RARITAN VALLEY COMMUNITY COLLEGE

ACADEMIC COURSE OUTLINE

IDTC-204 Lighting for Interiors

I. Basic Course Information

A. Course Number and Title: IDTC-204, Lighting for Interiors

B. New or Modified Course: Modified

C. Date of Proposal: Semester: Fall Year: 2010

D. Sponsoring Department: Visual and Performing Arts

E. Semester Credit Hours: 3 credits

F. Weekly Contact Hours: 3 Lecture: 3

Laboratory: None

G. Prerequisites: IDTC 100 Design Studio 1 and IDTC 200 Design Studio 2

H. Laboratory Fees: None

I. Name and Telephone Number or E-Mail Address of Department Chair: Ann Tsubota, atsubota@raritanval.edu

II. Catalog Description

Prerequisites: IDTC 100 Design Studio 1 and IDTC 200 Design Studio 2 This course is an introduction to lighting theory and principles for interior space. The aesthetic, psychological, and functional aspects of lighting will be addressed. It will introduce basic principles of lighting design, including criteria, calculations, planning, layout and documentation to support interior design programs and concepts.

III. Statement of Course Need

This course is a core requirement for the Associate of Applied Science in Interior Design. It will create a foundation needed for interior design professionals to understand the role and importance of lighting in interior space. It will establish the basic knowledge to apply, assess, and document lighting for interior space.

IV. Place of Course in College Curriculum

- A. Free Elective
- B. The course is a program requirement for the Associate of Applied Science in Interior Design.
- C. Course transferability: According to the New Jersey Transfer website (www.njtransfer.org), this course will transfer to an Interior Design program at

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

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

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

<u>Lighting Design Basics/</u> 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)