Design Sketching (Sample Syllabus)

Course Description
This course addresses drawing and visualization techniques necessary for design thinking and development. It introduces the basic methods and processes necessary to make informed choices about formulating, developing, and presenting visual information. Topics covered include the fundamentals of line, surface, shape, perspective, volume, light, shadow, texture, form, detail, sketch technique, orthographics, design exploration, and observational drawing.

Course Objectives
- Identify drawing and visualization techniques that best communicate a design project.

- Gain knowledge of 2-D and 3-D analog drawing and sketching techniques that can be used to conceive, analyze, and develop design projects.

- Develop the technical and creative skills necessary for making judgements about the effectiveness of information communication and work quality.

- Establish a strong link between design thinking and the tools necessary for creating, manipulating, and communicating images to produce an effective design project.

Course Style
- Design sketching proficiency is attained through practice and rigor. You are expected to nurture your talent beyond course assignments.

- This course depends on your active participation and collaboration. Questions not asked are questions not answered. The course is interactive.

- Attendance and involvement are mandatory and key to your success in this course. The course will be taught in a "demo then practice" style. If a student misses a demo, the instructor will not do a make-up demo for that student. It is the student's responsibility to learn what he or she has missed from his or her classmates.

- Feedback and criticisms will be direct and honest, aimed at your process and product – not at you personally. Please hear them carefully and do not hesitate to discuss with the instructor about anything that is unclear or confusing.

Deadlines:
Deadlines for assignments will be announced in class. Late assignments will receive a zero, but will be evaluated. Exceptions will only be made for medical or family emergencies.

Attendance:
Mandatory. Attendance will be noted and factored into the grade. If a student is more than 20 minutes late to class, he or she will be counted as absent.

Reporting Illness:
Medical reasons for missing class should be supported by letters from doctors.

Required Reading:
- *Conceptual Drawing* by Joseph A. Koncelik & Kevin Reeder

Suggested Reading:
- *Design Sketching* by Erik Olofsson & Klara Sjolen
- *Drawing: A Creative Process* by Francis D.K. Ching
- *Design Rendering Techniques* by Dick Powell
- *Product Rendering With Markers* by Mark Arends
- *Quick & Easy Solutions to Marker Techniques* by Yoshiharu Shimizu
- Any books by Syd Mead (they can be difficult to find, but *very* inspirational)

Grading Criteria

Attendance / Participation	20%
Assignments	60%
Final Project	20%

- No incompletes will be given -

Grades are a means to communicate my evaluation of work and progress. Work will be graded with a letter grade and will be assigned a point value corresponding to the proportion, complexity and time allotted by the schedule. Specific evaluation criteria will be provided with each assignment. The final grade will be a compilation of assignment grades and class participation (attendance, attention, interest, contribution).

Course Topics and Schedule

Aug. 18	Course introduction Introductory demo on basic drawing tools and materials
Aug. 20	Line, contour, and shape
Aug. 25	Basic rules of perspective Sketching cubes in perspective and the principle of "drawing through" Deriving other basic geometric volumes from the cube
Aug. 27	*In-class workday*
Sept. 1	Sketching ***additive*** forms using cubes
Sept. 3	*In-class workday*
Sept. 8	Sketching ***subtractive*** forms using cubes
Sept. 10	*In-class workday*
Sept. 15	Sketching ***combined additive and subtractive*** forms using cubes
Sept. 17	*In-class workday*
Sept. 22	Analyzing and sketching existing simple product forms using cubes and the ***additive*** and ***subtractive*** method
Sept. 24	*In-class workday*
Sept. 29	Basic light, shade, and cast shadow principles for matte surfaces and volumes (value study)
Oct. 1	Basic quick marker techniques
Oct. 6	**FALL RECESS**

Oct. 8	Basic orthographic views
Oct. 13	Basic section and exploded views
Oct. 15	Sketching the cylinder
Oct. 20	*In-class workday*
Oct. 22	Sketching ***additive*** forms using cylinders
Oct. 27	*In-class workday*
Oct. 29	Sketching ***subtractive*** forms using cylinders
Nov. 3	*In-class workday*
Nov. 5	Sketching ***combined additive and subtractive*** forms using cylinders
Nov. 10	*In-class workday*
Nov. 12	Sketching ***combined additive and subtractive*** forms using cubes **and** cylinders
Nov. 17	*In-class workday*
Nov. 19	**Final Project**: TBD
Nov. 24	*Knowledge reinforcement / in-class workday*
Nov. 26	**THANKSGIVING BREAK**
Dec. 1	*In-class workday*
Dec. 3	**FINAL PRESENTATION**