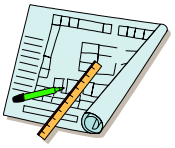
Department of Planning, Policy, and Design
University of California, Irvine

Course # & Title: **12WPPD275/204 DESIGN & PLANNING GRAPHICS: FUNDAMENTALS**

Course Code	:	54585	Professor	:	Sanjoy Mazumdar
Quarter	:	2012 Winter	Phone	:	824-5046
Time	:	T 4:30-7:20 p.m.	Office	:	218H SE1
Venue	:	3240 SBSG	Hours	:	M 2:00-3:00.



T.A.: Jeffrey A. Juarez <jajuarez@uci.edu>, OH: T 1-2, Venue: 320SE1

DESCRIPTION:

Graphic representation and communication of physical place characteristics, design and physical planning ideas and concepts using a variety of graphic techniques of free hand drawing, sketching, orthographic representations, scale drawings, 3D representations, maps, photo-documentation, and various media. (Catalog description).

How do designers and planners conceptualize and convey design and planning ideas? Besides being a communication medium how can graphics enable analysis and creativity? In this introductory course students will learn the fundamentals of visualization, graphic representation and communication of ideas related to physical planning and design of the built environment. Fundamental components and concepts included are: architectural space, floor, roof, walls, openings, planes, three-dimensional space, massing, solids and voids, urban design and planning graphics. Representational techniques include uncut and cutaway views, plans, elevations, sections, isometrics, axonometrics, perspectives, basic three-dimensional representation (conceptual, drawn, physical models, virtual simulations) using (international) standard conventions for representations. Conceptual clarity, acquisition of skills, and application of graphics ideas are all important in this course.

REQUIREMENTS:

Exams, several assignments (in class and take home), presentations are required. Drawing, graphic representation of ideas, with/out the use of drafting equipment, and some photography may be necessary; arrange for tools and digital camera for this time. Failure to submit any assignment without prior permission and proper excuse may lead to an F grade.

TEXTS:

 # AUTHOR, YR, TITLE, PUBLISHER, ISBN

1. Laseau, Paul (2001) *Graphic thinking for architects and designers*, New York, NY: John Wiley & Sons. (3rd ed.). ISBN-10: 0471352926 (0-442-25698 1980 ppbk).70
2. Ching, Frank D.K. (2009/2003/1975) *Architectural graphics,* (5th ed.). New York, NY: John Wiley & Sons. ISBN: 978-0-470-39911-8 (5th ed), 45.
3. Talen Emily (2009) Urban design reclaimed: Tools, techniques, and strategies for planners, Washington, DC, Planners press. ISBN: 978-1-932364-63-7. 75.
4. Wang, Thomas C. (1996) *Plan and section drawing*. New York, NY: John Wiley & Sons, Inc. ISBN: 10: 0471286087 (2nd ed.) 60
5. Mazumdar, Sanjoy (2012) *Design and Planning Graphics Reader*.

Ancillary possibilities

Martin, C. Leslie (1968) *Design graphics*, New York, NY: Macmillan. ISBN-10: 0023766409, T353.M36 1968. 85/14.

Dandekar, Hemalata (ed) (2003). *The planner's use of information*, Chicago, IL: Planners Press, American Planning Association, (2nd ed). HT391.P543 2003. 50/17

Jacoby, Helmut (1965) *Architectural drawings*, New York, NY: Praeger. NA1088.J3 A43. 16

Porter, Thomas (1990) *Architectural drawing*, New York, NY: Van Nostrand Reinhold.3/1.5.

12WPPD275/204 DESIGN & PLANNING GRAPHICS: FUNDAMENTALS SCHEDULE

DATE	DUE	WK	SESS	SUBJECT	READINGS
T10Jan12		1	§01A	**Intro to Design & Physical Planning**	Lecture;
			§01B	Intro to course, requirements	Lecture;
			§01C	Introduction: Need for visualization, graphic representation & communication Visual thinking Graphic thinking & imagination	Lecture; Laseau (2001)@ I: Intro pp1-5; Frank in Dandekar (2003); Wang (1996)@I: Intro 1-6; Lecture; Laseau (2001)@ I: Intro pp. 6-7; Lecture; Laseau (2001)@ I: Intro pp. 8-13;
			§01D	Tools for representation	Lecture; Ching (2009)@I:1-14 Drawing tools & materials; Laseau (1980)@ I: Intro 1-18;
			§01E	Reading, learning, acquiring skills, doing	Lecture; Laseau (1980)@V:65-90 Design; Laseau (2001)@ VI: Analysis 81-113 {Laseau (1980)@VI: 91-104 Manipulation}; Laseau (2001)@ VIII: Discovery 141-161; {Laseau (1980)@ VII: Discovery 115-134}; Wang (1996)@III: Design process 13-18;
				*Guest Lecture/AV/Site trip	
T17Jan12		2	§02A	**Representation: Kinds**	Laseau (1980)@II: Basic skills19-34; Laseau (1980)@V:65-90;91-104; @VII:115-; Wang (1996)@V: Concept drawings 25-32;
			§02B	**Representation**: Scale Line Conventions	Lecture; Ching (2009)@III:27-42: Architectural drawing systems Wang (1996)@VII: Line 41-48; Laseau (2001)@ III: Conventions 39-53;
T17Jan12		2	§02C	**Representation Techniques** Drawing techniques, Graphic vocabulary Graphic language Graphic analysis	Lecture; Laseau (2001)@ XI: Individual design 189-201; {Laseau (1980)@ XI: Individual design 169-178}; Ching (2009)@I:1-14 Laseau (2001)@ IV: Abstraction 55-65; {Laseau (1980)@IV: Graphic vocab 57-61}; Ching (2009)@II:15-26; Laseau (2001)@ IV: Abstraction 55-65; {Laseau (1980)@IV: Graphic language 51-64}; Laseau (2001)@ VI: Analysis 81-113; {Laseau (1980)@II: 22-34; 51-64}; Ching (2009)@II:15-26 Architectural drafting; Wang (1996)@IV: Analytical drawings 19-24;
			§02D	**Representation Modes**: Free Hand drawing, technically in/correct representation, aided representation,	Lecture; Laseau (2001)@ II: Drawing 17-37; {Laseau (1980)@II: FH drawing 19-21; Sketch techniques 42-43}; Ching (2009)@10:211-242 FH drg; Ching (2009)@III:28-42;
T24Jan12		3	§03A	**Building graphics**: Orthographic Projections, uncut views (Plans, Elevations)	Lecture; Ching (2009)@IV: Multiview drawings 43-84; Wang (1996)@VIII: Plan graphics 49-90;
			§03B	Building graphics: cutaway views (Plans, Sections),	Lecture; Laseau (2001)@ III: Conventions 39-53; {Laseau (1980)@III: Representation 35-36; 44-45}; Wang (1996)@IX: Sections and elevations 91-100; Wang (1996)@X: Section graphics 101-122;
T31Jan12		4	§04A	Building graphics: 3D representations Perspectives, Axonometrics, Isometrics,	Lecture; Laseau (2001)@ III: Conventions 39-53; {Laseau (1980)@III: Perspective 37-41}; Lecture; Laseau (2001)@ III: Conventions 39-53; {Laseau (1980)@III:45-49}; Ching (2009)@VI:101-140 Perspective drawings; Ching (2009)@V:85-100

					Paraline drawings; Laseau (2001)@ III: Conventions 39-53; {Laseau (1980)@III:35-50 Representation esp 45-49};
			§04B	Rendering & presentation	Ching (2009)@VII:141-178 Rendering and tonal values; Ching (2009)@VIII:179-194 Rendering context; Ching (2009)@IX:195-210 Architectural presentations; Wang (1996)@II: Presentation graphics vs process graphics 7-12;
				Massing, solids & voids	Lecture;
				*Guest Lecture/AV/Site trip	
T07Feb12		5	§05	Exam #1 * (preferred date)	All materials covered so far
				Models– conceptual, physical, virtual	Lecture;
				Graphic design & design process	Lecture; Laseau (2001)@ IV: Abstraction 55-65; {Laseau (1980)@IV:51-64 Graphic language}; Laseau (2001)@ VIII: Discovery 141-161; {Laseau (1980)@VII: Discovery 115-134}; Laseau (2001)@ IX: Verification 163-175; {Laseau (1980)@ VIII: Verification 135-150}; Laseau (1980)@IX: Stimulation 151-162; Laseau (2001)@ X: Process 179-187; {Laseau (1980)@X: Design process 163-168};
T14Feb12		6	§06	**Urban design & planning graphics**	Lecture; Talen (2009) 13-64;
				Exam #1 * (standby date)	All materials covered so far
T21Feb12		7	§07	Representing: Neighborhoods City blocks Streets Landscapes Land use	Lecture; Talen (2009) 13-20; Lecture; Talen (2009) 13-64; Laseau (1980)@IX: Stimulation 151-162; {Laseau (1980)@9:151-162 Stimulation}; Laseau (2001)@ XII: Team design 203-215; {Laseau (1980)@12:179-188 Team design}; Wang (1996)@VIII: Plan graphics 49-90; Lecture; Talen (2009) 13-64; Talen (2009) 13-64; Laseau (2001)@ XIII: Public Design 217-229; {Laseau (1980)@13:189-196 Public design}
T28Feb12		8	§08	Urban design graphics: 3D representations	Talen (2009) 13-64; Laseau (2001)@ XII: Team design 203-215; {Laseau (1980)@XII:179-188 Team design}
				maps, photodocumentation	Lecture;
				Representational error identification Bias, distortion	Laseau (2001)@ VII: Exploration 115-139; esp 128-130; {Laseau (1980)@VI: Distortion 105-114}; Wang (1996)@IX: Vertical exaggeration 98;
T06Mar12		9	§09	**Reports** graphics,	Lecture
				*Guest Lecture/AV/Site trip	
T13Mar12		10	§10	**Conclusion**	Lecture
			§	EXAM #2	All materials covered
DATE	**DUE**	**WK**	**SESS**	**SUBJECT**	**READINGS**

Light blue font = older version of book – with probable equivalents. @ = chapter in Roman numerals.
N.B.: * = Items on this syllabus and schedule may be changed at the discretion of the professor; scheduling of sessions and topics may be affected by class progress, and sessions dependent on Guest Lecturers/firms/AV/Site trip, which may affect other sessions.
Reading citations based on version of book available; new editions, if released, may lead to modification.
Text books will help understand class materials, but in themselves are not complete and will not teach execution. These will be described in class. Ancillary books may be helpful to some, but are not deemed essential. Reference Standards provide much useful information needed in representation.
Holidays: M16Jan12 MLK day; M20Feb12 Pres day.

REFERENCE STANDARDS

Ramsey, Charles George; Harold Reeve Sleeper; and John Ray Hoke (2000) *Ramsey/Sleeper Architectural Graphic Standards*, New York, NY: John Wiley & Sons (Tenth Edition). SL: TH2031 .R35 2000

American Planning Association (2006) *Planning and urban design standards*. Hoboken, NJ: John Wiley & Sons. SL: TH2031 .P55 2006

Gindroz, Ray & Urban Design Associates (UDA) (2003). *The Urban Design Handbook: Techniques and Working Methods*. New York, NY: W. W. Norton & Company. LL: NA9105 .U73 2003

RULES FOR THE COURSE:

- Only UCI students properly registered in this course are permitted to attend class sessions.
- **Drop Policy**: Drops after week 2 will be permitted only in acceptable exceptional circumstances.
- **Add Policy**: Those adding late are responsible to meet all course requirements and deadlines.
- No video, photographic, or audio recording of class is permitted.
- Class materials/notes are not for sale or for posting to websites -could be copyright violation.
- **ACADEMIC HONESTY & RESPONSIBILITY**: Deviation from or violation of academic honesty guidelines, including cheating, plagiarism, collaboration, help (other than that specifically approved by the instructor), data falsification or manufacture in assignments or exams are not permitted and will lead to an F grade in the course and may lead to a notation on the transcript and disciplinary action. Refer to Schedule of Classes, UCI General Catalog, and lectures.
- Your submission, paper or electronic, includes an automatic certification that you have followed Academic Honesty guidelines, that the work and product are yours alone, that you have not received any unauthorized help, and that you have edited and carefully checked for errors.
- Rules of decorum, good behavior, and respect in the classroom apply, including:
  - Not disrupting class (for any reason, e.g. for adds/drops)
  - Not using mobile/cell phone during class or exam (phones must be turned off).
- Bring your UCI student picture I.D. to class. For exams: no exam without UCI picture I.D. Books, notes, mobile electronic devices and caps not permitted during exams.
- One absence from in-class meeting may be permitted if timely email is received.
- **COMMUNICATION**: I prefer face-to-face communication during my Office Hour. Email is not a good medium for me, though I may send email to the Registrar's class list. These materials will not be re/sent separately to individual addresses. For electronic communication always use your **UCI email** account; your name must appear under "From" and "Subject" must include the YearQuarterCourse # (e.g. 12WPPD275/204), otherwise it will not be opened.
- The Professor reserves the right to change content, schedule, assignments, and grading criteria.
- All **assignments** are to be submitted to your T.A. before class. Tardy assignments or exams will not be accepted and may lead to an F grade in the course.
- Submit digital **assignments** by uploading to the appropriate class drop box and if so directed on CD (clearly labeled with the year, quarter, course number {e.g. 12WPPD275/204}, your name & ID in big letters) by deadline given. For physical and paper submissions, follow identification guidelines.
- Originals of materials submitted will not be returned. If you wish to have a copy returned submit two **identical** copies. Any returnable assignments and exams will be available only for two weeks past the end of the quarter, after which these will be discarded.
- **Assignments** may be exhibited/made available to and commented on by those in and out of class.

GRADING POLICIES:

Grading will be on "absolute" standards, not on relative basis.
Numerical scores will not be rounded off, for example, 79.95 is a B-.
Inc will not be given except in extraordinary cases, only after an agreement is signed.
F course grade will be given for not meeting any requirement, e.g. tardiness, poor quality.
Grade Challenges: Computing errors should be immediately brought to the attention of the T.A. Grade challenges require a one page written explanation of the rationale and resubmission of original assignment.

GRADING SYSTEM FOR COURSE - GRADING SCALE:

100	95	90	85	80	75	70	65	60	55	50	45	44.99-
A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F

GRADE ALLOCATION FOR COURSE

DATE	WK	DUE	DESCRIPTION	GRADE %	Total
	3	#1	Design graphics	20	
	7	#2	Urban Design & Planning graphics	20	
	9	#3	Neighborhood Planning & Design Project	30	
	5		Term Exam #1	10	
	10/11		Term Exam #2	10	
			In-class assignments	05	
			Misc: Guest Lectures, exceptional work in assignments, class participation and enthusiasm, Tutorial/Discussion meetings, Library work, collage, unannounced quizzes, Field Trips, etc.	05	
			TOTAL	100	100

GRADING CRITERIA

In all submissions (report, paper, project, or notes), the following criteria are important.

Quality is extremely important. A major portion of the grade for each assignment will depend on quality of substantive aspects (richness, analysis, writing, drawing) and of projects.

Writing quality is important. Think and plan before you write. Always keep the reader/user in mind; writing should enable the reader to follow what you are trying to convey and designs should be user oriented. Before submitting, check your final product to make sure that your work is perfect.

Motivation is important. Exceptional work exemplifying your motivation and involvement in the material of this course will be rewarded. Deductions will be made for not following suggestions and advice.

PRESENTATION & FORMAT OF ASSIGNMENTS:

It is important to use and apply the information covered in class to everyday planning practice, to graphically communicate your ideas, and to make your submissions more easily legible, to convey ideas succinctly, and to create a good impression.

Total presentation quality, including visual presentation, is very important. We strongly encourage you to communicate your ideas using several communication modes, visual and graphic means, such as drawings, pictures, etc. Call on us for any questions, trying out your ideas, graphics, or draft.

Assignments must be easily legible. Submissions must be typed, with double line spacing. Font should not be difficult to read, and not smaller than 11 or 12 point. Illegible and handwritten copies are not acceptable. Good contrast printing is essential.

The entire submission should be well designed. The write up should be expressive. Plan and outline the assignment in advance.

Cover Sheet: On the first line center the title of the paper in bold and large print, leave two lines blank, on the next line center by, and following two more blank lines, center your name, on the following line put your I.D. #, and after one blank line type the year and quarter and course number, followed on the next line by the assignment number. On the next line type the Professor's name and on the following line the TA's name. Header: All pages (except cover) must have a header with your name, I.D. #, and page number (as on this sheet). Keep min. 1" margin all around (lines longer than 5.5" slow reading).

ASSIGNMENTS:

Assignments have been organized as sequential and additive, such that the conceptual clarity, knowledge, and skills of previous assignments will be useful in later ones. Start using the knowledge and skills right away. Earlier, conceptual acuity will be important, drawing skills less; the latter will increase in importance as the course proceeds.

GRADING CRITERIA: Conceptually correct representations, answering questions, understanding, knowledge, and use of concepts covered, quality of representations (of drawing orthographic projections), and design ideas. Good assignments, in our judgment, show creativity in design, creation of an ambiance, innovativeness in the combination of elements, and demonstration of skill and mastery in the use of the concepts and elements covered in class and in the readings. Design thinking, creativity, motivation, and effort will be rewarded. Submitted materials will not be returned.

ASSIGNMENT # 1 DESIGN GRAPHICS

This assignment will require use of concepts taught in class, conceptual clarity in various representational techniques, application of skills taught, and drawing and other forms of representation. One form of the assignment will require graphic representation of a design provided (e.g. drawing orthographic representation from an isometric, or vice versa). Errors indicating lack of conceptual understanding will lead to deductions.

This assignment is to provide some practice and to test the ability in various design graphics representations. The exact nature of the assignment and requirements will be described in class.

ASSIGNMENT # 2 URBAN DESIGN GRAPHICS

The purpose of this assignment is to ensure that students have achieved mastery in learning urban design graphics, conceptually understanding it, and have acquired the skills in executing the requirements of urban design and its components.

Specifically, the assignment will provide a scenario and require students to use the techniques taught in class to represent ideas correctly using standard conventions. Unlike the earlier assignment, this assignment will require learning representations of various aspects of urban design projects.

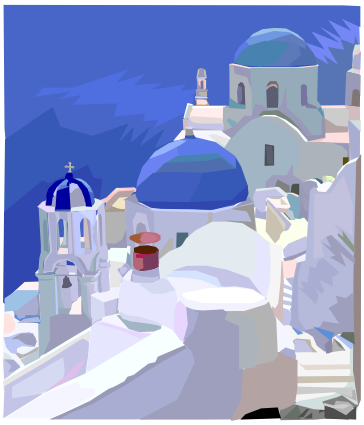
ASSIGNMENT #3 NEIGHBORHOOD DESIGN PROJECT

This assignment will require the creation of an urban neighborhood, imagining the details of the neighborhood, representing those ideas using techniques taught. The knowledge and skills of the previous assignments will be useful. Students may be encouraged to make a brief verbal presentation.

Three-dimensional depictions, including a model, may be required.

Components of the neighborhood (we might select for you and announce in class):

- ☑ land plot
- ☐ built area
- ☐ undeveloped/natural/open area
- ☐ massing
- ☐ streets
- ☐ urban spaces
- ☐ plazas
- ☐ residential
- ☐ work
- ☐ recreation
- ☐ parks/gardens



GOOD LUCK & BE CREATIVE!