

FLORIDA STATE COLLEGE AT JACKSONVILLE

COLLEGE CREDIT COURSE OUTLINE

COURSE NUMBER: IND 2433

COURSE TITLE: Lighting Design

PREREQUISITE(S): IND 1606

COREQUISITE(S): None

CREDIT HOURS: 3

CONTACT HOURS/WEEK: 3

CONTACT HOUR BREAKDOWN:

Lecture/Discussion: 3

Laboratory:

Other _____:

FACULTY WORKLOAD POINTS: 3

STANDARDIZED CLASS SIZE
ALLOCATION: 30

CATALOG COURSE DESCRIPTION:

This course will cover all of the aspects of lighting design practice as outlined by the Illuminating Engineering Society of North America and the International Association Of Lighting Designers. Creative applications will be explored and a final presentation will be required.

SUGGESTED TEXT(S): Lighting Design Basics; Mark Karlen/James Benya: Latest Edition

Interior Lighting for Designers; Randall Whitehead: Latest Edition

IMPLEMENTATION DATE: Winter Term, 1990 (902)

REVIEW OR MODIFICATION DATE: September 26, 1989
Fall Term, 1995 (961)
Fall Term, 2002 (20031)
Fall Term, 2008 (20091)

COURSE TOPICS	CONTACT HOURS <u>PER TOPIC</u>
I. The Basics	12
<ul style="list-style-type: none"> A. Light and Color B. Lighting Needs C. Sources D. Luminaries and Light Controls E. Luminance Calculations F. Applications for Critical Seeing G. Applications for Motivational Lighting H. Lighting Economics I. Exterior Lighting 	
II. Lighting Education	6
<ul style="list-style-type: none"> A. Concepts on the Behavior of Light <ul style="list-style-type: none"> 1. Colors and Light 2. Reflection 3. Absorption/Transmission 4. Visual Task Visibility Factors B. Quantitative Measurements of Light/ Photometric Performance Report C. Calculation of the Quantity of Luminance for Effective Visibility <ul style="list-style-type: none"> 1. Lumen Method 2. Light Loss Factors 	
III. Lamps and Luminaires	8
<ul style="list-style-type: none"> A. Incandescent B. Fluorescent C. High Intensity Discharge Lamps D. Color Rendering Quality of Light 	
IV. Daylighting	4
<ul style="list-style-type: none"> A. Daylighting effects on: <ul style="list-style-type: none"> 1. People 	

COURSE TOPICS (Continued)	<u>CONTACT HOURS PER TOPIC</u>
2. Acoustics	
3. Ventilation	
4. Heat Gains and Losses	
5. Economics	
6. Other Parameters	
 V. Design Criteria for Lighting Interior Living Spaces	 2
A. Type of Fixtures	
B. Dimming Control System	
C. Functional Requirements	
 VI. Definitions of Lighting Terms	 1
A. Common Usage	
B. Special Distribution Charts	
C. Kelvin Temperature	
 VII. Lighting Critique of Actual Lighting Designer Projects	 6
A. Residential Spaces	
B. Commercial Spaces	
 VIII. Final Presentations	 4
A. Floor Plan	
B. Reflected Ceiling Plan	
C. Legends	
D. Graphics	
E. Specifications	
1. Manufacturers List	
2. Finish Schedule	
 IX. Computer Skills	 2
A. Microsoft Documents and Excel	
B. Blackboard	

PROGRAM TITLE: Interior Design Technology

COURSE TITLE: Lighting Design

CIP NUMBER: 1404.050100

LIST PERFORMANCE STANDARDS ADDRESSED:

NUMBER(S): TITLES(S):

05.0 IDENTIFY THE USE, FUNCTION AND MAINTENANCE OF FURNISHINGS AND MATERIALS – The student will be able to:

05.01 Determine lighting use and concept for specific interiors.

7.0 RESEARCH AND SPECIFY LIGHTING--The student will be able to:

07.01 Identify lighting requirements.

07.02 Relate lighting styles and fixtures to interior design.

07.03 Select appropriate lighting fixtures to perform efficiently and effectively.

07.04 Identify and describe human response to light contrast and glare.

07.06 Describe or illustrate the positive and negative impact of daylight on interiors.

07.12 Identify and describe the color characteristics of artificial lighting.

07.15 Apply knowledge of appropriate fixture placement and location in interior design projects.

09.0 IDENTIFY RESOURCES FOR DESIGN MATERIALS--The student will be able to:

09.04 Identify lighting manufacturers.



NOTE: Use either the Tab key or mouse click to move from field to field. The box will expand to accommodate your entry.

Section 1		COURSE PREFIX AND NUMBER: <u>IND 2433</u>	SEMESTER CREDIT HOURS: <u>3</u>
COURSE TITLE: <u>Lighting Design</u>			
Section 2			
TYPE OF COURSE: (Click on the box to check all that apply)			
<input type="checkbox"/> AA Elective	<input checked="" type="checkbox"/> AS Required Professional Course	<input type="checkbox"/> College Prep	
<input type="checkbox"/> AS Professional Elective	<input checked="" type="checkbox"/> AAS Required Professional Course	<input type="checkbox"/> Technical Certificate	
<input type="checkbox"/> Other _____	<input type="checkbox"/> General Education: (For General Education courses, you must also complete Section 3 and Section 7)		
Section 3 (If applicable)			
INDICATE BELOW THE DISCIPLINE AREA FOR GENERAL EDUCATION COURSES:			
<input type="checkbox"/> Communications	<input type="checkbox"/> Social & Behavioral Sciences	<input type="checkbox"/> Mathematics	
<input type="checkbox"/> Natural Sciences	<input type="checkbox"/> Humanities		
Section 4			
INTELLECTUAL COMPETENCIES:			
<input checked="" type="checkbox"/> Reading	<input checked="" type="checkbox"/> Speaking	<input checked="" type="checkbox"/> Critical Analysis	<input checked="" type="checkbox"/> Quantitative Skills
<input checked="" type="checkbox"/> Writing	<input checked="" type="checkbox"/> Listening	<input type="checkbox"/> Information Literacy	<input type="checkbox"/> Ethical Judgment
		<input type="checkbox"/> Scientific Method of Inquiry	<input checked="" type="checkbox"/> Working Collaboratively
Section 5		METHOD OF ASSESSMENT	
LEARNING OUTCOMES		METHOD OF ASSESSMENT	
1	Students will be able to demonstrate an understanding of light properties and lighting controls.	Graded exams	
2	Students will be able to demonstrate an understanding of light sources such as incandescent and discharge lamps and how they are used in an interior setting.	Graded exams	
3	Students will be able to demonstrate an understanding of luminaries and how they are used in an interior setting.	Graded assignments and projects	
4	Students will be able to demonstrate appropriate lighting design and documentation for interior space.	Project with Rubric method	
5	Students will be able to successfully design and assemble a working luminary.	Project with Rubric method	

Section 6

Name of Person Completing This Form: Sheri Litt

Date: 11/27/07