## 57:005 ENGINEERING I Part II: Engineering Graphics and Visualization

### Spring 1998

**Instructor:** Professor Sharif Rahman, 2140 EB, 5-5679, rahman@icaen.uiowa.edu

**Lecture:** 12:30 – 1:20 pm, MWF, 101 BCSB

**Office Hours:** 1:30 - 2:30 pm, MWF and by appointments

Corequisite: 22M:009

**Textbooks:** 1. A. R. Eide, R. D. Jenison, L. H. Mashaw, L. L. Northup, and C.

G. Sanders, Engineering Graphics Fundamentals, Second Edition,

McGraw Hill, Inc., 1995. (available at IMU bookstore)

2. J. S. Freeman and A. E. Whelan, Introduction to Pro/ENGINEER,

University Book Store (U-PACS), 1998. (available at IMU

bookstore)

**Teaching Assistants:** Chris Groszczyk, 2420 EB, 5-5384, groszczy@icaen.uiowa.edu

Nate Stephens, 1125 EB, 5-5049, stephens@blue.weeg.uiowa.edu

Guofeng Chen, 1125 EB, 5-5687, gchen@icaen.uiowa.edu Hongsheng Lu, 1125 EB, 5-3377, hslu@icaen.uiowa.edu

Lead TA: Chris Groszczyk (send/copy him all e-mails/queries)

**Discussion Sections:** Dis 32: Nate Stephens, 9:30 – 10:20 am, Thu, 2102 EB

[3 hours/week] Dis 33: Chris Groszczyk, 10:30 – 11:20 am, Thu, 2102 EB

Dis 35: Chris Groszczyk, 12:30 – 1:20 pm, Thu, 2102 EB

TA Lab Sessions: Chris Groszczyk, 4:00 – 5:00 pm, Mon, 2102 EB

[4 hours/week] Chris Groszczyk, 6:30 – 7:30 pm, Wed, 2102 EB

Nate Stephens, 9:00 – 11:00 am, Tue, 2102 EB

**TA Office Hours:** Chris Groszczyk, 2:30 – 3:30 pm, Mon, 2420 EB

[5 hours/week] Nate Stephens, 2:30 – 3:30 pm, Tue, 4102 EB (Elder Lab)

Nate Stephens, 9:30 – 10:30 am, Fri, 4102 EB (Elder Lab)

Guofeng Chen, 2:30 – 3:30 pm, Tue, 4102 EB (Elder Lab)

Hongsheng Lu, 9:30 – 10:30 am, Fri, 4102 EB (Elder Lab)

#### **Performance Evaluation Criteria**

#### A. Homework and Computer Assignments

- The assigned homework and computer problems should be worked out and submitted to the instructor in a professional format at the <u>beginning</u> of the lecture period. Include your <u>name</u>, <u>course title</u>, assigned <u>problem numbers</u> in the heading of your paper. The <u>dates</u> of <u>assignments</u> and their <u>due dates</u> are given in the attached <u>assignment sheet</u> (Page 3).
- Your solution must be submitted individually. No group submission or copies are permitted. If a copy is detected, a *zero* score will be assigned regardless of whom did the copying. You are advised to obtain help from the instructor and TAs when needed.

#### **B.** Examination Policy

• There will be <u>two examinations</u> (Examinations III and IV) for this course. Both will be closed-book examinations. The tentative schedule for the exams is as follows:

1. Examination III: April 14, Tue, 7:00 – 8:30 pm

2. Examination IV: TBA

(Note: The exact date/time/place will be confirmed or revised during the semester)

#### C. Grading Policy

- The letter grade for this course will be based on the student's overall performance on homework assignments, computer assignments, and examinations.
- The distribution of points is as follows:

Homework & Computer Assignments
Examination III
Examination IV
M (15% of final course grade)
(17.5% of final course grade)
(17.5% of final course grade)

• The final grade will be posted on the web and my door at the end of the semester.

# Assignment Sheet 57:005 Engineering I

# Spring 1998

No.	Date	Topics	Assignment	<b>Due Date</b>
1	Mar 13, Fri	Introduction to ICAEN and HP/UX		
2	Mar 23, Mon	Engineering Graphics & Pro/ENGINEER		
3	Mar 25, Wed	Concurrent Engineering and Design	C1	Apr 02, Thu
D1	Mar 26, Thu	Practice on HP/UX		
4	Mar 27, Fri	Viewing Projection		
5	Mar 30, Mon	Multiview Projection	H1	Apr 06, Mon
6	Apr 01, Wed	Multiview Projection	C2	Apr 09, Thu
D2	Apr 02, Thu	Pro/E: The Basic Part		
7	Apr 03, Fri	Missing Views		
8	Apr 06, Mon	Missing Views	H2	Apr 13, Mon
9	Apr 08, Wed	Missing Views	C3	Apr 16, Thu
<i>D3</i>	Apr 09, Thu	Pro/E: The Advanced Part		
10	Apr 10, Fri	Perspective Views/Axonometric Views		
11	Apr 13, Mon	Review for Exam III		
	Apr 14, Tue	Exam III, 7:00 – 8:30 pm (TBA)		
12	Apr 15, Wed	Oblique Views	C4	Apr 23, Thu
D4	Apr 16, Thu	Pro/E: Assemblies		
13	Apr 17, Fri	Sectional Views		
14	Apr 20, Mon	Sectional Views	H3	Apr 27, Mon
15	Apr 22, Wed	Sectional Views	C5	Apr 30, Thu
D5	Apr 23, Thu	Pro/E: 2D Drawing/Projection		
16	Apr 24, Fri	Dimensioning Rules		
17	Apr 27, Mon	Dimensioning Practice	H4	May 04, Mon
18	Apr 29, Wed	Dimensioning Practice	C6	May 07, Thu
D6	Apr 30, Thu	Pro/E: Sectional Views/Dimensioning		
19	May 01, Fri	Tolerancing	H5	May 08, Fri
20	May 04, Mon	Tolerancing		
21	May 06, Wed	Tolerancing/Design Concepts		
D7	May 07, Thu	Pro/E: CAM Lab Demonstration		
22	May 08, Fri	Review for Exam IV		
	May 11-15	Exam IV (TBA)		

## Weekly Schedule

Time	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00-9:30 am		TA Lab (2102 EB)			
9:30-10:00 am		Stephens		Dis 32 (2102 EB)	Office Hr (4102 EB)
10:00-10:30 am		TA Lab (2102 EB)		Stephens	Stephens (TA) Lu (TA)
10:30-11:00 am		Stephens		Dis 33 (2102 EB)	Lu (171)
11:00-11:30 am				Groszczyk	
11:30-12:00 n					
12:00 n-12:30 pm					
12:30-1:00 pm	Lecture (101 BCSB)		Lecture (101 BCSB)	Dis 35 (2102 EB)	Lecture (101 BCSB)
1:00-1:30 pm	Rahman		Rahman	Groszczyk	Rahman
1:30-2:00 pm	Office Hr (2140 EB)		Office Hr (2140 EB)		Office Hr (2140 EB)
2:00-2:30 pm	Rahman (Instructor)		Rahman (Instructor)		Rahman (Instructor)
2:30-3:00 pm	Office Hr (2420 EB)	Office Hr (4102 EB)	,		
3:00-3:30 pm	Groszczyk (TA)	Stephens (TA) Chen (TA)			
3:30-4:00 pm					
4:00-4:30 pm	TA Lab (2102 EB)				
4:30-5:00 pm	Groszczyk				
5:00-5:30 pm					
5:30-6:00 pm					
6:00-6:30 pm					
6:30-7:00 pm			TA Lab (2102 EB)		
7:00-7:30 pm			Groszczyk		