

Syllabus Fall 2013

CRN: 4868 Section: A

Location: 6 East 16th Street Room 1206 **Time Schedule:** Fridays, 9am to 11:40am
Alternate Location: 25 East 13th Street, 305 Lighting Lab**Instructor:** Randy Sabedra

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- Office hours by appointment
- Please do not leave messages in my Department Mailbox – I normally do not check it.
- Please let me know if you cannot attend class or why you did not attend class.

Course Description:

Architectural Lighting Design is both science and art. An *Architectural Lighting Designer* must understand the intricate details and process of construction, as well as an understanding of light and lighting technologies, vision, and how together they define our built environment. Light allows us to see. Light defines what see. With an understanding of how light works, Architects and Interior Designers can extend their knowledge beyond forms and surfaces – they can enter a world of brilliance, glow, shadow, sparkle, and darkness.

This course will introduce students to the various lighting technologies, lighting applications, and current practice standards on natural and electric lighting design. Assignments on self exploration and discovery of light will challenge your artistic side.

Teaching Method:

This course will consist of a power point lectures, demonstrations and mock-ups, group discussions, homework and project assignments, individual and class critiques, reading assignments, and field trips to visit lighting showrooms and lighting projects.

Prerequisites:

None

Learning Outcomes:

1. A basic understanding of light explored thru class demonstrations and “hands-on” approach assignments – students will learn how light can be controlled and define perception.
2. Learn the tools and resources available to today’s Architectural Lighting Designer – students will learn how to see, what to see, and where to go to learn, research, and explore light.
3. Approaching and solving an architectural lighting design projects with client needs, space program and functions, and technical requirements - students will be able to develop lighting concepts, research fixture products, perform simple lighting calculations, read light fixture catalog sheets, produce reflected ceiling plans, and write fixture specifications.

Materials and supplies:

Text Book: None (*optional lighting design and reference books attached*)
All lectures are presented PowerPoint. *Students are required to print their own copies of the handouts via my website*

Website: www.rsltg.com (roll over on **Student** button, and then click on your class)

- **Handouts will be posted one week before the scheduled class.** I will send an E-mail informing you when handouts are posted. Printing or browsing handouts for every lecture is recommended

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- **Handouts recommended to be kept in a 3-inch 3-Ring Binder with Dividing Tabs** (Suggested Labels*: Vision, Concepts, Lamps, Calculations, Lamp Drawings, Light Levels, and Graphics.) Students encouraged creating their own criteria for organizing topics

Evaluation and grading: Criteria of grading Projects, Participation and Attendance and % weight.

Assignments... all assigned work is due at dates noted (after that is considered late and will be marked down accordingly)

Preparedness... students are expected to bring required materials during desk reviews. This may include: inspirations images, class notes, vocabulary, questions, clippings, drawings, ideas, sketches for assignments. A progress of development must be seen.

Grading Distribution:

Homework Assignments – 25%

Assignment One – 25% (60% in progress reviews* and 40% final submission)

Assignment Two – 25% (60% in progress reviews* and 40% final submission)

Assignment Three – 25% (60% in progress reviews* and 40% final submission)

Extra Credit - show and tell, sharing lighting related discoveries with class

* In Progress Reviews and Preparation of Assignments – *this is an opportunity for me to see how much you are learning and applying to your project*

Department and class policies by:

Attendance:

*Attendance is mandatory. There is no substitute for working and participating in class. If a student fails a class due to attendance, he/she is no longer permitted to attend the class. Absence will impact final grade. Undo tardiness following a given break will result in an absence. Leaving before the class is over is considered an absence. **Three absences are grounds for failure.***

Tardiness:

Two tardies will be counted as one absence. Ten minutes late is considered tardy. Over 20 minutes late is considered absence.

Academic Warning

Students who do not complete and submit assignments on time and to a satisfactory standard will fail the class. It is the student responsibility to obtain missed assignments from other classmates and make up work in time for the next class.

Evaluation and Grading:

Criteria of grading Projects, Participation and Attendance and % weight. In order to receive a grade, students must complete all assignments, participate in class and maintain a daybook.

Undergraduate Grade Description:

A	4.0	95%	Outstanding, professional quality work – (on-time, perfect)	C+	2.3	70%	Average work
A-	3.7	90%	Excellent work	C	2.0	65%	Adequate work
B+	3.3	85%	Work of high quality	C-	1.7	60%	Passing work but below good academic standing
B	3.0	80%	Very good work	D	1.0	55%	Below average
B-	2.7	75%	Good work	F	0.0		Failure

Work that is late, if accepted by instructor, is downgraded one full grade for each session late (including lateness)

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Course Schedule

Week	Lecture	Homework / Assignments
1 30 Aug	Introduction of Instructor and Course - Review Syllabus and Schedule - Class Discussion: What is Light? - RS Lighting Design portfolio	
2 6 Sept	Making Light: - An overview of the history of light - Electric Lamps: Incandescent/Halogen/Fluorescent/HID/LED - learn basic wiring and simple lighting effects	Homework Discussion: A survey of your own lamps Assignment One Discussion: An exploration of light
3 13 Sept	Seeing Light: - learn about vision and perception, color, and - understanding shade and shadow	Assignment One desk review
4 20 Sept	What is a Light Fixture? - controlling light, luminaire optics and distributions - introduction to light fixture materials and construction, and components - system controls and dimming	Assignment One desk review
5 27 Sept	Assignment One Presentations	Assignment Two Discussion: An Analysis of Space
6 4 Oct	Field Trip: Lighting Showroom	Homework Discussion: Find a Fixture
7 11 Oct	Light in Architecture and the Psychology of Light	Assignment Two desk review
8 18 Oct	Lighting Concepts and Drawing Light - learning to develop a lighting concept, approach, and strategy - drawing lighting, and rendering techniques	Assignment Two desk review
9 25 Oct	Light a Surface: Horizontal and Vertical - present various approaches and techniques - finding light fixtures, online resources	Assignment Two desk review
10 1 Nov	Field Trip: Lighting Project - check out illuminance meters for the field trip	Homework Discussion: Measuring and Recording Light
11 8 Nov	Assignment Two Presentations	Assignment Three Discussion: A Lighting Design problem
12 15 Nov	Light a Surface: For a Task - present various approaches and techniques	Assignment Three desk review
13 22 Nov	Calculating Light - learn light metrics and calculation methods - review energy and the environment	Assignment Three desk review
Thanksgiving Break		
14 6 Dec	Construction Documents Specifications - overview of lighting specification	Assignment Three desk review
15 13 Dec	Daylight - overview of solar design, terminology, and tools	