



INTERIOR 1061 CAMELBACK RD P. 949.675.4451
DESIGNERS NEWPORT BEACH F. 949.759.0667
INSTITUTE CA 92660 www.idi.edu

Course Syllabus

COURSE: 325 **CAD 1**

REQUIRED TEXT: Plan Set: Two Story Office Building (A file for printing this document will be made available to you the first day of class - this document and the syllabus are required for class every day)

GRADING:	Project	100 points
	Final	50 points
	Notebook	50 points
	<u>Quizzes</u>	<u>100 points</u>
	Total:	300 points

WORKPRODUCT:

Graded items above are required to be turned in as described in class and will not be returned to the student.

SOFTWARE: AutoCAD Student version

HARDWARE: USB Flash Memory Drive (USB 2.0, 2GB Minimum, any brand)

ETIQUETTE: No food or drink in the lab

SYLLABUS: The syllabus and schedule can be changed at anytime in class discussion, students are responsible to record and respond to these changes.

PRINTING:

All printing required for the course is the student's responsibility.

CLASS OVERVIEW:

This lab-based course has been designed to promote an understanding of AutoCAD software and basic construction document production methods.

COURSE OBJECTIVES:

1. To provide an understanding of various AutoCAD commands and how to access them.

2. To provide an understanding of primary concepts that guide construction document production.
3. To provide in class work time with access to the instructor or teachers aid for questions and answers.

Class Outline

CLASS 1:

Printing:

Lecture:

Intro

Copying files

Print houses

AutoCAD

Groupware or collaborative software

Digital format for sharing information with allied disciplines; Mechanical, electrical, plumbing, etc.

CLASS 2:

[Sheet A1 First and Second Floor Plan]:

Lecture:

Template

Line

Measure

Zoom & Pan

Erase

Offset

Object snap & Polar tracking

Ortho

Extend, Fillet & Trim

CLASS 3:

Lab: draw walls:

In Class work on walls

Quiz 1 next time

CLASS 4:

Construction Documents, Layers:

Quiz 1: Draw walls

Lecture:

Construction Documents, Section Concept, & Plan Sets

Grips & Grips with Object Snap

Polyline

Layers

Line types

Selection Windows

CLASS 5:

Lab: draw walls, and layering:

In Class work walls and layering

Quiz 2 next time

CLASS 6: _____

Insert Blocks:

Quiz 2: Create walls, and layer

Lecture:

Door and door keys

See legend sheet A1

Storefront framing systems

Field trip to campus building exterior to see storefront system installed

Plumbing fixtures

Coordination with plumbing engineer for drain, and vent locations

Use sheet A1.2 for a guide to design location of toilet fixtures and plumbing accessories

Circulation systems

Elevator plan drawing

Stair plan drawing

Use details sheet AD2 to understand riser, tread, etc.

Insert blocks

Move

Copy

Mirror

Rotate

CLASS 7: _____

Lab: insert blocks, draw walls, and layer:

In Class work

Quiz 3 next time

CLASS 8: _____

Model Space & Paper Space, Dimensioning:

Quiz 3: Create walls, layers, and insert blocks

Lecture:

Ltscale

Model

Paper

Viewport

Active viewport

Block creation

Block copies

Insert dimension & Modify dimension

Object Snap & dimensioning

CLASS 9: _____

Lab: draw dimensions, title block, layer, and insert blocks:

In Class work

Quiz 4 next time

- CLASS 10:** _____ **[Sheet A7 and A7.1 Window and Door Schedule]:**
- Quiz 4: Create standard entities, paper space, dimensioning**
- Lecture:**
Text & Mtext
Style
Legend, Key notes & Sheet notes
Copy with base point
Midpoint - mtp
- CLASS 11:** _____ **Lab: schedules:**
- In Class work
- CLASS 12:** _____ **[Sheet A1.3 Demolition Plan]:**
- Lecture:**
Viewport dependant layers; display, color, linetype
- CLASS 13:** _____ **Lab: demolition plan:**
- In Class work
- CLASS 14:** _____ **[A3 Reflected Ceiling Plan]:**
- Lecture:**
Collaboration with allied disciplines in this sheet
Mechanical
Return, supply air register locations
Electrical
Light fixture location, level of illumination, occupancy sensors, daylighting sensors, switching
Insertion point
Hatching
Xreference
- CLASS 15:** _____ **Lab: reflected ceiling plan:**
- In Class work
- Quiz 5 next time**
- CLASS 16:** _____ **Printing:**
- Quiz 5: Create model and paper entities, hatching**
- Lecture:**
Chspace
Plot style table
- *** KEEP YOUR CAD FILES FOR CAD 2****
- *Printed sheets for redlines due next week**

- CLASS 17:** _____ **Lab: print and redline (flex day):**
- *Redline prints due**
- In Class work
Student peer redline session
Bring your printed project sheets and a red pen
Make and receive markups
- CLASS 18:** _____ **Lab: print and redline (flex day):**
- In Class work
- CLASS 19:** _____ **Lab: print and redline:**
- In Class work
- CLASS 20:** _____ **Lab: print and redline:**
- In Class work
- CLASS 21:** _____ **PROJECT DUE – FINAL EXAM**
- *Project -turn in:**
- [A1 First and Second Floor Plan]
 - [A7.1 Window Schedule]
 - [A7 Door and Hardware Schedule]
 - [A1.3 Demolition Plan]
 - [A3 Reflected Ceiling Plan]
- *Final Exam**
- CLASS 22:** _____ **One on one grading (day 1)**
- In class grading:**
Bring work and be patient
- CLASS 23:** _____ **One on one grading (day 2):**
- In class grading:**
Bring work and be patient
- CLASS 24:** _____ **One on one grading (day 3):**
- In class grading:** *Bring work and be patient*

Course Policies

TUTORING:

A list of qualified tutors is available upon request. Please see the professor if you feel you need a tutor.

ATTENDANCE:

Attendance will be taken during each class period. Students who are absent will receive a reduction in their total points for the course.

QUIZZES AND EXAM:

There are no makeup quizzes or exams.

CHEATING:

Any form of cheating will result in failure of the course.

EXTRA CREDIT:

There is no extra credit offered for this course.

GRADING SUMMARY:

Grade breakdown:	279-300	A
	258-278	B
	237-257	C
	216-236	D
	0-215	F