The emphasis of this course is on progressive rendering techniques. Fundamentals of drawing detailed perspective systems are also reviewed.

COURSE LEVEL STUDENT LEARNING OUTCOME(S) Supported by this course:

1. apply independent design ideas to required projects.
2. demonstrate the ability to think in three dimensions.
3. appraise and apply the various and different perspective methods.
4. interpret reflections and reflective surfaces.
5. use gradation to differentiate surfaces to make surfaces read properly.

6. interpret and use the basic types of renderings media used by designers.

7. generate lab drawings and renderings for accurate and dramatic presentations.

8. demonstrate the technical knowledge, attitude, and habits conducive to attaining a successful career in design.

9. interpret and apply different types of shadows.

**COURSE OBJECTIVES:**

1. develop the ability to think in three dimensions.

2. accrue the technical knowledge, attitude and habits conducive to attaining a successful career in design.

3. study and apply the various and different perspective methods.

4. understand reflections and reflective surfaces.

5. utilize gradation to differentiate surfaces and make surfaces read properly.

6. understand and apply different types of shadows.

7. understand and use the basic types of rendering media used by designers.

8. complete lab drawings and renderings for accurate and dramatic presentations.

9. apply independent design ideas to required projects.

**COURSE CONTENT:**

**LECTURE CONTENT:**

1. Design lettering

2. Technical and mechanism sketching

3. Use of instruments

4. Geometric construction

5. Templates, ellipses, sweeps and curves

6. Orthographic multi-view projections

7. Oblique, axonometric and perspectives

8. Sections

9. Title blocks and notes

10. Basic dimensioning

11. Introduction to ways to differentiate various materials using rendering media

12. Pencils, pens, markers, chalk and airbrush techniques

**LABORATORY CONTENT:**

**METHODS OF INSTRUCTION:**

A. Lecture:

B. Lab:

C. Independent Study:

**INSTRUCTIONAL TECHNIQUES:**
COURSE ASSIGNMENTS:
Reading Assignments
Lecture notes and instructor handouts.

Out-of-class Assignments
Research Library Media Center or Internet.

Writing Assignments
Analyze, apply and solve design problems requiring the knowledge, skills and techniques covered in class lectures, demonstrations, activities and research assignments.

METHODS OF STUDENT EVALUATION:
Midterm Exam
Final Exam
Short Quizzes
Written Assignments
Projects (ind/group)
Problem Solving Exercises
Skills Demonstration

Demonstration of Critical Thinking:
The student will explain to the instructor’s satisfaction why certain techniques taught in class and covered in the reading assignments are used to solve each assigned drawing and rendering problem.
The student will apply critical thinking/problem solving skills to their class drawings and renderings.

Required Writing, Problem Solving, Skills Demonstration:
Analyze, apply and solve design problems requiring the knowledge, skills and techniques covered in class lectures, demonstrations, activities and research assignments.

TEXTS, READINGS, AND RESOURCES:
TextBooks:

Other:
1. Research Library Media Center or Internet
   Class Syllabus
   Instructor Handouts
   Project related lab supplies

LIBRARY:
Adequate library resources include:

Comments:

Attachments:
[Attached Files]