

MCHE 201 Engineering Graphics and Visualization

Course Syllabus – Spring 2015-2016

"I am always doing that which I cannot do, in order that I may learn how to do it." Pablo Picasso
What you learn can never hurt you and no one can take away from you...Learn and control your life!

Course/Instructor Information

Course Code & Title	MCHE 201: Engineering Graphics and Visualization		
Lecture	Time: 15:00 -16:00	Date: MW	
Lab.	Time: 8:00 -10:00	Date: Tu	Drawing room and computer Lab.
Iconnect Link	http://iconnect.bau.edu.lb/		
Instructor Name	Mohamad Darwiche	Office	F127
Phone	3452	Email	m.darwich@bau.edu.lb
Office Hours	MW 10:00-13:00		
Term/Year			

Course Description

Course-in-brief

Every first year engineering student will face enough troublesome subjects and Engineering Drawing is one of the toughest. It is very obvious to have a sound knowledge of drawing for an engineering student of any branch. Technical drawing subject does not only teach students on how to draw lines and points but it is a perfect source of communication between engineer and construction sheet to make innovative designs for better future. Engineering drawings are those drawings that found very helpful to many industries to make their productive layout on sheet of paper to get higher productivity. The covered topics are: geometric constructions; orthographic drawing and theory of sketching shapes and surface identification; sectional views and conventions; pictorial drawing and finally applications of Auto-CAD software for 2D drawings and solid modeling.

Course Resources

Resources for the course include the instructor, textbook and references; class notes and handouts; your teammates; the library; the web.

Office Hours

Support is always available for those who seek it. You are encouraged to come into my office and ask questions, consult, provide feedback, or give suggestions anytime during the day.

Although I adopt an open-office policy, best times to find me in the office this semester are: M- 11:00 -12:00; T- 9:30-11:00; W - 12:00-13:00; Th9:30-11:00- and F- 14:00 – 15:00.

Please take full advantage of office hours. Students are encouraged to send me enquiries by emails at m.darwich@bau.edu.lb

Textbook

- Principles of Engineering Graphics, Frederick E. Giesecke, Second Edition, Prentice –Hall, Inc.
- AutoCAD 2011 Tutor for Engineering Graphics, A. J. Kalameja and K. Lang, Delmar, Cengage Learning.

References

- Engineering Graphics, Eighth Edition, Giesecke Mitchell Spencer Hill.

Useful Websites

Free Books Download: search.4shared.com/search.html

Social media: www.youtube.com

Topics

The subject matter for this course includes the material in Chapters 1, 2, 5, 7, and 9 of the first text, Chapters 1, 2, 3, 4, 9, 10, and 11 of the second text and additional material in the form of lecture notes to cover the following topics:

No	Subjects covered	50 min. lectures
1	Introduction and Geometric Constructions	2
2	Geometric Constructions (<i>continue</i>)	3
3	Theory of projection: First angle Surface identification	3
4	Theory of projection: Surface identification	2
5	Three views presentations and surface identification Getting started with AutoCAD	3
	Midterm Exam	
6	Drawing command 1	2
	Midterm Exam	
7	Deduction of missing third view	3
8	Drawing command 2 and Modifying command 1	2
9	Missing Lines Modifying command 2	2

10	Sectional views Adding Dimensions to the drawing and dimensions style	2
11	Sectional views	2
12	Pictorial views	2
13	Isometric view in AutoCad	2
12	Total	30

Intended Learning Outcomes

At the end of this course, the student is expected to:

1. Acquire using engineering drawing tools ,Prepare engineering drawings,
2. Apply different geometric constructions, solve problems related to geometric constructions and acquire basic skills in technical graphic using AutoCAD software,
3. Recognize the theory of projection, represent the 3D-object by 2D views,
4. Develop the ability to read and imagine engineering drawings,
5. Solve problems relevant to sectional views of the object,
6. Develop the pictorial drawing using AutoCAD software.

Assessment and Evaluation

Assessment in the following areas will be converted to points, to compute your final grade in the course:

Assessment:	Dates	Weighing
Mid-term exam	8 th week	30%
Auto-CAD Lab. and homework	Every other week	30%
final exam	Exams period	40%