Las Positas College 3000 Campus Hill Drive Livermore, CA 94551-7650 (925) 424-1000 (925) 443-0742 (Fax)

#### **Course Outline for INTD 58**

#### **FUNDAMENTALS OF LIGHTING**

Effective: Fall

I. CATALOG DESCRIPTION:

INTD 58 — FUNDAMENTALS OF LIGHTING — 3.00 units

Residential and commercial lighting systems as they apply to what constitutes a well-lit interior space. Includes an investigation of current lighting fixtures and lighting resources.

3.00 Units Lecture

**Grading Methods:** 

Letter or P/NP

**Discipline:** 

MIN **Lecture Hours:** 54.00 **Total Hours:** 54.00

- II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1
- III. PREREQUISITE AND/OR ADVISORY SKILLS:
- IV. MEASURABLE OBJECTIVES:

#### Upon completion of this course, the student should be able to:

- A. evaluate existing commercial and residential lighting installations;
- B. design a lighting system for a residential and commercial establishment using drafting equipment;
- read an electrical overlay for residential and commercial establishments; recognize lighting organizations which encourage advancing lighting knowledge including Designers Lighting Forum and Illuminating Engineering Society;
  E. be aware of local sources for obtaining further lighting knowledge and products;
- F. develop a lighting proposal for a client.

### V. CONTENT:

- A. Lighting terminology

- B. Elements of design as applied to lighting
  C. Color rendering with artificial and natural light
  D. How direct, indirect, task, ambient, general, specific, and accent light relate

- F. The function of various luminaries
  F. Residential lighting
  G. Commercial lighting including store, restaurant, and beauty salon examples
  H. The effect of Title 24 on commercial lighting design
  I. How to draw reflective ceiling plans including the use of electrical symbols and lettering J. Lighting documents
  K. Special lighting needs, including using a computer
  L. Light manufacturers and resources

- M. Landscape lighting
- N. Light as art

## VI. METHODS OF INSTRUCTION:

- A. Guest Lecturers -B. Slides
- C. Field Trips -D. Lecture -

### VII. TYPICAL ASSIGNMENTS:

# VIII. EVALUATION:

- A. Methods
- B. Frequency

- IX. TYPICAL TEXTS:
  1. No text; current readings
- X. OTHER MATERIALS REQUIRED OF STUDENTS: A. Drafting equipment