



# ARE 201: ARCHITECTURAL GRAPHICS

## Course Outline

Course : Architectural Graphics, ARE 201  
 Semester : 2007-71  
 Instructor : Sabeer Hamid  
 Office : 19-331  
 Tel. : 1907  
 Office Hours : As Posted  
 E-mail : [sabeer@kfupm.edu.sa](mailto:sabeer@kfupm.edu.sa)  
 Course Timings: Saturday & Monday, 1.10 PM to 4.10 PM  
 Location : 19 - Studio

### 1. Course Description

The course exposes students to a range of graphic tools, techniques and conventions that designers use to communicate architectural ideas. Presentations, demonstrations, assignments and discussions in the studio encourage students to improve and enhance their graphic skills starting from simple basics of sketching to the more formal methods of presenting architectural drawings and details. Through practice and informal studio interaction among students and instructor, interest in the subject is developed allowing graphics to be an enjoyable experience.

### 2. Course Objective

	Program Objective	Objective
<b>Course Objectives:</b>	#1	<ul style="list-style-type: none"> <li>• <b>To acquaint</b> student with the range of graphic tools, techniques available for conveying architectural ideas in the design process</li> </ul>
	#2	<ul style="list-style-type: none"> <li>• <b>To introduce</b> the graphical means of presenting a design proposal and to communicate ideas graphically with the instructor and other colleagues in the design studio</li> </ul>
	#2	<ul style="list-style-type: none"> <li>• <b>To introduce</b> presentation and model-making techniques</li> </ul>
	#2	<ul style="list-style-type: none"> <li>• <b>To generate</b> discussions and criticism among the students over the graphical representation of design ideas in the studio</li> </ul>



### 3. Course Outcomes

	Program Outcome	Description
<b>Course Outcomes:</b>	#1.1	▪ Be able to logically perceive <i>objects in 3-dimension and draw meaningful sketches</i> related to buildings.
	#1.1	▪ Be able to <i>read &amp; understand building sketches and drawings</i> , understand formal & informal techniques to represent ideas graphically.
	#2.5	▪ Be able <i>represent design problems &amp; their solutions graphically</i> .
	#2.5	▪ Be able to <i>analyze design drawings and the conventions</i> used to represent the solutions, provide critique, & evaluate graphics of architectural design projects.
	#2.7	▪ Be able to effectively <i>communicate in oral, written, and graphical forms</i> producing professional quality visual aids.

### 4. Text Book

- Frank Ching, Architectural Graphics, 4<sup>th</sup> Edition, Van Nostrand Reinhold, 2003.

### 5. Course Syllabus

1. Architectural Engineering field and role of graphics in ARE Drawing tools and materials
2. Free hand sketching & view imitation
3. Architectural Lettering
4. Techniques and methods of Architectural design representation Line weight, type & quality
5. Architectural sketching and drafting
6. Drafting conventions
7. Orthographic projections
  - a. Building floor plans
  - b. Building Sections
  - c. Building Elevations
8. Basic 3-dimensional projections
9. Rendering techniques
  - a. Rendition of value & contrast
  - b. Media & techniques
  - c. Tonal value in architectural drawings
  - d. Material rendering



10. Contextual elements
  - a. People, background, landscape, lettering, etc. Shades and Shadows
11. Basic Graphic diagrams
12. Model making techniques
13. Perspective Views (one point, 2 point, shade & shadow)

## 6. Course Evaluation

Break-up of course evaluation

✓	Class assignments	50
✓	Model Making Assignment	10
✓	Final Project	30
✓	Class participation/extra efforts*	10

\* *The last break-up of 10 marks depends on the student's attendance/ discipline/ timely submission of assignments and his enthusiasm to create and produce good work.*

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### Note:

- As engineering students and future professionals, students are required to be responsible and be present in all the studio classes. ***A class missed is knowledge lost.*** All the students should be present in the studio before the instructor arrives and thus minimize the wastage of time. Attendance will be taken twice as the class begins and during studio hours and will not be repeated.
- **Two un-excused absences will result in a warning letter from the department Chairman. Further absence requires the student to withdraw from the course (W) or (DN) will be reported to the registrar office.**
- Late submission of assignments is not expected and will result in reduced grades.
- To complete your work and do a good job, you are expected to put extra efforts and time at your own convenience.

### References:

1. Francis Ching, Architectural Graphics, 4th Edition, John Wiley & Sons Inc. 2002
2. Francis Ching, Design Drawings, Van Nostrand Reinhold co. 1998
2. William K. Lockard, Design Drawings, 2000 Edition, W.W. Norton & Co. 2001
3. Kevin Forseth, Graphics for Architecture, Van Nostrand Reinhold co. 1980
4. Robert W. Gill, Rendering With Pen & Ink, Thames & Hudson, 1984
5. Paul Laseau, Graphic Thinking for Architects & Designers, 3rd Edition, John Wiley & Sons Inc. 2001

***Good Luck***

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