GAVILAN COLLEGE
5055 Santa Teresa Blvd
Gilroy, CA 95020

Course Outline

COURSE: CGD 1 DIVISION: 50 ALSO LISTED AS:

TERM EFFECTIVE: Fall 2011 **Inactive Course**

SHORT TITLE: INDUS SKETCH/P.S.

LONG TITLE: Industrial Sketching and Problem Solving

Units	Number of Weeks	Type	Contact Hours/Week	Total Contact Hours
2	18	Lecture:	1	18
		Lab:	3	54
		Other:	0	0
		Total:	4	72

COURSE DESCRIPTION:

Graphical problem solving techniques used by professional designers in various fields of application using both traditional freehand and the computer. Emphasis is on developing the mental ability to visualize objects/shapes and their manipulation. This is an open entry exit supervised class. Students may concurrently enroll in CGD 110 or GCD 2L. May be repeated three times for a total of 8 units. ADVISORY: Eligible for English 250, English 260 and Mathematics 205. Computer lab work can be done both in lab and off-site.

PREREQUISITES:

COREQUISITES:

CREDIT STATUS: D - Credit - Degree Applicable

GRADING MODES
L - Standard Letter Grade

REPEATABILITY: R - Course may be repeated
Maximum of 3 times

SCHEDULE TYPES:
02 - Lecture and/or discussion
03 - Lecture/Laboratory
04 - Laboratory/Studio/Activity

STUDENT LEARNING OUTCOMES:

1. Student will be able to use the mind mapping process for designing.
ILO: 7,4,2,1,3,5
Measure: Performance, Folio review
2. The student will be able to use and set-up various methods of organizing design solution models.
ILO: 7,1,4,2,5,3
Measure: Performance, Folio review
3. The student will be able to perform, by using freehand sketching, the set-up of a selected design problem in various fields of application.
ILO: 1,4,7,5
Measure: Performance, Folio review
4. The student will be able to perform 2d/3d computer graphics for a given design solution documentation and or presentation.
ILO: 1,4,7,5
Measure: Performance, Folio review

CONTENT, STUDENT PERFORMANCE OBJECTIVES, OUT-OF-CLASS ASSIGNMENTS
Inactive Course: 09/26/2011
WEEK 1 4 HOURS
CONTENT: Introduction to use and application of the design process as used
in various fields of design
HOME WORK: Search the web for info on the design process and structure.
PERFORMANCE OBJECTIVE: Search web for information. Start freehand sketching of various object used in illustrating paths and flow movement in schematic form.
WEEK 2,3 8 HOURS
CONTENT: Start of using the class software to illustrate and document ideas.
Continued use and development of freehand sketching.
HOMEWORK: Search the net for examples of design solution presentations.
PERFORMANCE OBJECTIVE: Continued development of freehand sketching and computer graphics used in 2d/3d drawing and modeling for fast documentation.
WEEK 4,5,6 12 HOURS
CONTENT: Student selection area of application. Structure of design solution
process (s). Various documentation methods.
HOMEWORK: Continued search process of design solutions on the net.
PERFORMANCE OBJECTIVE: Student will be able to create and demonstrate the typical design steps in forming a solution process.
WEEK 7,8,9 12 HOURS
CONTENT : Student selects project to begin first example of the design process.
HOMEWORK: Student will search for other types of possible design project.
PERFORMANCE OBJECTIVE : The student will be able to structure the step

by
step design solution process.
WEEK 10,11,12,13 16 HOURS
CONTENT: Student selected project and field of application. Student continues work on the computer and freehand sketching
HOMEWORK: Student will search for design solution models.
PERFORMANCE OBJECTIVE: Student will continue to develop skills and knowledge of freehand and digital documentation.
WEEK 14,15,16,17 16 HOURS
CONTENT : Student selected field of application and project. Student has choice of software.
HOMEWORK Student will search magazines and internet articles relating to
the project and field of choice.
PERFORMANCE OBJECTIVE : Student will be able to construct and offer a class presentation of his/her work.
WEEK 18 2 HOURS
CONTENT : Final assemblage of all folio work.
HOMEWORK: Assemblage of all outside work and presented to the instructor.
PERFORMANCE OBJECTIVE : Student will have all work assembled for review and documented.
ASSIGNMENTS:
Included in content section.

METHODS OF INSTRUCTION:
Small group and full discussions/dialog with use of the computer for graphics demonstrations. Class discussions with Q/A.

METHODS OF EVALUATION:
This is a degree-applicable course, but substantial writing assignments are NOT appropriate, because the course primarily:
Involves skill demonstrations or problem solving
The problem-solving assignments required:
None
The types of skill demonstrations required:
Class performance
Other: Graphics is like a sport, it requires practice/use
The types of objective examinations used in the course:
None
Other category:
critical thinking and problem solving as applied to the design process, selection of software tools/processes, and use of computer/hardware.
The basis for assigning students grades in the course:
Writing assignments: 0% - 0%
Problem-solving demonstrations: 0% - 0%
Skill demonstrations: 35% - 60%
Objective examinations: 0% - 0%

Other methods of evaluation: 55% - 80%

REPRESENTATIVE TEXTBOOKS:

Robert McNeel and Associates, ^uRhinoceros Nurbs Modeling for Windows v3 Users Guide^s, 2002
Don Koberg and Jim Bangall, ^uUniversal Traveler^s, 1991
Nancy Margulies w/ Nusa Maal, ^uMapping Inner Space^s, 2002
Reading level of text: 11, 16, 11 grade level. Verified by: J. Ferro
Other materials required to be purchased by the student: 250 MB zip disk or USB mini drive-256 mb to store work files. One CDROM as portfolio.

ARTICULATION and CERTIFICATE INFORMATION

Associate Degree:
CSU GE:
IGETC:
CSU TRANSFER:
Transferable CSU, effective 200430
UC TRANSFER:
Not Transferable

SUPPLEMENTAL DATA:

Basic Skills: N
Classification: I
Noncredit Category: Y
Cooperative Education:
Program Status: 2 Stand-alone
Special Class Status: N
CAN:
CAN Sequence:
CSU Crosswalk Course Department: CGD
CSU Crosswalk Course Number: 1
Prior to College Level: Y
Non Credit Enhanced Funding: N
Funding Agency Code: Y
In-Service: N
Occupational Course: C
Maximum Hours:
Minimum Hours:
Course Control Number: CCC000184428
Sports/Physical Education Course: N
Taxonomy of Program: 095300