkins College of Education majors (undergraduate, graduate, and doctoral) or majors in other colleges seeking educator certification through the Perkins College of Education. Students who do not have an existing LiveText account will receive an access code via the SFA email system within the first week of class. You will be required to register your LiveText account, and you will be notified how to do this via email. If you forward your SFA e-mail to another account and do not receive an e-mail concerning LiveText registration, please be sure to check your junk mail folder and your spam filter for these e-mails.

If you have questions about obtaining or registering your LiveText account, call ext. 1267 or e-mail SFALiveText@sfasu.edu. Once LiveText is activated, if you have technical questions, call ext. 7050 or e-mail livetext@sfasu.edu. Failure to activate the account and/or submit the required assignment(s) within the LiveText system may result in course failure. (Live text is used if pursuing a Construction Management Certificate).

VII. Course Evaluations

Near the conclusion of each semester, students in the Department of Human Sciences electronically evaluate courses taken within the College of Education. Evaluation data is used for a variety of important purposes including: 1) course and program improvement, planning, and accreditation; 2) Instruction evaluation; and 3) Decision-making for faculty tenure, promotion, pay and retention. As you evaluate this course, please be thoughtful, thorough, and accurate. Please know that the College of Education faculty members are committed to excellence in teaching and continued improvement.

In the College of Education, the course evaluation process has been simplified and is completed electronically through My SFA. 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: Found at https://www.sfasu.edu/policies
**Class Attendance and Excused Absence: Policy 6.7**

Regular, punctual attendance, documented participation, and, if indicated in the syllabus, 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. Whether absences are excused or unexcused, a student is still responsible for all course content and assignments. Students with accepted excuses may be permitted to make up work for up to three weeks of absences during a semester or one week of a summer term, depending on the nature of the missed work. Make-up work must be completed as soon as possible after returning from an 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, 936-468-3004 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/disabilities/.

**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:
- using or attempting to use unauthorized materials on any class assignment or exam;
- falsifying or inventing of any information, including citations, on an assignment; and/or;
- 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 one’s own. Examples of plagiarism include, but are not limited to:
- submitting an assignment as one’s own work when it is at least partly the work of another person;
- submitting a work that has been purchased or otherwise obtained from the Internet or another source; and/or,
- incorporating the words or ideas of an author into one’s paper or presentation without giving the author credit.

**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. 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 policy 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.

VIII Other Relevant Course Information.

Cell Phones:

Cell phones must be turned off and placed out of sight during class. It is considered unprofessional and disrespectful to engage in text messaging, internet usage, and/or email while in class. Students who habitually violate this policy will be asked to leave the class. In the unusual circumstance that one must leave his/her phone on vibrate (with a sick child at home or waiting for emergency information via phone), notifying the instructor at the beginning of class is appropriate and expected to avoid confusion. Communication with professor is required.

Interior Design Program

CLASS POLICIES

1. Attendance: Per University policy, regular and punctual attendance is expected at all class meetings. The class roll will be checked to verify attendance. Removal of absences recorded due to tardiness is the responsibility of the design student. The student should speak with the professor at the end of the class period on the same day in which the absence may have been recorded. If you attend all classes an additional 10 points will be added. Students may miss one class, for each additional class 10 points will be subtracted from the total. After 3 absents you will receive one letter grade lower.

2. Excused Absence: It is University policy to excuse students from attendance for reasons related to health, family emergencies, religious holidays, and participation in University-sponsored events. Students are responsible for providing the professor with satisfactory documentation for an excused absence. 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.

3. 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.

4. Unexcused Absence: In interior design classes, students with unexcused absences will forfeit the make-up of lecture notes, critiques, demonstrations, field trips, handouts, 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 two absences for a long semester and one for a summer term.
summer semester; thereafter, a letter grade will be deducted from the semester grade for each additional unexcused absence. (3 or more absences)

5. **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.

6. **Project Reworks:** Students electing to rework major studio projects may resubmit them the first day of Dead Week. The projects will be re-graded, and the new grade for each project, averaged with the prior grade, will determine a final project grade. None will be accepted after the first day of Dead Week.

**IX. Other Relevant Course Information:**

**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. Additionally, in an effort to maintain the appearance and aesthetics of the Human Sciences South Building, students are prohibited from the use of spray adhesives, spray paints, or any other damaging materials in the building, near the building or on any exterior surfaces connected to the building. These materials are to be used ONLY in designated areas.

3. Students should limit food or drink to the gallery of the Human Sciences South building. Per university policy, food and drink are not allowed in university classrooms.

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 student dissatisfaction arises, the student’s request for a private conference with the professor serves 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 school director may be scheduled.

8. Modest, comfortable dress is expected for regular classes. For class presentations, professional dress is required. In general, professional dress includes: a jacket or jacket-substitute such as a vest or cardigan, modest full-length pant or knee-to-calf length skirt, modest shirt with sleeves, and closed-toe shoes. Hair
of shoulder-length or longer should be pulled up or back. Common professional dress ERRORS TO AVOID are denim clothing, tennis shoes, flip-flops, sleeveless clothing, tight-form-fitting clothing, bare midriffs, underwear that shows, low-rise pants which reveal naval abdomen or lower hips area, and low-cut tops which reveal the male chest or female cleavage.