



**College of Health Sciences  
Family and Consumer Sciences Department**

**FACS 2388  
BUILDING SYSTEMS FOR INTERIORS  
3 CREDIT HOURS  
SPRING SEMESTER, 2018**

**INSTRUCTOR:**

**Dr. Laura Burleson**

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**Office Hours:** Mon & Wed 8:00am – 9:30pm. Thur. 4:00pm -5:00pm

**Sam Center:** Mon. & Wed. 1:00pm – 5:00pm, Thur. 10:00am – 1:00pm. Fri 8:00am-12:00pm

**CLASS TIME:**

Lecture – Tuesday Thursday 8:30 – 9:30am, Lab – Tuesday 9:30 – 11:30am

**CLASS LOCATION:**

Margaret Lea Houston Building, Room 110 - lecture, Room 110 - lab

**COURSE DESCRIPTION:**

**FACS 2388 Building Systems for Interiors:** This course will focus on helping students to develop an understanding of building systems as they apply to interior design. Student understanding of systems will be communicated in drawing of construction, electrical, mechanical, ceiling and floor systems as part of design solutions. (2-2). Credit 3.

**TEXT:** Ching, F., *Building Construction Illustrated 5<sup>th</sup> Edition*, Wiley & Sons, 2014.

Kilmer, W. O., and Kilmer, R., *Construction Drawing and Details for Interiors, 3<sup>rd</sup> Edition*, John Wiley & Sons, Inc., 2016

Bonda P., & Sosnowcik, K., *Sustainable Commercial Interiors 2<sup>nd</sup> Edition*, Wiley & Sons, 2014.

**EXPECTATIONS FOR ENTERING STUDENTS**

Student should have appropriate knowledge of:

1. College mathematics and geometry
2. Metric system
3. Measurement conversions
4. Proficient drafting skills, lines weights, lettering, use of scale and page set up.
5. Accessing internet through use of a personal or university provided computer.

**COURSE FORMAT:**

This course will include instructional discussion, demonstrations and studio critiques of design drawings and models. The student is expected to read discussion material and produce construction drawings and models during lab time, as well as outside of lab. Drafting quality is emphasized along with presentation suitable for the construction industry. Project descriptions and requirements have been developed to simulate the real work and time commitments of practicing interior designers as this course prepares the student for advanced design coursework and FACS 4369 Internship.

**COURSE OBJECTIVES:**

Upon completion of this course, students should be able to:

1. Communicate using learned drafting skills an understanding of building structures (both structural and non-structural) and materials as represented in the development of site plans, foundations, floors, walls, and roof systems in plan and section views, stairs and vertical circulation and cabinet details in either wood or steel materials.

2. Communicate an understanding of building systems in three-dimensional model construction as represented in site plans, foundations, floors, walls/doors/windows, roof systems, exterior and interior surfaces, electrical and thermal system.
3. Communicate using learned drafting skills appropriate layouts for distribution systems including power/electrical, mechanical/HVAC, data/voice telecommunications, security, and plumbing.
4. Show an understanding of concepts for sustainable building and materials, energy, and building controls, and acoustics as discussed, researched and reported through written analysis.
5. Produce quality documents suitable for construction and professional portfolios.
6. Show an understanding of typical fabrication and installation methods and maintenance requirements for building materials in residential and commercial construction.
7. Demonstrate an understanding of environmental systems related to thermal control and indoor air quality that enhance the health, safety, welfare and performance of building occupants.

**CIDA 2017 Standards: For the interior design program**

**Standard 4. Global Context - Interior designers have a global view and consider social, cultural, economic, and ecological contexts in all aspects of their work.**

a) Students are **aware** that building technology, materials, and construction vary according to geographic location.

Student work demonstrates **understanding** of:

- c) how environmental responsibility informs the practice of interior design.
- d) exposure to the current and relevant events that are shaping contemporary society and the world.

**Standard 5. Collaboration - Interior designers collaborate and also participate in interdisciplinary teams.**

Students have **awareness** of:

- a) the nature and value of integrated design practices.
- b) the terminology and language necessary to communicate effectively with members of allied disciplines.

**Standard 6. Business Practices and Professionalism - Interior designers understand the principles and processes that define the profession and the value of interior design to society.**

Students have **awareness** of the:

- a) contexts for interior design practice.
- c) breadth and depth of interior design's impact and value.

**Standard 8. Design Process - Interior designers employ all aspects of the design process to creatively solve a design problem.**

Student work demonstrates the ability to **apply** knowledge and skills learned to:

- c) identify and define issues relevant to the design problem.

**Standard 9. Communication - Interior designers are effective communicators.**

e) apply a variety of communication techniques and technologies appropriate to a range of purposes and audiences.

**Standard 13. Products and Materials - Interior designers complete design solutions that integrate furnishings, products, materials, and finishes.**

Student work demonstrates **understanding** of:

- c) typical fabrication, installation methods, and maintenance requirements.
- e) Students select and **apply** products and materials on the basis of their properties and performance criteria, including ergonomics, environmental attributes, life safety, and life cycle cost.

**Standard 14. Environmental Systems and Comfort - Interior designers use the principles of acoustics, thermal comfort, and indoor air quality in relation to environmental impact and human wellbeing.**

a) Students are **aware** that design decisions relating to acoustics, thermal comfort, and indoor air quality have an environmental impact.

Students **understand**:

- b) the principles of acoustical design.
- c) appropriate strategies for acoustical control.
- d) the principles of thermal design.
- e) how active and passive thermal systems and components impact interior design solutions.
- f) the principles of indoor air quality.
- g) how the selection and application of products and systems impact indoor air quality.

**Standard 15. Construction - Interior designers understand interior construction and its interrelationship with base building construction and systems.**

a) Students have **awareness** of the environmental impact of construction.

Student work demonstrates **understanding** that design solutions affect and are impacted by:

- b) base-building structural systems and construction methods.
- c) interior systems, construction, and installation methods.
- d) detailing and specification of interior construction materials, products, and finishes.
- e) the integration of building systems including power, mechanical, HVAC, data/voice telecommunications, and plumbing.
- f) monitoring systems including energy, security, and building controls systems.
- g) vertical and horizontal systems of transport and circulation including stairs, elevators, and escalators.
- h) Students **understand** the formats, components, and accepted standards for an integrated and comprehensive set of interior construction documents.

Students are **able** to:

- i) read and interpret base-building construction documents.
- j) contribute to the production of interior contract documents including drawings, detailing, schedules, and specifications appropriate to project size and scope.

**Standard 16. Regulations and Guidelines - Interior designers apply laws, codes, standards, and guidelines that impact human experience of interior spaces.**

Student work demonstrates **understanding** of laws, codes, and standards that impact health, wellness, security, and fire and life safety, including:

- b) sustainable environment guidelines.

Students **apply**:

- g) industry-specific regulations and guidelines related to construction.
- h) industry-specific regulations and guidelines related to products and materials.

**IDEA Objectives:**      I= Important      E=Essential

1. **Gaining factual knowledge** (terminology, classifications, methods, trends) \*E
2. Learning fundamental principles, generalizations, or theories
3. **Learning to apply course material** (to improve thinking, problem solving, and decisions) \*E
4. **Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course** \*I
5. Acquiring skills in working with others a member of a team
6. Developing creative capacities (writing, inventing, designing, performing in art, music, drama, etc.)
7. Gaining a broader understanding & appreciation of intellectual/cultural activity (music, science, literature, etc.)
8. Developing skill in expressing oneself orally or in writing
9. Learning how to find and use resources for answering questions or solving problems
10. Developing a clearer understanding of, and commitment to, personal values
11. Learning to analyze and critically evaluate ideas, arguments, and points of view
12. Acquiring an interest in learning more by asking questions and seeking answers

Many of the other listed IDEA objectives are part of this course, however are not part of the objectives that are evaluated.

**COURSE EVALUATION:**

Drawing Assignments (6 @ 75 points)	450	90 - 100% = A
Construction Model (3 parts @ 50 points)	150	80 - 89 % = B
Test (3 @ 100 points)	300	70 - 79 % = C
Final	100	60 - 69 % = D
Total	1000	0 - 59 % = F

**Grading Procedures:**

1. All assignments and projects will be evaluated and graded for substantive content, design quality, soundness of planning, presentation, creativity, and specific criteria required in the assignment or project.
2. Grades are allotted on a 10% scale as shown.

**A grade of C or above is required for credit toward a degree in interior design** and as a prerequisite for the next level of course work in the interior design major.

## **COURSE OUTLINE:**

### UNIT I – Sustainability Construction

- A. Introduction to Sustainability
- B. Global Issues
- C. Site, Water & Energy
- D. Sustainable Materials
- E. Indoor Environments
- F. Using Sustainable Resources
- G. The Business of Green Design
- H. Practicing Green Design

### UNIT II – The Building

- A. Foundation
  - 1. Pier & Foundation Wall
  - 2. Slab
- B. Floor System
  - 1. Beam or Joist Supported
  - 2. Homogenous slab
- C. Wall System
- D. Doors and Windows
- E. Roof System
- F. Moisture and Thermal Systems

### G. Special Construction

- 1. Stairs
- 2. Fireplaces
- 3. Cabinetry

### H. Finish Materials

### I. Mechanical Systems

- 1. HVAC
- 2. Electrical

### J. Building Material

- 1. Concrete and Stone
- 2. Steel
- 3. Wood

### UNIT III – Model Construction

- A. Site Plan
- B. Foundation
- C. Floor System
- D. Wall System
- E. Roof System

## **COURSE POLICIES:**

### **Attendance:**

Class attendance is expected for all classes and attendance will be taken during each class period. Each class period should be attended with the necessary supplies and materials for working.

As stated in the University catalog, students are allowed to take **THREE hours of absences for the purpose of personal illness, family funerals, university activities or legal matters. There are NO PERSONAL DAYS.** The fourth and fifth absences will result in a 5 point deduction (half a letter grade) for each of from the final semester grade. The sixth and seventh absence will result in a 10 point deduction (full letter grade) for each from the final semester grade.

**A total of 8 absences will result in a failing grade for the course.** When a failing grade is posted the last regularly attended class day will be reported to the Registrar's Office when grades are due. The total number of absences will be posted at the end of the semester in separate column in Blackboard (this column is not figured into the calculated grade) and a separate column will be posted that shows the point deduction due to missed attendance.

Example: If a student has a final grade of:

94 and 4 absences (- 5 pts) the grade recorded is 89 a "B"

94 and 7 absences (-30 pts, 10 pts for the 4<sup>th</sup> and 5<sup>th</sup> and 20 pts for the 6<sup>th</sup> and 7<sup>th</sup>) the grade recorded is 64 a "D"

94 and 8 absences the grade recorded is an "F"

It is the student's responsibility to make sure a tardy is recorded as a tardy and not an absence from class before the end of that class period. **Five tardies will be counted equal to one absence.** Leaving the classroom early is only permitted with notifying the instructor before the start of class. Abuse of leaving early will result in accumulation of absences in the same manner as tardies.

Absences resulting from extenuating circumstances accompanied by appropriate documentations from the Office of Student Life will be evaluated on an individual basis.

### **Assignments:**

1. All course work due in each course should be turned in on the date and at the time scheduled. Late work will receive a 5 % reduction in points for each day late, which includes days counted through the weekend, spring break and/or holidays.
2. Course work will only be received if turned into the instructor.

3. All work must be turned in by the last regular class day prior to the start of finals. No work will be accepted once finals exams have started. In accordance with the university catalog, all work must be received in order for the student to be eligible to take a final examination.

There is no individual extra credit accepted in this course. The only way a student can improve the course grade is to improve the work performance on test and assigned projects.

**Examination:**

1. Examinations will be given on the date and time scheduled in the syllabus calendar.
2. A comprehensive make-up examination over all material covered by previous test in the course will be given on the last regular class day.

**Academic Dishonesty:**

All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but is not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resources materials.

If a student is involved in cheating on an exam, that person will receive a grade of "0" on that exam. If a student is involved in cheating on a second exam or the final examination, that student will receive an "F" for the course.

If a student is involved in misrepresenting work, the work will receive a "0" or if a student allows someone else to borrowed work, that work will receive a "0". Most work is to be done by the individual student and is not team work unless stipulated.

Misrepresented methods can include but are not limited to:

1. copying work of another student, (Friends working together should take extra care to have work that is different; so it does not appear to be copied.)
2. tracing a drawing of another student
3. using the computer to generate work that is to be hand generated
4. allowing someone else to complete an assignment or work for the student.

**Classroom Behavior:**

1. Classroom disturbances should be avoided including:
  - a. Personal discussions and talking or passing notes during lectures. Discussion should relate to course topics.
  - b. Personal discussion of grades. Honor a student's right to privacy. Conference time may be set with the instructor if individual discussion is required.
  - c. No sleeping in class is permitted. Please, do not put your head down on the desk or table. If a student is ill they should ask to be excused.
  - d. No open eating food or drinks allowed in the classrooms or labs. Please, take it out into the hall.
  - e. Working on other course assignments, reading the newspaper.
  - f. Working on the computer during lectures or discussions.
  - g. Leaving the classroom early is not permitted without notifying the instructor before the start of class.
2. The student's work area (i.e. table floor space, etc.) should be clean of all papers, pencil marks, paint, and markers before leaving the classroom.

**Returning Work:**

Due to accreditation procedures the department is required to keep student work done in major FACS, ETCM and ARTS courses. Work will be returned to the student to inform the student of their evaluation and grade. Work that is collected will be held by the instructor until after the accreditation site.

1. Students should photograph or reproduce their work before submitting it within each course.  
ARTS projects can also be photographed. ETCM drawings should be reprinted for the department.

2. Students should notify the program director if they wish for their work to be returned after any accreditation site visit.

**Student Syllabus Guidelines:** You may find online a more detailed description of the following policies. These guidelines will also provide you with a link to the specific university policy or procedure:

<http://www.shsu.edu/syllabus/>

### **University Policy regarding student use of Electronic Devices in the Classroom**

The following statement should be placed in the syllabus, which allows for faculty members to make exceptions, but as a general rule the policy is as follows.

#### **CELL PHONES**

As members of the classroom community, all students have a responsibility to others who are a part of that community. The goal is to produce an environment that is conducive to learning. Students are to treat faculty and other students with respect. Cell phones, laptop computers, and similar devices have become increasingly a part of life in our society; however, when used in the classroom environment they can become disruptive. Laptop computers, if allowed, may be used for note taking purposes if they are not disruptive to other class members. **Students are to turn off cell phones and other similar electronic equipment while in the classroom.** When cell phones students respond in class or leave class to respond, it disrupts the class. Therefore, the use by students of cell phones or similar communication devices during scheduled class-time is prohibited unless specifically permitted by the instructor. All such devices should be turned off or put in a silent (vibrate) mode and ordinarily should not be taken out during class.

**If there is an emergency situation for a student**, that student should inform the instructor and place himself/herself in a seat near the door where an exit for a phone call would be only minimally disruptive. With instructor approval, students may record lectures, take notes via laptop computer, etc., provided that they do not disturb other students in the process. Other exceptions to this policy may be granted at the discretion of the instructor.

**Any use of cell phones or other electronic devices during a test period is prohibited. Even the visible presence of a cell phone or other device during the test period will result in a zero for that test.** Use of a cell phone during a test could result in a charge of academic dishonesty (see student code of conduct reference below). During the test these instruments should be left at home or stored securely in such a way that they cannot be seen or used by the student.

### **STUDENTS WITH DISABILITIES POLICY:**

It is the policy of Sam Houston State University that no otherwise qualified disabled individual shall, solely by reason of his/her disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any academic or Student Life program or activity. Any student with a disability that affects his/her academic performance should contact the Office of Services for Students with Disabilities in the SHSU Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786) to request accommodations. **NOTE: No accommodation can be made until the student registers with the Office of Services for Students with Disabilities (SSD).** E-mail: [disability@shsu.edu](mailto:disability@shsu.edu), Web Address: [www.shsu.edu/disability](http://www.shsu.edu/disability).

**Student Absences on Religious Holy Days:** Students are allowed to miss class and other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. Students remain responsible for all work. *See Student Syllabus Guidelines.*

**Academic Dishonesty:** Students are expected to maintain honesty and integrity in the academic experiences both in and out of the classroom. *See Student Syllabus Guidelines.*

**Visitors in the Classroom:** Only registered students may attend class. Exceptions can be made on a case-by-case basis by the professor. In all cases, visitors must not present a disruption to the class by their attendance.

### **Academic Grievance Procedures for Students (AP 900823)**

Academic grievances include disputes over course grades, unauthorized class absences/tardiness, suspension for academic deficiency, instructor's alleged unprofessional conduct related to academic matters, graduate comprehensive and oral exams, theses and dissertations, and withdrawal or suspension of privileges related to degree-required clinical rotation, internships, or other clinical service delivery in professional degree programs.

If the dispute is determined to be based upon professional judgment, the aggrieved student is entitled to have, as appropriate and in turn, the department/school chair, College Academic Review Panel, academic dean, Dean of Graduate

Studies (for graduate student issues), and Provost and Vice President for Academic Affairs form an opinion about the dispute and so advise the individual(s) involved. <http://www.shsu.edu/dotAsset/0bb1346f-b8d6-4486-9290-dba24123d0d8.pdf>

**ADDITIONAL SUGGESTED READING:**

Mehta, Scarborough & Armpriest, *Building Construction*.

Shaeffer, *Elementary Structures for Architects and Builders*.

Jefferis & Madsen, *Architectural Drafting and Design*.

Ching, F. *Architecture: Form, Space and Order*.

Koenig, P. *Design Graphics: Drawing Techniques for Design Professionals*.

Harmon, S. K. *The Codes Guidebook for Interiors, Fifth Edition*

**College of Health Sciences  
Family and Consumer Sciences Department**

**FACS 2388  
Building Systems for Interiors  
Student Agreement Sheet**

Date \_\_\_\_\_

By signing this Student Agreement Sheet I, \_\_\_\_\_ accept the responsibility for abiding by the information in this course syllabus. (print name)

Initial below that you understand the following policies:

\_\_\_\_\_ **Attendance:** As stated in the University catalog, students are allowed to take THREE hours of absences for the purpose of personal illness, family funerals, university activities or legal matters. There are NO PERSONAL DAYS. Five tardies will be counted equal to one absence.

\_\_\_\_\_ **Assignments:** All course work due in each course should be turned in on the date and at the time scheduled. Late work will receive a 5 % reduction in points for each day late, which includes days counted through the weekend, spring break and/or holidays.

Additionally, I agree to allow the interior design program in the Department of Family and Consumer Sciences to keep any and all interior design assignments, projects, papers, preliminary and final drawings, and reports produced in this course for a temporary period (up to two years) for accreditation purposes.

\_\_\_\_\_  
(Signature)

SHSU email \_\_\_\_\_

Alternative email \_\_\_\_\_

Cell phone number for returning student work \_\_\_\_\_