

Interior Design Program Analysis
Fall 2006
Update Spring 2007

Following an analysis of the CIDA standards and a survey of topics listed in interior design programs at other accredited Texas universities, the following outline is proposed for the interior design program at Sam Houston State University. This process of analysis is to assist the program in meeting compliance to CIDA Standard 1 - Curriculum Structure.

The first two years (freshman and sophomore) of the program concentrate on building basic skills and knowledge in several areas of design, including furniture, textiles, architectural graphics, and elements and principles of design (based in art theory). The courses in these first two years use progressively less prescriptive assignments that provide basic application and increase the student's depth of knowledge with the goal of launching the student on a path toward self-directed creativity and/or autonomy.

The last two years (junior and senior) of the program expand on basic design knowledge with complex topics such as lighting and building codes and also provide a problem-solving focus to assignments. The courses in these years concentrate on the practice of systematic analysis of the design process, culminating in the application to design problems that result in created solutions. These upper-level courses require the use of basic skills developed in freshman and sophomore years to communicate the complex solutions that are produced through design analysis and the design process. The required studio courses concentrate on extensive application of the design process to both residential and commercial design problems. Through the projects in these courses, students create holistic solutions incorporating architecture, interior systems, furnishings, and custom elements such as cabinetry, floor designs, stairs, and fireplaces. Upon completing these courses the student will be prepared for an employment internship with a professional interior designer, architect or builder.

As indicated in the accreditation visiting team report three points under Standard 1 - Curriculum Structure were not met. The curriculum changes that are being recommended in this document should create a curriculum that does follow a logical sequence, reflect concepts that are interrelated and reinforced as seen in projects that demonstrate variety and complexity in type, size and scope.

The following outlines list the objectives that should be attained by the end of each year in preparation for success at the next level of course competencies. In the second step of the review process, the outlines were matched to existing FCS, ART or IT courses. If the recommended new content was not able to be matched to an existing course then an appropriate course level was suggested. In some cases the recommendation was made to move course content to another level.

Objectives to be met by the end of the Freshman Year:

- A. Master use of the elements and principles of design:
 - CIDA Standard 3 – Design Fundamentals
 - CIDA Standard 4 – Interior Design Knowledge, Skills, Processes & Theories

- B. Master math and English writing skills:
 - CIDA Standard 5 – Communication

- C. Demonstrate familiarity with basic human needs:
 - CIDA Standard 3 – Design Fundamentals
 - CIDA Standard 4 – Interior Design Knowledge, Skills, Processes & Theories

- D. Demonstrate ability to create concepts of interior finishes through rendering techniques:
CIDA Standard 5 – Communication
- E. Demonstrate ability to develop concepts of objects and space in three dimensions:
CIDA Standard 4 – Interior Design Knowledge, Skills, Processes & Theories
- F. Demonstrate ability to draft objects using computer-aided design (CAD):
CIDA Standard 5 – Communication
- G. Demonstrate ability to freehand sketch objects with emphasis on shape and form:
CIDA Standard 4 – Interior Design Knowledge, Skills, Processes & Theories

At the end of the Freshman Year, students should be able to:

1. Understand and apply design fundamentals and theory in art
 - a. Design Principles
 - b. Design Elements
 - c. Color Theory
 - d. Design Compositions

FCS 160 & ART 161
prerequisites for Jr. level design process course (proposing to delete req. for ART 161 due to redundancy)

These concepts are introduced and discussed in lecture, presented in textbook *Design Basics*, and application of them is made in lab projects.

2. Demonstrate basic college-level writing and math skills

ENG 164, 165, & MTH 164
MTH 164 prerequisite for FCS 287

Basic writing and math skill will assist performance in all academic and design-based courses. Math concepts especially needed include probability, logic, linear algebra, linear programming, mathematics of finance, and geometry.

3. Introduction to basic human needs and tasks performed by people who use spaces with concentrations of furniture used in
 - a. Social areas
 - b. Sleeping areas
 - c. Eating areas

FCS 160
prerequisite for Soph.-level design theory and material course

These three categories of spaces are introduced in connection with interior floor plans and furniture placement as part of a project in the lab.

4. Understand and apply basic ideas of design concepts
 - a. Produce a design concept based on a prescriptive list of needs and human characteristics
 - b. Develop furniture plans based on an understanding of human needs and design principles

FCS 160
prerequisite for Jr.-level design process course

These concepts are introduced and discussed in lecture, presented in textbook *Design Yourself*, and application of them is made in lab projects.

5. Develop basic rendering skills using a color pencil media
 - a. Render both hard and soft materials including wood, metal, glass, cotton prints, tweeds, leather, lace
 - b. Render an illustration of objects with highlights and shading
 - c. Render interior finishes in ¼"=1'0" scale on a floor plan and elevation

FCS 160

prerequisite for Jr.-level design process course

These concepts are introduced and discussed in lab, presented in textbook *Basic Color Pencil Techniques*, and applications of them is made in lab projects.

6. Develop three-dimensional designs in the form of visual displays
 - a. Apply the elements and principles of design
 - b. Develop a promotional concept that applies to the college audience

FCS 160 & ART 161

prerequisites for Jr.-level design process course (proposing to delete req. for ART 161 due to redundancy)

These concepts are introduced and discussed in lecture, presented in textbook *Design Basics*, and application of them is made in bulletin board and display case projects.

7. Master basic understanding of CAD
 - a. Be able to draft objects
 - b. Execute use of layers
 - c. Apply basic symbols to drawn objects
 - d. Apply dimensioning to drawn objects

IT 139 & IT 161

prerequisite for IT 263 (proposing to delete IT 161 req. due to lack of content application in CIDA Standards)

These concepts are introduced and discussed in lecture, presented in textbooks and application of them is made in CAD projects.

8. Understand visualization of three-dimensional objects and be able to sketch them
 - a. Interpret light direction related to an object and highlights and shadows to objects in sketches
 - b. Be able to sketch in various drawing medias (pencil, charcoal, pastel)

FCS 160 & ART 163

prerequisites for Jr.-level design process & ART 370

These concepts are introduced and discussed in lecture, presented in the textbook *Basic Color Pencil Techniques* used in FCS 160 and application of them is made in drawing projects in both ART 163 and FCS 160.

To accomplish the objectives that are outlined for the freshman year the courses require the student to produce work in the form of assignments, projects, and perform on test. The understanding of these concepts and standards will be evidenced through student projects completed and turned in during the semester.

Using knowledge and skills acquired in the Freshman Year, the student should be able to master the following objectives in the Sophomore Year.

Objectives to be met by the end of the Sophomore Year:

- A. Obtain knowledge of historic interiors, architecture, and furnishings, along with understand their application to spaces designed early in the 21st century:
CIDA Standard 3 – Design Fundamentals
- B. Demonstrate the ability to communicate through architectural drawings:
CIDA Standard 5 – Communication
CIDA Standard 4 – Interior Design Knowledge, Skills, Processes & Theories
- C. Demonstrate the ability to understand and a knowledge of interior finishes, materials and equipment:
CIDA Standard 4 – Interior Design Knowledge, Skills, Processes, & Theories
CIDA Standard 6 – Building Systems & Interior Materials
- D. Understand basic design theory and study of human behavior applied to the uses of interior spaces:
CIDA Standard 3 – Design Fundamentals
CIDA Standard 4 – Interior Design Knowledge, Skills, Processes & Theories
- E. Demonstrate the ability to understand and produce construction documents using both manual and CAD drafting:
CIDA Standard 4 – Interior Design Knowledge, Skills, Processes & Theories
CIDA Standard 5 – Communication
- F. Demonstrate the ability to apply interior systems including HVAC, water, electrical, and communications (telephone, cable, wireless technology) to interiors represented in drafted drawings:
CIDA Standard 4 – Interior Design Knowledge, Skills, Processes & Theories
CIDA Standard 5 – Communication
CIDA Standard 6 – Building Systems & Interior Materials
- G. Understand the concepts of sustainability and green design and be able to see their impact on design and specification of building and interior components:
CIDA Standard 2 – Professional Values
CIDA Standard 3 – Design Fundamentals
CIDA Standard 6 – Building Systems & Interior Materials

At the end of the Sophomore Year, students should be able to:

- 1. Demonstrate knowledge of historic and contemporary architecture, interior and furniture styles
 - a. Understand the influences of style development
 - b. Understand the terminology associated with

FCS 261
prerequisite for Jr.-level
residential design course

- styles and details
- c. Understand the trends in style reproductions

These concepts are introduced and discussed in lecture, presented in the textbook *Designer's Guide to Furniture Styles*, and application of them is made in historic and contemporary style notebook projects.

2. Demonstrate basic drafting skills (two-dimensional designs) in pencil on velum
 - a. Architectural lettering
 - b. Architectural lines
 - c. Dimensioned floor plans in ¼"=1'0" scale
 - d. Dimensioned elevations
 - e. Furniture plans
 - f. Electrical and lighting plans
 - g. Schedules
 - h. Cabinetry

These concepts are introduced and discussed in lecture, presented in the textbook *Architectural Graphics* used in FCS 287, and application of them is made in manually drafted projects.

3. Demonstrate knowledge of interior materials, finishes and equipment including textiles, floor finishes, wall finishes, ceiling finishes, window treatments and kitchen components for interior spaces
 - a. Understand characteristics of materials, equipment and finishes
 - b. Understand installation and uses for materials, equipment, and finishes
 - c. Understand how to calculate and measure for an appropriate quantity of materials and finishes

These concepts are introduced and discussed in lecture, presented in the textbook *Foundations in Interior Design* used in FCS 364, and application of them is made in projects and assignments. In a sophomore course this material will better prepare students for the junior residential design studio course.

4. Understand basic design theory and study of human behavior applied to the uses of interior spaces including
 - a. Anthropometric (human dimensioning) and clearances for use in interior components and furnishings
 - b. Human ergonomic use of furnishings

FCS 287

prerequisite for FCS 360, Jr.-level design process course, Jr.-level Lighting for Interiors course, Jr.-level residential design course, Sr.-level FCS 430 & FCS 431

Soph.-level Design Theory & Materials course (currently FCS 364), FCS 269

prerequisites for Jr.-level design process course, Jr.-level residential design course, Sr.-level FCS 430 & FCS 431

Soph.-level Design Theory & Materials course (currently FCS 364)

prerequisite for Jr.-level design process course, Jr.-level residential design course, Sr.-level FCS 430 & FCS 431

- c. Universal design
- d. Territoriality
- e. Wayfinding

These concepts are introduced and discussed in lecture, presented in the textbook, *Foundations in Interior Design* used in FCS 364 and application of them is made in projects and assignments. In a sophomore course this material will better prepare students for the junior residential design studio course.

5. Comprehend the interior systems and components that are needed for spaces to function and provide for human comfort including:
 - a. HVAC
 - b. Water and plumbing
 - c. Electrical
 - d. Communications (telephone, cable, wireless technology, etc.)

These concepts are introduced and discussed in lecture, presented in the textbook, *Building Construction Illustrated* used in FCS 468x, and application of them is made in drawings, projects and test. In a sophomore course this materials will better prepare students for the junior residential design studio course. The inclusion of these concepts will enable the curriculum to meet the need for a comprehensive knowledge of building construction that was not previously met in the industrial technology courses. Additionally, at the sophomore level this knowledge will enable more extensive application of concepts in junior and senior level projects.

6. Understand and communicate the basics of building construction and components including foundations, floors, walls, ceilings, doors, windows, stairs, and roof systems in both English and metric systems
 - a. Foundations
 - b. Building sections
 - c. Building elevations
 - d. Cabinet sections
 - e. Stairs
 - f. Fireplace systems

These concepts are introduced and discussed in lecture, presented in the textbook, *Building Construction Illustrated* currently used in FCS 468x and application of them are made in drawings, projects and test. The inclusion of these concepts at the sophomore level will enable the curriculum to meet the need for a comprehensive knowledge of building construction that was not met previously in the industrial

Soph.-level building construction course

prerequisite for Jr.-level design process course, Jr.-level residential design course, Sr.-level FCS 430 & FCS 431

Soph.-level building construction course

prerequisite for Jr.-level design process course, Jr.-level residential design course, Sr.-level FCS 430 & FCS 431

technology courses. Additionally, at the sophomore level this knowledge will enable more extensive application of concepts in junior and senior level projects.

7. Understand the application of sustainability and green design to buildings including
 - a. Use of renewable and recycled building products
 - b. Conservation of energy resources
 - c. Political and financial incentives offered through LEED certifications

Soph.-level Design Theory & Materials course (currently FCS 364) & FCS 268
prerequisites for Jr.-level residential design course, Sr.-level FCS 430 & FCS 431

These concepts are introduced and discussed in lecture, presented in the textbook *Foundations in Interior Design* used in FCS 364 and application of them is made in projects and assignments. In a sophomore course this material will better prepare students for the junior residential design studio course.

To accomplish the objectives that are outlined for the sophomore year the courses require the student to produce work in the form of assignments, projects, and perform on test. The understanding of these concepts and standards will be evidenced through student projects completed and turned in during the semester.

Using knowledge and skills acquired in the Sophomore Year, the student should be able to master the following objectives in the Junior Year.

Objectives to be met by the end of the Junior Year:

- A. Understand design theory and study of lighting applied to interior spaces:
CIDA Standard 3 – Design Fundamentals
CIDA Standard 4 – Interior Design Knowledge, Skills, Processes & Theories
- B. Understand the application of ADA, Life Safety, and building codes:
CIDA Standard 7 – Codes & Regulations for Health & Safety
- C. Understand the business operations common to most interior design, architectural and builder businesses:
CIDA Standard 2 – Professional Values
CIDA Standard 4 – Interior Design Knowledge, Skills, Processes & Theories
- D. Develop design solutions through implementing the design process:
CIDA Standard 4 – Interior Design Knowledge, Skills, Processes & Theories
- E. Develop visualization of space through implementing rapidly sketched perspectives and model constructions:
CIDA Standard 4 – Interior Design Knowledge, Skills, Processes & Theories
- F. Apply skill in both manual and CAD drawings to communicate residential design construction:
CIDA Standard 4 – Interior Design Knowledge, Skills, Processes & Theories
CIDA Standard 5 – Communication
CIDA Standard 6 – Building Systems & Interior Materials

- G. Apply rendering techniques to design solutions:
CIDA Standard 5 – Communication
- H. Participate in active listening of client needs and design critiques:
CIDA Standard 2 – Professional Values
- I. Communicate space in three-dimensional design:
CIDA Standard 4 – Interior Design Knowledge, Skills, Processes & Theories
CIDA Standard 5 – Communication

At the end of the Junior Year, students should be able to:

1. Understand the design theory of lighting applied to interior spaces
 - a. Communicate design solutions through lighting and reflected ceiling plans
 - b. Design the lighting of a space to incorporate task and function, as well as lighting objects and providing accents
 - c. Determine appropriate levels of light and recommend appropriate lamps and fixtures needed to provide a lighting solution for a space

Jr.-level Lighting for Interiors course (currently FCS 432)
prerequisite for Sr.-level FCS 430
FCS 431, & FCS 469

These concepts are introduced and discussed in lecture, presented in the textbook *Interior Lighting for Designers* used in FCS 432 and application of them is made in projects and assignments. In a junior course this material will better prepare students for the senior commercial design studio courses.

2. Understand the application of building codes
 - a. ADA codes
 - b. Life Safety codes
 - c. Egress and fire safety codes
 - d. Building codes
 - e. Residential codes

FCS 377
prerequisite for FCS 430, FCS 431, & FCS 469

These concepts are introduced and discussed in lecture, presented in the textbook *The Codes Guidebook for Interior* used in FCS 377 and application of them is made in projects, assignments and test. As a junior course this material will better prepare students for the senior commercial design studio courses and internship.

3. Understand the business operations common to most interior design, architectural and builder businesses
 - a. Determine proper business formation and operational procedures to create a business plan
 - b. Understand the procedures and methods of working with vendors, contract employees and other design professionals.

FCS 360 & Sr.-level presentation techniques course (currently FCS 362)
prerequisites for FCS 430, FCS 431, & FCS 469

- c. Develop professional values and ethics related to working with clients, vendors and other design professionals
- d. Understand the methods of working with clients, billing and charging for design service.
- e. Create client project books including completing all needed business forms, drawings, and other forms of business communication that occur with a client project.

These concepts are introduced and discussed in lecture, presented in the textbook *Business Practices and Procedures for Interior Design* used in FCS 360 and application of them is made in projects assignments and test. As a junior course this material will better prepare students for the senior commercial design studio courses and internship.

- 4. Understand and implement the design process
 - a. Understand the stages of the design process and implement them to create design solutions in both two-dimensional and three-dimensional formats
 - b. Interpret the design constraints established by the client, the building and the site
- 5. Develop visualization of space building based on knowledge of two-dimensional drawings progressing to three-dimensional rapidly sketched perspectives and model construction
 - a. Build on understanding of two-dimensional drawings
 - a. Learn rapid sketching techniques
 - b. Construct three-dimensional forms and scaled models

These concepts are introduced and discussed in lecture, presented in the textbooks *The Design Process, Sketching Interiors at the Speed of Thought and Shaping Interior Spaces* used currently in FCS 468x and application of them is made in projects and assignments. As a junior course this material will better prepare students for the senior commercial design studio courses and internship. Inclusion of these concepts will enable the curriculum to meet the need for application of knowledge that was not met in the previously.

- 6. Apply skills in communication to residential design
 - a. Manual drafting and CAD construction drawing for residential projects
 - b. Develop creative and technically sound solutions to client needs in residential projects using the design process in both two-dimensional and three-dimensional drawings and models

Jr.-level design process course

prerequisite for FCS 430, FCS 431, & FCS 469

Jr.-level design process course

prerequisite for FCS 430, FCS 431, & FCS 469

Jr.-level residential design course

prerequisite for FCS 430, FCS 431, & FCS 469

These concepts are introduced and discussed in lecture, presented in the textbooks *Interior Design Visual Presentation and Interior Design and Space Planning* used currently in FCS 468x and application of them is made in projects and assignments. As a junior course this material will better prepare students for the senior commercial design studio courses and internship. Inclusion of these concepts will enable the curriculum to meet the need for application of knowledge that was not met in the previously.

7. Apply rendering techniques to design solutions
 - a. Colored pencils
 - b. Marker media

These concepts are introduced and discussed in lecture, presented in the textbooks *Interior Design Visual Presentation and Color Drawing* used currently in FCS 468x and application of them is made in projects and assignments. As a junior course this material will better prepare students for the senior commercial design studio courses and internship.

8. Participate in active listening of client needs and design critiques
 - a. Record and interpret clients' constraints and needs
 - b. Participate in self and group critiques of projects in process.

These concepts are introduced and discussed in lecture, application of them is made in projects and assignments. As a junior course this material will better prepare students for the senior commercial design studio courses and internship.

To accomplish the objectives that are outlined for the junior year the courses require the student to produce work in the form of assignments, projects, and perform on test. The understanding of these concepts and standards will be evidenced through student projects completed and turned in during the semester.

Using knowledge and skills acquired in the Junior Year, the student should move toward mastery of the following objectives in the Senior Year.

Objectives to be met by the end of Senior Year:

- A. Apply critical thinking, programming and the stages of the design process to create functional and enriched solutions for commercial design:
 - CIDA Standard 2 – Professional Values
 - CIDA Standard 4 – Interior Design Knowledge, Skills, Processes & Theories

Jr.-level design process course

prerequisite for Jr.-level residential design course, FCS 430, FCS 431, & FCS 469

Jr.-level design process course

prerequisite for Jr.-level residential design course, FCS 430, FCS 431, & FCS 469

- B. Develop holistic solutions that apply a global perspective including environmental ethics and sustainability to design solutions for commercial design:
 CIDA Standard 2 – Professional Values
 CIDA Standard 3 – Design Fundamentals
- C. Create appropriate documents for construction and presentation purposes to be used for clients and other design professional such as architects, vendors, and builders:
 CIDA Standard 5 – Communication
 CIDA Standard 6 – Building Systems & Interior Materials
 CIDA Standard 7 – Codes & Regulations for Health & Safety
- D. Apply project management skills and professional values to commercial project solutions:
 CIDA Standard 2 – Professional Values
 CIDA Standard 7 – Building Systems & Interior Materials
- E. Understand the unique characteristics associated within the scope of commercial design projects:
 CIDA Standard 4 – Interior Design Knowledge, Skills, Processes & Theories
 CIDA Standard 5 – Communication
- F. The student should be ready to enter the professional workplace as an assistant designer:
 CIDA Standard 2 – Professional Values
 CIDA Standard 8 – Business Professional Practices

At the end of the Senior Year, the student should be able to:

1. Apply critical thinking, programming and the design process to create functional solutions
 - a. Produce preliminary ideas through the design process and evaluate the appropriateness of the solution
 - b. Participate in self and group critiques of design ideas and solutions
 - c. Produce design solutions that function and enrich the human experience of the design space

FCS 430, & FCS 431
 prerequisites for FCS 469

These concepts are introduced and discussed in lecture, presented in the textbooks *Problem Seeking and Cradle to Cradle* used currently in FCS 430 and 431 and application of them is made in projects and assignments. As a senior course this material will better prepare students for the internship.

2. Create solutions for commercial spaces that apply a global perspective
 - a. Consider environmental ethics
 - b. Incorporate sustainability and green design
 - c. Consider a variety of cultural issues
 - d. Personally sensitive to human needs

**FCS 430, FCS 431, & Sr.-
 level presentations techniques
 course (currently FCS 362)**
 prerequisites for FCS 469

These concepts are introduced and discussed in lecture, presented in the textbooks *Problem Seeking and Cradle to Cradle* used currently in FCS 430 and 431 and application of them is made in projects and assignments. As a senior course this material will better prepare students for the internship.

3. Create appropriate documents to be used for clients and other design professionals using manual drafting and CAD
 - a. Design solutions should be appropriate for client presentations
 - b. Design solutions should present needed information for architects, vendors, builders, and codes officials
 - c. Appropriate documents should include floor plans, elevations, building sections, lighting/reflected ceiling plans, furniture and finish plans, furniture and fixture specifications, finish selection, cabinet drawings, and building and interior models

FCS 430, FCS 431, & IT 372
prerequisites for FCS 469

These concepts are introduced and discussed in lecture, presented in the textbooks *Interior Design and Space Planning*, and *The Codes guidebook for Interiors* used currently in FCS 430 and 431 and application of them is made in projects and assignments. Application of CAD to projects is performed in both FCS 430 and 431, as well as in IT 372. As primarily senior courses this material will better prepare students for the internship.

4. Apply project management skills and professional values to commercial project solutions
 - a. Develop time management skills related to production of project elements
 - b. Implement professional values that impact design decisions and solutions
 - c. Implement building codes

FCS 430, FCS 431, & Sr.-level presentations techniques course (currently FCS 362)
prerequisites for FCS 469

These concepts are introduced and discussed in lecture, presented in the textbooks *Interior Design and Space Planning*, and *The Codes guidebook for Interiors* used currently in FCS 430 and 431 and application of them is made in projects and assignments. As senior courses this material will better prepare students for the internship.

5. Understand the unique characteristics associated within the scope of commercial design projects including
 - a. Office and open office systems
 - b. Restaurant

FCS 430, FCS 431, & IT 372
prerequisites for FCS 469

- c. Retail
- d. Assembly
- e. Health care

These concepts are introduced and discussed in lecture, presented in the textbooks *Interior Design and Space Planning*, and *The Codes guidebook for Interiors* used currently in FCS 430 and 431 and application of them is made in projects and assignments. As senior courses this material will better prepare students for the internship

- 6. Enter the workplace as an assistant designer
 - a. Apply learned skills and knowledge of a professional designer, architect or builder to the client's job
 - b. Present a professional portfolio of the work that has been created through the program

FCS 469, & Sr.-level presentations techniques course (currently FCS 362)

The work practicum includes applications of all interior design knowledge learned throughout the program. The student is required to work 300 clock hours under the supervision of an architect, licensed interior design or builder. The evaluation of the intern by the business supervisor provides information for curriculum improvement as well as assist the student to improve their skills and knowledge for preparation for the a post graduation employment position.

To accomplish the objectives that are outlined for the senior year the courses require the student to produce work in the form of assignments, projects, and perform on test. The understanding of these concepts and standards will be evidenced through student projects completed and turned in during the semester.