

-->

## OUTLINE Project

<u>Wk</u>	<u>Ch</u>	<u>Topics :Read</u>	<u>Lab Plates</u>
<u>Due</u>			

1	11	Lettering, Draw	
---	----	-----------------	--

---

		CAD Tools, Sketch, Sp Sh	
--	--	--------------------------	--

		Labor Day, Sept 4 Monday	College <b>Closed</b> , No Classes
--	--	--------------------------	------------------------------------

2	10	Instruments, Scales	
---	----	---------------------	--

---

	25	Graphs	
--	----	--------	--

3	12	Geometric Construction Scheduling, Planners	
---	----	--	--

---

4	13.1-6	Multiview Sketching	
---	--------	---------------------	--

---

		Orthographic Sketching	
--	--	------------------------	--

5	13.7-8	Pictorials, Illus., 3d Soft.	
---	--------	------------------------------	--

---

	24	Obliques	
--	----	----------	--

6	13.8,24	Isometrics.	
---	---------	-------------	--

---

	7.7, 19.12.-19.25		
--	-------------------	--	--

		Columbus Day, Oct 9 Monday	College <b>Closed</b> , (Tuesday Oct 12 hold <b>Monday</b> Classes)
--	--	----------------------------	---

7	27	Solid Modeling:	
---	----	-----------------	--

---

		3-d Modeling, Phys. Modeling	
--	--	------------------------------	--

8	20.1-2	Points, Lines, Planes.	
---	--------	------------------------	--

---

9	14	Multiview Instr.Orthographic Drawing	
---	----	--------------------------------------	--

---

10	15	Auxiliary Views	
----	----	-----------------	--

---

11	16	Sections	
----	----	----------	--

---

12      19      Dimensioning

---

21      Contours, Profiles. 28.8-.12, & 28.18-.23

20      Lines slope, Compass Bearing 20.14-.15

Closed      Thanksgiving Recess

Nov 22 Wed- Nov 27 Sunday : College

13      20      Tolerances

---

14      17      Working Drawings

---

18      Reproduction Methods (read)

15      23      Revolution, Computer Graphics

---

Vector Graphics, Project Deadlines

15      **Final Exam**    during Last Required Week of **Day** classes/Finals Dec11-14, Mon- Th

## SYLLABUS

1.      **Course Title**    Engineering I    (Fall)      **Instructor**    David A. Davies, Professor  
         **Course Number**    53101      **Department**    Science / Engineering

2.      **Course Description**    An introduction, to Engineering as a career with emphasis on communication skills. Topics to be presented include engineering graphics, technical report writing, computer graphics, and introduction to spreadsheets. (2 lecture, 2 lab, 3 credits)

**Prerequisite**    Three years of college preparatory mathematics or permission of the department chair.

3.      **Relationship to other**    Engineering I is mostly for engineering students. So doesn't count as a math/sci course.

**Programs & Degrees**    Programs & Degrees Science requirements. Non engineering students may sign up for course as an elective. Refer to OCCC catalog for complete, authoritative information. Also recommend Engineering students, after completing Engineering I, to take Intro to CAD, 52110, with AutoCAD. It's given Day & Evening Fall, and Evening Spring.

4. **Course Objectives** An introduction to Engineering Graphics through engineering proposal writing, Graphics, and projects. Laboratory's will concentrate on sketching, instrument and computer graphics design. Proposal and project writing may see computer applications such as word processing, spread sheet, charting, circuits, project planner, and but laboratories and tests mostly 2-d design.
5. **Chronology of Study** See course OUTLINE on page 1.
6. **Grading Tests** About 6 to 9 tests. A missed test counts zero. Grade on Final will count as one missed test grade for test average. Or Final exam grade counts as one missed lab grade for lab average.
- 15 Week Average**  $1/2 (\text{Tests} + \text{Project} + \text{Notebook Av}) + 1/2 (\text{Lab Average})$
- Final Grade**  $2/3\text{'s} (15 \text{ Wk Ave}) + 1/3 (\text{Final Exam})$
7. **Texts** *Graphics for Engineers, AutoCAD 2004, Eleventh Edition*  
James H. Earle, Person/ Prentice Hall
8. **Lab Workbook** *Graphics for Engineers 2 with Computer Graphics*,  
Earle, Cleland, Stark, Mason, Bardell, Vogel, Coppinger,  
Creative Publishing Company
- Lab Plates** 15 Laboratories. Most of Problems are in Workbook, may be assigned.  
-1 grade if Late. 0 for one lab if 3<sup>rd</sup> late lab..
- Lec Notebook** 3 ring lecture notebook required & grade. Notebook average counts as 1 test. Notebook contains lect & lab notes, homework, handouts, Lab worksheets. Must be neat, readable, complete, 8 1/2 x 11 paper  
Notebooks graded during tests.
- Lab Notebook** Enter Lab Lecture Notes as part of lecture notebook.
- Homework** Homework reading and project assignments  
Any Homework due with lab worksheets, i.e. every week
8. **Drawing Instruments** Drawing Instruments are required. A scientific. calculator is required.

### **Notebook & Memory**

#### **Stick**

#### **Approx. of Cost**

3-ring Notebook, 2" diameter minimum

\$6 - \$8

Memory Stick 256M or larger, with neck cord

\$32

#### **Instruments**

Zip All Pencil Case, 3-Hole, 10" or 11" tall

\$3

Bow Compass, Alvin or Staedtler

\$8- 12

Engineering Scale, Alvin or Helix

\$6

Architect Scale

\$4

Mechanical Pencil

\$4

Student Pocket Metric Rule 6" with 15 cm Metric,  
Metal \$1

Triangle 6" 45°

,Triangle 6" 30° - 60°

,Protractor 5°  
division

, and Eraser for drafting      All four about  
\$7

\*Optional

\*Flow Charting Template w. Metric Rule( optional or  
share)      \$7

or Helix #7701 Flow Chart

Template      \$4

\*Erasing Shield (Magic Rub)  
\$1

\*Drafting Tape/Dots/Masking Tape  
\$5 - 8

\*Small Scissors  
\$1

**Bring**      text, workbook, 256M memory stick, notebook and instruments to  
class. Read assignments and problems before coming to class. Do  
workbook problems in class and hand in at end of period.

9.      **Attendance**      Every absence after three absences in a 5 week period lowers 5  
week average 6 points. Absent 3 or more weeks means F grade in  
course. Student must withdraw by last day for W grade.

10.      **Instructor withdraw**      Instructor will not withdraw any student. The responsibility for a  
withdrawal is the students.  
**Policy**

11.      **Support Services**      Tutorial services are available by contacting the Learning Resource  
Center (LRC) at 341-4520. Students may seek tutorial service for this  
course. An instructor signature will be provided upon request.

Computer Lab in Harriman 309 will be open from 8:00 am to  
about 9:00 pm every day. Friday it closes at 4:00

12.      **Office &Hours**      Office hours are posted on my office door. HA 315.; T-Th - 11  
**and Telephone Ext.**      Campus Phone extension, 4540. From outside call 341-4540.

13.      **Disability, ADA**      If you have a documented disability and anticipate needing  
accommodations in this course, please request that the Advocate for  
Services to Students with Disabilities send a letter verifying your  
accommodations and then meet with me to make the proper  
arrangements.

14.      **Cell Phones**      All cell phones, beepers, and similar electronic devices must be in  
silent mode for lecture an  
lab. If an electronic device sounds and disrupts class, the owner will  
be asked to leave class for the day and marked absent.

Week	#Plates	Lab Plate numbers
1	8	15p, 16p-16c, 17p-17c, EWB 99-98, Symmetry 04 p314
2	6	18p-18c, 19p-19c, 20c, 26pc
3	6	21p-21c, 22p-22c, 23p-23c
4	8	24p-24c, 32p-32c, 33-2p-33c, 34d-34c
5	5	37p-37c, 38p - 38-4c, 40p

---

Week 1-5 counts as 1<sup>st</sup> 5 week period

6	6	36p, 40-1to4c do 3 of 4, 41d, 42d
7	6	39p-39c, p183 Ac3ps, Excel Pencil Calc, Excel SS, Excel Formulas
8	6	Tuesday Lab, p175 plate 4, p175 plate 6, Packet #11, #22, #33, #44 Thursday Lab, p175 plate 3, p175 plate 7, Packet #11, #22, #33, #44
9	6	44p, 45p-45c(d only), 46p-46c(d only), Spread Sheet 26 w Chart

---

Week 6-9 counts as 2<sup>nd</sup> 5 week period

10                    5            47d, 48p-48c, 49p, X220(moved to here from wk 9)

11                    ?            50c, ...\_\_\_\_\_

12                    \_\_\_\_            \_\_\_\_\_

13                    \_\_\_\_            \_\_\_\_\_

14                    \_\_\_\_            \_\_\_\_\_

---

Week 10-14 counts as 3<sup>rd</sup> 5 week period