### THE ARCHITECT'S SKETCHBOOK Arch 220. SRING 2017. SYLLABUS

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### USC SCHOOL OF ARCHITECTURE

#### **1. INTRODUCTION.**

#### COURSE OBJECTIVES. A PRIMER FOR SKETCHING WHAT YOU SEE!

The intention of this course is to enable students to develop a passion for sketching and the essential graphic skills to fulfill their aspirations. The ability *"to sketch what you see", "to understand what you see", and to "love what you see",* underscores the fascination and beauty of the sketchbook and the visual curiosity of it's author. It is the sketch that enters directly into the soul of the viewer, enabling them to see everyday things, hitherto never seen before! Sketching will enrich your ability to envision your surroundings quickly, and let you share your visions with others. Sketching is very personal and you will develop your own visual vocabulary as an expression of your interest and skills. In addition to the preliminary list of principles described, each class will have one overriding rule for sketching.

#### SEE, UNDERSTAND, ANALYZE & DRAW !!

The hope is that you will develop a love for sketching and quickly discover the pleasure and satisfaction that this reveals. You will be introduced to the basic skills, but the single biggest factor in your success will be continual practice until your sketching ability becomes instinctive. Everywhere you go, whatever you see of interest will become a candidate for your sketchbook. Beginning to "SEE" is fundamental, your ability to sketch what you see, in place, or in your mind's eye, will be your personal passport and quickest way to communicate and share with others. This is not a class for artistic rendering or "flamboyant" illustration, although it is hoped that the class might serve as a foundation for further ambitious development. The class will focus on introducing you to a disciplined approach to visually recording and sharing your world and the basic steps essential to achieving this! With the prolific use of digital computing and the abundance of sophisticated visual aid tools available,

the fundamentals of sketching is not anticipated as a substitute, but as a parallel and highly personalized tool in your ability to develop and share your vision with others.

#### PREFACE.

This course of study is imperative for all students who are frustrated in their efforts to graphically describe the world around them and the visual ideas that be developed from within. A required pre-requisite for this course is enthusiasm and the joy of scribbling. The course will introduce you to rules and techniques to organize your latent graphic skills and develop them as a provocative design record of your visual ideas and investigations.

Architect's Sketchbook is a portable laboratory for visually observing, investigating and spontaneously documenting the built environment around us. It is also a means of describing your personal interpretation of what you see and why it is important. It will enable you to develop a personal "visual vocabulary' with which you can share your discovery and interpretation with others. The sketch is not a finished drawing, but is anticipated as a quick visual analysis of your surroundings. This can be developed later, at will, as a finished study, or remain as the provocative diagram, asking as many questions as it provides answers.

The Techniques and basic skills to construct a sketch are fundamental and essential to the architect, it is in the first sketches that design "ideas" are spawned and the ability to visually describe what you see, is your means of communicating with others. You will be introduced to the basic tools essential to "building" a sketchbook and you will exercise these techniques by practice and demonstration on a regular weekly basis.

The prolific sketcher will record and document the world around them at every opportunity. When you sit down at a café or bar, the waitress will hand you a "beautiful" white napkin, meant to be drawn on, this is an opportunity never to be lost. There are so many "things" around you to sketch and visually analyze. Reflections on a wine glass, the structure of an orange, etc., etc.! This is a kind of "obsession" that we want you to cultivate.

#### 2. THE RUDIMENTS OF SKETCHING, DESCRIBING THE WORLD AROUND YOU.

Initially the quest is to understand your placement or position in relation to the object/subject, you are observing and describing. This is the landscape that surrounds you; your position in the larger context is critical. This might be introduced as a series of basic principles.

#### 2.1. VISION, LARGE TO SMALL

Always look to the largest visual framework to describe your observation (see later discussion on limits of vision)! Never start from a detail and work outward, otherwise the drawing will never close. Layout the larger frame of reference with attention to "Datums" horizontal and vertical, and sub-dividing proportions, with this diagrammatic start and constant frame of reference, you can work inward, further sub-dividing and sub-dividing until you finally select the finished view you wish to develop in more detail. Now you can build the sketch with confidence that the larger "frame of reference" is visually anticipated.

#### 2.2 IMPORTANCE OF DATUMS

Presumes that everything you sketch is viewed from "eye-level;" i.e., the primary horizontal datum in any sketch. Eye Level or Horizon line is critically important as the observer can immediately relate to this datum. It is along this datum that familiar objects appear, large or small, human figures, trees, etc. the size of which provides your first understanding of "depth of field", that is, Foreground, -- Middle ground, -- Distant ground. The size of these objects, all the same in shape and proportion provides the first clue as to how far or near. The constant eye level (horizon) datum is what enables the 3<sup>rd</sup> party observer to relate to your sketch, to enter into your drawing, to see what you see! To understand your viewpoint, for example, a bird's eye view or worm's eye view of the context is unnatural and disturbing, unless you can explain the circumstance of this extraordinary high or low viewpoint! This is not to deny the relevance of these viewpoints, which are often used in analytical drawings where the sole purpose is to describe objects from above or below to explain their anatomy or disposition from a hitherto unforeseeable aspect.

(See diagrams of "dancing heads" trees, shrubs, & familiar objects that let you describe "here to there" dimensions relative to the "horizon line" and distance from position of viewer.

#### 2.3 SHAPE AND PROPORTIONS.

Shape, Form & fundamental proportions of familiar objects.

- A. People, The human figure, the frame, the head.
- B. The Shape & Structure of Trees leaves. Shrubs. Plants.
- C. Platonic Forms, fundamentals of descriptive geometry, squares, cubes, triangles, prisms, Conic form, etc.
- D. The "Golden Section", Numbers, Proportions, the Fibonacci series.

#### 2.4 PERSPECTIVE VISION.

**One point or parallel perspective.** Where all lines on the same axis as the horizon line are parallel to each other. This only works when view is restrained within prescribed "Cone of Vision", otherwise lines begin to bend" toward horizon. (See rules of cone of vision and limits of view).

One point perspective enables you to accurately measure depth from "here to there." See details of how to establish measuring tools within a one point perspective.

## *Two point perspective and multiple point perspective construction.*

Bending the picture plane! Concave and convex images, "fish-eye" vision, constructing "dioramas" or continuous perspective drawings.

#### 2.5 SCIAGRAPHY. "The art of shadow casting."

Using shade & shadow to describe shape and form. Shadow as the determinant of the source of light! Renaissance drawing, light from within, where light was always understood to be at the source of the picture! or, light from outside, beyond the picture frame, behind the viewer.

Impact of shadow and shading on variable Materials and Surfaces, Brick, Stone, Marble, Glass, etc. Opaque, transparent or translucent materials, smooth, polished, textured or contoured surfaces & reflections.

#### 2.7 VISUAL MEMORY.

Instant Imaging. Single line, continuous drawing, (pen does not leave paper), or (drawing with your eyes closed).

Determination of critical shape and form, (see P3). Animation of shape! Thumbnail sketching!

10 minute, one minute, 30 second trees, single line portrait images, shape of shadow as primary determinant of shape/form of object.

Symbols and Icons. "Ink blots" Pools of color, leftover light, gaps within, "sparkle of light within shadow"

#### 2.8 COLLAGING or LAYERING.

Multiple sketch views of same of same objects, overlaid from varying viewpoints. Superimposed drawings to describe 3-D form of object simultaneously implied movement of object or viewer to describe shape, form and detail. Subtle changes in shape and form may be introduced to imply viewed object in motion.

#### 2.9 DRAWING, SKETCHING TECHNIQUES.

Ink drawing, single line/ continuous "figure". Shape, form & proportion or iconic symbol and meaning. Light and shade drawing, ink sketching, density of collective lines, line direction, synonomous with source of light and direction of shadow, in correspondence with, or opposing directional forces of perspective, "dynamic drg, visual drama! Drawings without visible line edges, watercolor wash techniques, depth of field. Sparkle of "light" from the paper untouched. The space in between.

*Composite studies.* Combination of principles, techniques and various media.

#### 3. LIST OF REQUIREMENTS

#### Variable Media and Materials.

These are the tools for your portable laboratory

**3.1 The Sketchbook:** 9" X 12" CANSON hardcover with tear out pages (spiral bound). This is the equivalent of your diary or Journal. Everything you see of interest is documented in sketch, diagram and notation, either for future reference and further examination, or, as an imaged record of a moment in time.

Extra **Paper clasps** to hold edges should be available for Field sketching. **Drafting/masking tape and Pins** for presentation reviews should also be available at all times.

**3.2** *Ink Pens:* Black ink cartridge pens are desirable and encouraged. "Schaeffer" or "Lamy" or "Pelican", all make relatively inexpensive fountain pens. (not oblique calligraphy nibs) Expensive Fountain pens like "Mont Blanc" are not required. Black ink will be the prevalent medium for sketching, simply because it is unforgiving and cannot easily be erased, see notes on "doodling" below. Construction lines are part of the finished sketch, not erased as with pencil drawing. Visible construction lines, whilst not as visible as the final determined sketch lines, are, intriguing and provide a fascinating clue to the priority and construct of the sketch. Medium size, flexible nibs are preferred, this permits a variation in line weights and densities, simply by adjusting the pressure on the paper. (This is an asset not available when using roller ball pens) Ink cartridges can be easily refilled using a syringe and a bottle of black, waterproof, fountain pen ink, "Waterman" or equivalent.

Like handwriting, ink sketching has a very unique personality, which should be encouraged. An ink sketch conveys the author's identity, this is important, and is made more difficult by pens with roller ball, fixed nibs, which have less weight variation than Fountain pens.

Alternative pens will be discussed, of which the "**Pilot**", **roller ball**, "**Precise**" **V5 & V7** pens are readily available, in varying nib sizes. Ex Fine, Fine, Medium, Large. Also, the **Uni-ball, deluxe, Micro, fine & extra fine** provides a consistent nib.

# *3.4 Pencils:* Black Graphite pencils, range, H, F, B, 2B. 4B. Eraser & pocket sharpener. Colored "Prismacolor" pencils (thick lead) extra blacks.

Windsor & Newton. Water colors, pocket box, 12 pans. Variable brushes, Sable hair, fine line,#3. medium #7,broad #11.

**3.4** *Paper Napkin Sketches*, "Graphic doodling" 5" x 5" white napkins or coasters. The prolific sketcher will record and document the world around them at every opportunity. When you sit down at a café or bar, the waitress will hand you a "beautiful" white napkin, meant to be drawn on, this is an opportunity never to be lost. There are so many "things" around you to sketch and visually analyze. Reflections on a wine glass, the structure of an orange, etc., etc.! This is a kind of "obsession" that we want you to cultivate. You will be expected to show your napkin "doodles" on a weekly basis. The reason Napkin sketches are so important is because the paper is unforgiving, it absorbs ink rapidly, like a blotter and you only have "one shot" at the sketch, you cannot readily make changes without your sketch turning into an uncontrolled "ink-

blot". This necessitates, "clarity" of vision and "speed" of line, and, lot's of practice. Napkin sketches can be copied and composed on to 8.5" x 11" White cover stock and included in Semester portfolio.

#### 4. CLASS STRUCTURE & ORGANIZATION.

#### 4.1 Arch 220

Is a 3-hour lab/lecture class, which meets from 9.00.am until 11.50 noon, each Friday. Time will be spent reviewing, discussing and applying class notes. It is imperative that all assignments are completed each week. Out of classroom studies will take place within the USC campus and Exposition Park, with further off-campus field trips to selected exceptional architectural sites within greater Los Angeles. Class attendance is imperative and in accordance with USC requirements, more than 3 absences will automatically jeopardize a passing grade.

#### 4.2 GRADING.

Class participation, attendance, and enthusiasm	35%.
Review of in-class work, out of class, field sketch assignments	35%
Final and Final Sketchbook Portfolio review and presentation	·30%.

#### 4.3 STUDY EXERCISES.

The following is a broad list of studies and sketch sites to be selected from, (to be further developed) In addition to the syllabus above. Students will be asked on a weekly basis to visit various sites of Architectural interest to sketch and document details and places. In preparation for the above students will be introduced to fundamental strategies and techniques for drawing, sketching and recording images and ideas. Students should not be intimidated by their current lack of confidence or skill, as this course does not essentially demand an inherent "artistic" skill, but introduces the means to "see, understand and document" the physical world around us. **General studies**, Nature, Landscape, Manmade world, Figure Drawing, Human form.

List of potential sites and particular places of interest for sketch analysis and visual documentation.

USC Campus, Rose Garden & People, individual & groups. Trees, foliage, sky/ clouds. Museum Complex. Landscape, Arches, Colonnades, Fountains, Flowers, Shrubs. Streets, Walks, Fire Hydrants, Promenades, etc.

Harris /Fisher & Watt Courtyards.	Tables /swivel chairs, colonnades, gallery, stairs.
Fisher gallery/Museum.	Sculpture and Statuary, private collection.
Topping Library.	Wedge skylight and light monitors, repetitive form,
	and reflections.
Mudd Hall / Doheny library, etc.	Courtyards, doorways, windows, chimneys, frieze &
	Fresco details, .etc.
Religious Centre.	Form & Geometry, Modernist language.

Additional field trips of interest will be organized and encouraged, these might include.

Huntington Gardens,	Natural and man made landscapes.	
California Plaza,	Grand Ave, MOCA, DISNEY HALL, The BROAD Museum	
Los Angeles, downtown CBD.	Urban streets, thoroughfares, alleys, plazas, urban scenes.	
Historic LA buildings. 7th St.	Fine Arts Building, 1926. Walker & Eisen.	
Los Angeles St to Figueroa St.	Fine Arts Building, 1926. Walker & Eisen.	
	Roosevelt Bldg. (the Roosevelt) 1927. Curlett & Beelman.	
	The Bradbury Building.	

(The proximity of the new Metro light rail system, now makes the extended location of urban field trips feasible on a weekly basis).

#### 5. NOTES ON ART AND FORM

The importance of "**Center**", The determination of place, Focus, Method of measurement, Center of perception. Concentric grid versus Cartesian grid.

"Form". - Structural manifestation of shape, not just shape!

"Art". - Form created by a human intellectual act, easily synoptic, to be visually comprehensive, visually understood. "A work of art is a closely coherent and consistent whole" - Aristotle. "A unit, like a living creature", - Socrates.

" The sublime economy of art, no redundancy or obsolescence". Henri james.

"Masterpieces are Dumb" ! So self centered, so at peace with themselves that nothing can enter or leave. - Flaubert.

**Closed Form.** Complete and purposeful, Self fulfilling.

**Open Form.** Evocative. Symbolic quality and meaning, full of human curiosity and relevance. The balance between exceptional and universal.

A "DOT", is only a short line.

**DRAWING** "Like the ancient god "Janus", has two faces, one looks to the past, whatever exist, the other looks to the future, what does not exist, except in our "Minds Eye". This is what we do when we design, from **Frank Ching's** introduction to "Freehand Drawing and Discovery", by James Richards.

**"What is, to What can be"**. A Springboard to Vision! Freehand sketching is a designer's "Secret Weapon" at the outset of the creative process, not a means to illustrate the end.

DRAW PEOPLE FIRST. Get the party started!!!

The "CAMERA" photographs things as they are, not what they could be!

"LIGHT" is not something we see, but only illuminates what we choose to see!

#### **BIBLIOGRAPHY.**

#### Recommended reading.

TITLE.	AUTHOR.	PUBLISHER
Voyage, Le Corbusier. Drawing on the road.	Jacob Brillhart.	W.W. Norton & C0.
Travel Drawing. Engaging the Spirit of Place.	Edward T. White.	Architectural Media.
Freehand Perspective and Sketching.	Dora M.Norton.	Dover Publications.
Gordon Cullen. Visions of Urban Design.	David Gosling.	Academy Editions.
BASIC Perspective.	Robert W.Gill.	Thames and Hudson.
The Geometry of Art & Life.	Matia Ghyka.	Dover Publications.
The Divine Proportion.	H.E. Huntley.	Dover Publications
A Study in Mathematical Beauty.		
The Art of Drawing.	Bernard Chaet	Holt. Rinehart Winston/
Anatomy, Perspective, Composition.	Stan Smith.	Chartwell Books.
Pen and Ink.	Carl Glassford.	Walter Foster Publishing.
The Urban Sketcher,		
Techniques for seeing & drawing on location.	Marc T Holmes.	North light books.

#### NOTES ON USC. PROTOCOL.

#### Statement for Students with Disabilities

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to TA) as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m.– 5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776.

#### **Statement on Academic Integrity**

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own. All students are expected to understand and abide by these principles. *Scampus,* the Student Guidebook, contains the Student Conduct Code in Section 11.00, while the recommended sanctions are located in Appendix A:

<u>http://www.usc.edu/dept/publications/SCAMPUS/gov/</u>. Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: <u>http://www.usc.edu/student-affairs/SJACS/</u>