



most four-year colleges and universities.

## **V. Outline of Course Content**

- A. Perception and Psychology
- B. Brightness/Color
- C. Lamps/Luminaires
- D. Daylighting/Sustainability
- E. Light Control
- G. Photometrics/Light Calculations
- H. Electricity
  - 1. Circuits
  - 2. Switch Control
  - 3. Dimming
  - 4. Control Systems
- I. Documentation
- J. Concept and Design

## **VI. Educational Goals and Learning Outcomes**

### **A. Educational Goals**

Students will:

1. Acquire the vocabulary and general knowledge to analyze lighting design and applications. (GE-RVCC 1)
2. Apply research methods for lighting design and applications. (GE-RVCC 1, 3; NJ 4)
3. Apply the human and technological factors of lighting.
4. Produce work that requires a critical assessment of lighting applications (GE-RVCC 1, 2, 7; NJ 1, 2)

### **B. Learning Outcomes**

Upon completion of this course students will be able to:

1. Assess lighting technology and applications
2. Document lighting applications and design
3. Apply the human and technological factors of light within the aesthetics of an interior design program
4. Complete basic light calculations
5. Identify and specify lamps and luminaires
6. Recognize and account for daylight and sustainability in a lighting program

## **VII. Modes of Teaching and Learning**

- A. Lecture/discussion
- B. Quizzes
- C. Computer-assisted instruction

- D. Guest speakers
- E. Student oral presentations
- F. Student lighting design projects
- G. Site visits
- H. Individual and group critiques

### **VIII. Examinations, Projects and other Assessment Instruments**

- A. Research papers/Case studies
- B. Quizzes/Exams
- C. Oral Presentation/Informative Dialogue
- D. Lighting design projects and documentation

### **IX. Grade Determinants**

- A. Active participation in class discussions/activities
- B. Quizzes/Exams on technology, calculations and theory
- C. Research/Design Case Studies/Presentations
- D. Final Design Project/Presentations

### **X. Texts and Materials**

- A. Suggested Textbooks

Interior Lighting for Designers/ Edition 4, by Gary Gordon , Gregory Day ,  
Wiley John & Sons, Incorporated

Fundamentals of Lighting/ Edition 1, by Susan Winchip , Fairchild Books

Lighting Design Basics/ Edition 1, by James Benya , Mark Karlen , James Benya ,Wiley,  
John & Sons, Incorporated

(Please Note: The course outline is intended only as a guide to course content and resources. Do not purchase textbooks based on this outline. The RVCC Bookstore is the sole resource for the most up-to-date information about textbooks.)

### **XI. Resources**

This course requires adequate physical space to accommodate students and visual projection and room darkening capabilities. Required equipment includes a computer with projection screen.

Additional resources:

- A. Computer lab with web access
- B. Drawing tables in classroom
- C. College Library (database access to art, architecture and interior design)