

CATALOG INFORMATION

Dept and Nbr: INDE 63

Title: INTER PRD MTRLS LIGHTING

Full Title: Interior Products, Materials, and Lighting

Last Reviewed: 1/25/2021

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	6	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00

Total Student Learning Hours: 157.50

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

**Catalog Description:**  
Introduction to products and materials used in interior design, including flooring, wall coverings, furniture, window treatments, accessories and interior lighting for residential and commercial interiors. The life cycle of products and materials used in interiors, their impact on building occupants, and Indoor Environmental Quality (IEQ) indicators will be discussed.

**Prerequisites/Corequisites:**

**Recommended Preparation:**  
Eligibility for ENGL 100 or ESL 100 or appropriate placement based on AB705 mandates

**Limits on Enrollment:**

**Schedule of Classes Information:**  
Description: Introduction to products and materials used in interior design, including flooring, wall coverings, furniture, window treatments, accessories and interior lighting for residential and commercial interiors. The life cycle of products and materials used in interiors, their impact on building occupants, and Indoor Environmental Quality (IEQ) indicators will be discussed.  
(Grade Only)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100 or appropriate placement based on AB705 mandates

Limits on Enrollment:

Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>	Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>CSU Transfer:</b>	Transferable	Effective: Fall 2007	Inactive:
<b>UC Transfer:</b>		Effective:	Inactive:

**CID:**

**Certificate/Major Applicable:**

Both Certificate and Major Applicable

## **COURSE CONTENT**

### **Student Learning Outcomes:**

At the conclusion of this course, the student should be able to:

1. Select appropriate products and materials, including HVAC (Heating, Ventilation, Air-Conditioning) systems, as commonly used in interior design projects.
2. Analyze and compare materials, products, and design proposals suitable for use in sustainable and green building design residential interior design projects.
3. Use industry-accepted terminology for materials, products, and systems for communication with industry professionals and clients for interior design projects.

### **Objectives:**

At the conclusion of this course, the student should be able to:

1. Research material and product properties commonly used in interior design projects.
2. Identify materials, products, and design solutions suitable for use in environmentally sustainable and green building design.
3. List and describe the functions of systems and technologies commonly used in interiors.
4. Select and propose appropriate materials, products, and systems for use in interior design projects.
5. Design interior spaces to ensure maximum Indoor Environmental Quality (IEQ) for building occupants.

### **Topics and Scope:**

#### **I. Terminology**

A. Indoor Environmental Quality (IEQ)

B. Cradle-to-cradle certified products and principles

#### **II. Textiles**

- A. Origins of fibers
- B. Construction of yarns
- C. Construction of fabrics
- D. Fabric finishes for interior design fabrics
- E. Fabric weights
- F. Sustainable/green textiles resources

### III. Wood Products

- A. Softwoods
- B. Hardwoods
- C. Composite wood products
- D. Wood grains
- E. Joining methods
- F. Case goods materials
- G. Wood finishes
- H. Sustainable/green wood resources

### IV. Furniture

- A. Wood furniture
- B. Metal furniture
- C. Other furniture materials
- D. Upholstered furniture

### V. Flooring Products

- A. Hard surface
- B. Ceramic, wood, bamboo, vinyl composite wood, and cork
- C. Soft floor surfaces
- D. Carpet weaves, installation methods, and pads
  - 1. Adhesives
  - 2. Impact on building occupants
- E. Rugs

### VI. Wall and Ceiling Materials

- A. Hard and rigid wall structures
- B. Paint and coatings
- C. Wall coverings
- D. Ceiling treatments
- E. Impact on building occupants
  - 1. Volatile Organic Compounds (VOC)
  - 2. Indoor air quality

### VII. Window Treatments

- A. Function and characteristics
- B. Soft window coverings
- C. Top treatments
- D. Drapery hardware
- E. Alternative window treatments
- F. Non-residential considerations
- G. Impact on building occupants

### VIII. Ceramics

- A. Clay bodies
- B. Forms
- C. Ornamentation
- D. Reclaimed materials

### IX. Glass

- A. Production process
- B. Types

- C. Ornamentation
- D. Architectural
- X. Metals
  - A. Characteristics
  - B. Types
- XI. Plastics
  - A. Family of plastics
  - B. Characteristics of various plastics
  - C. Uses of various plastics
  - D. Environmental issues
- XII. HVAC Systems
  - A. Heating
  - B. Ventilation
  - C. Air conditioning
  - D. Plumbing
  - E. Electrical
  - F. Impact on Indoor Environmental Quality (IEQ)
- XIII. Acoustics
  - A. Sound measurement devices product
  - B. Reverberation
  - C. Sound buffer products
  - D. Insulating materials and devices
  - E. Special construction materials and techniques
  - F. Impact on building occupants
- XIV. Lighting Systems
  - A. Lighting goals
  - B. Lighting types
  - C. Lighting functions
  - D. Effects of lighting on interiors
  - E. Lighting and Seasonal Affective Disorder
  - F. Mood lighting
  - G. Glare
  - H. Power terminology
  - I. Luminaries or lighting fixtures
  - J. The future of lighting
  - K. Non-residential lighting
  - L. Title 24 lighting standards impact
  - M. Impact on building occupants
- XV. Interior Technologies
  - A. Wiring
  - B. Technological control devices
  - C. Information age home automation systems
  - D. Information age wiring and installation
  - E. Built-in systems for residential
  - F. Communication systems
  - G. Home security systems
- XVI. Environmental Sustainability and Green Building Design Overview
  - A. Definitions
  - B. Outdoor environmental issues
  - C. Indoor environmental issues
  - D. Ventilation
  - E. Design solutions for resource conservation and pollution prevention

## Assignment:

1. Readings (20 - 40 pages per week)
2. Notebook of class notes and handouts
3. Glossary file: 40 - 50 labeled examples of interior products and materials
4. Research paper (3 - 5 page)
5. Product and materials worksheets (5 - 10)
6. Midterm and final exam

## Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Research paper

Writing  
10 - 20%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Worksheets and glossary file

Problem solving  
30 - 40%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None

Skill Demonstrations  
0 - 0%

**Exams:** All forms of formal testing, other than skill performance exams.

Midterm and final exam

Exams  
20 - 30%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

Participation and notebook

Other Category  
10 - 20%

## Representative Textbooks and Materials:

Interiors: An Introduction. 5th ed. Nielson, Karla. McGraw-Hill Companies. 2010 (classic)  
Interior Design Materials and Specifications. 3rd ed. Godsey, Lisa. Fairchild Books/Bloomsbury Publishing Inc. 2017  
Instructor-compiled reader