

INTRODUCTION TO ARCHITECTURE

LEARN.UNM.EDU | ARCH 1120.501 | SPRING 2020 | 3 CREDITS

Monday-Wednesday 10:30 am to 11:45 am

Instructor: Thomas (Tom) Vliet

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[office hours by appointment]

SYLLABUS

Course Description:

The goal of this course is to provide students with the tools and vocabulary to analyze, interpret, and discuss the built environment from environmental, social, historical, perceptual and technical aspects. Lectures based on the Textbook and assignments will introduce students to the elements of architecture from aesthetic, structural, functional and historical perspectives.

Course Objectives:

- 1. Improve students' understanding of our built environment through visual exercises.
- 2. Improve students' understanding of the language of design and architecture.
- 3. Understand the roles of a professional architect, designer, landscape architect, interior designer and product designer.
- 4. Introduce the students to important Architects and their buildings.
- 5. Increase the knowledge of important architectural elements, learn to analyze a building and be aware of the evolution of architecture through time.

Required Text and Materials:

1. Architecture: Form, Space, and Order

by Francis D.K. Ching

ISBN 978-1-118-74508-3

- 2. Sketchbook: Blank-paper 8 1/2" x 11", Min. 100 pages. (No Spiral or Ring-type books).
- 3. Tracing Paper: Blank 8 1/2" x 11" sheets.
- 4. Black Pens: At least one (1) Fine Point and one (1) Bold Point. (Chiseled Point or Calligraphy Pen is Optional).
- 5. Graphite Pencils: At least one (1) 2B Lead, and one (1) 6B lead.

Sketchbook, Assignments, Discussions, Mid-Term Essay and Final Project:

- 1. Sketchbook Assignments: Assignments given in the schedule that go into the sketchbook to be turned in as part of the Final portfolio (see below). At the end of the semester, students will present their Sketchbooks of the work they have created in the final Critique.
- UNM Learn Handouts (See Schedule)
- 3. UNM Learn Assignments (See Schedule)
- 4. UNM Learn Mid-Term Essay (See Schedule)
- 5. Final Project (See Schedule)

Evaluation:

The final class grades will be determined on the following basis:

| • | Assignments (12 Total – 6 of these are Sketchbook Assignments) | 50% |
|---|--|-----|
| • | Class Participation | 10% |
| • | Mid-Term Essay | 15% |
| • | Final Sketchbook | 10% |
| • | Final Project (Floor Plan, Site Plan, and Elevations | 15% |

Grade Scale: A: 90-100 B: 80-89 C: 70-79 D: 60-69 F: 59 and below.

UNM Learn Handouts:

All Handouts will be available for the Students to download off the UNM.Learn.Edu website.

Sketchbook Assignments:

Sketchbook Assignments are on the Course Schedule in this Syllabus and students are required to complete each Sketchbook Assignment in their sketchbook. The sketchbook will be reviewed by the Instructor and fellow students as part of the Final Critique.

UNM Learn Software and Operating Notes:

- Make sure your browser is compatible with UNM Learn. Click the following link for the list of supported browsers:
 - https://help.blackboard.com/enus/Learn/9.1 SP 10 and SP 11/Student/002 Browser Support SP 11
- Make sure you have JavaScript enabled. Also, make sure you have pop-up enabled for the learn.unm.edu site.
- If you are having difficulties doing something with one web browser, try a different browser to see if it will work there. On Windows computers, if something won't work in Internet Explorer, try Firefox. On Macintosh computers, if something won't work in Firefox, try Safari. Or vice versa.
- UNM Learn has a daily maintenance window from 4:30am until 5:30am. The application will be unavailable for part or all of the window, depending on the nature of the work being done. In addition, there is a routine UNM Learn maintenance window every Saturday from 5:30 am until 12 noon which may be used as needed for system maintenance. In most circumstances, announcements will be posted in UNM Learn two weeks ahead of time to notify users of any outages planned during this window. Be sure to plan your work around these scheduled outages.

Policies:

- 1. Positive attitudes are appreciated and expected.
- 2. Students need to draw (no drawing skills are necessary) and write from the lectures into their sketchbook, Instructor will review sketchbooks as per Sketchbook assignments and for the Final Critique. Write the date at the upper right corner of each of the pages for each Assignment.
- 3. All assignments are expected to be reviewed in the class period in which they are due. Students can provide their work late within a week (grade will be reduced by one letter grade), after one week the work will not be accepted.
- 4. Students who are going to miss a class need to make arrangements with Instructor prior to the date.
- 5. Students who need to participate in a special religious, cultural, athletic, or military event need to make arrangements with Instructor prior to trip.

Academic Integrity:

Having academic integrity is paramount to your success in any class. Plagiarism or cheating is not tolerated. Any instance of this will result in a grade of zero for that assignment. Here is the link to the UNM Academic Dishonesty Policy: https://policy.unm.edu/regents-policies/section-4/4-8.html. The policy states: Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, up to and including dismissal, against any student who is found guilty of academic dishonesty or who otherwise fails to meet the expected standards. Any student judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course.

Academic Dishonesty is defined as: "Academic dishonesty" includes, but is not limited to, dishonesty in quizzes, tests, or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; misrepresenting academic or professional qualifications within or without the University; and nondisclosure or misrepresentation in filling out applications or other University records.

Equal Access Disabilities:

Students with disabilities should notify the instructor of special needs at the beginning of the semester

If you have a documented disability, the Equal Access Services office will provide the instructor with a letter outlining your accommodations. I will then discuss the accommodations with you to determine the best learning environment. If you feel that you need accommodations, but have not documented your disability, please contact Jeanne Lujan, the coordinator for Equal Access Services at 925-8910 or jmlujan@unm.edu.

Equal Opportunity and Non-Discrimination:

In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees" by the Department of Education (see page 15 - http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Equal Opportunity (oeo.unm.edu). For more information on the campus policy regarding sexual misconduct, see: https://policy.unm.edu/university-policies/2000/2740.html.

Course Schedule:

Architecture: Form, Space, and Order by Francis D.K. Ching

Week 1: Introduction to Architecture – Wednesday, January 22nd.

- Ching; Pages IX to XIII
- Course Syllabus, Schedule and Assignments reviewed Deadlines and expectations
- LEARN UNM.EDU Review of Website to access Handouts and Assignments
- Handout #1: Alphabet Architektur
- Handout #2: Glossary of the Fundamentals of Architecture

Week 2: Chapter 1; "Primary Elements" – Monday and Wednesday

Learning to Observe, Experiencing, and Draw Forms in our Built Environment

- Ching; Pages 1 to 17
- Pont and Line
- Handout #3: Lead grades and Pen points
- Handout #4: Tonal Values; Greyscale, Hatching, Scribble, Stippling
- Assignment #1: Transparency Sketch of Architecture Building (Monday)
 - o Print out 1 Picture of a Historic Architecture Building on 8 ½ x 11 paper
 - Overlay Transparent paper on top of Picture
 - Sketch building on Transparency using Tonal Values
- Critique of Assignment #1 (Wednesday)

Week 3: Chapter 1; "Primary Elements" – Monday and Wednesday

Learning to Observe, Experiencing, and Draw Forms in our Built Environment

- Ching; Pages 18 to 32
- Plane and Volume
- Handout #5: Light, Shade and Shadow
- Handout #6: View Finder
- Assignment #2: Campus Walkabout Observing our Built Environment and Architectural Elements (Monday)
 - Sketch the INTERIOR of an interesting building in your Sketchbook of a Valencia
 Campus Building using Tonal Values and Light, Shade and Shadow
- Critique of Assignment #2 (Wednesday)

Week 4: Chapter 2; "Form" – Monday and Wednesday

The Formal Structure of a work – Arranging and Coordinating Elements

- Ching; Pages 33 to 63
- Properties of Form, Shape, Surfaces, Solids
- Handout #7: Body Dimensions
- Assignment #3: Campus Walkabout Observing our Built Environment and Architectural Elements (Monday)
 - Sketch the EXTERIOR of an interesting building in your Sketchbook of a Valencia Campus Building using Tonal Values and Light, Shade and Shadow
- Critique of Assignment #3 (Wednesday)

Week 5: Chapter 2; "Form" – Monday and Wednesday

The Formal Structure of a work – Arranging and Coordinating Elements

- Ching; Pages 64 to 98
- Centralized Form, Geometry, Corners, Surface Articulation
- Handout #8; Geometry, Scale, and Proportion
- Assignment #4: Campus Walkabout Observing our Built Environment and Architectural Elements (Monday)
 - Sketch an EXTERIOR ELEVATION of an interesting building in your Sketchbook of a Valencia Campus Building using Tonal Values and Light, Shade and Shadow
- Critique of Assignment #4 (Wednesday)

Week 6: Chapter 3; "Form & Space" – Monday and Wednesday

The Volume of Space - Dimension, Scale, Light and Mass

- Ching; Pages 99 to 147
- The Unity of Opposites, Base Plane, Overhead Plane, Vertical Linear Elements
- Handout #9; Positive-Negative Space
- Handout #10; History of Collage
- Assignment #5: Positive-Negative Collage (Monday)
 - See LEARN UNM.EDU to Download Assignment #5
- Continue Discussion of **Assignment #5** Positive-Negative Collage (Wednesday)

Week 7: Chapter 3; "Form & Space" – Monday and Wednesday

The Volume of Space - Dimension, Scale, Light and Mass

- Ching; Pages 148 to 194
- Planes, Openings, Light, View
- Handout #11; Architecture Timeline
- Assignment #5 Due: Positive-Negative Collage (Monday)
- Class Discussion: Ching; Glossary, Pages 427 to 434 (Wednesday)
- Class Discussion: Ching; Index of Buildings, Pages 435 to 440 (Wednesday)
- Class Discussion: Ching; Index of Designers, Pages 441 to 442 (Wednesday)
- Class Discussion: Ching; Index of Subject Matter, Pages 443 to 447 (Wednesday)
- Class Discussion: Mid-Term Essay Brainstorming Ideas, Create Outline (Wednesday)

Week 8: Chapter 4; "Organization" – Monday and Wednesday

Basic ways the spaces of a building relate to each other and organized

- Ching; Pages 195 to 227
- Spatial Relationships, Spatial Organizations, and Linear Organizations
- Handout #12; Internet Architecture Research (Monday)
- Assignment #6: Mid-Term Essay Continue Discussion Progress Report (Monday)
- Assignment #6 Due: Mid-Term Essay (Wednesday)

Mid-Term Break (March 16th to March 20th)

Week 9: Chapter 4; "Organization" – Monday and Wednesday

Basic ways the spaces of a building relate to each other and organized

- Ching; Pages 228 to 250
- Radial Organizations, Cluster Organizations, Grid Organizations
- Handout #13; Isometric and Shadows
- Assignment #7: Local Walkabout Observing our Built Environment and Architectural Elements (Monday)
 - Sketch an EXTERIOR of an interesting building(s) in your Sketchbook of a Place near where you live; i.e. Neighborhood, Downtown Business', Streetscape, Etc. using Tonal Values and Light, Shade and Shadow
- Critique of Assignment #7 (Wednesday)

Week 10: Chapter 5; "Circulation" – Monday and Wednesday

Movement through space

- Ching; Pages 251 to 275
- Circulation Elements, Approach, Entrance
- Handout #14; Perspective
- Assignment #8: Local Walkabout Observing our Built Environment and Architectural Elements (Monday)
 - Sketch an ENTRANCE of an interesting building(s) in your Sketchbook of a Place near where you live; i.e. Neighborhood, Downtown Business', Streetscape, Etc. using Tonal Values and Light, Shade and Shadow
- Critique of Handout #12; Internet Architecture Research (Wednesday)
- Critique of Assignment #8 (Wednesday)

Week 11: Chapter 5; "Circulation" – Monday and Wednesday

Movement through space

- Ching; Pages 276 to 304
- Configuration of the Path, Path-Space Relationships, Form of the Circulation Space
- Handout #15; The Site
- **Assignment #9:** Local Walkabout Observing our Built Environment and Architectural Elements (Monday)
 - Sketch a FLOOR PLAN of an interesting building(s) in your Sketchbook of a Place near where you live; i.e. Your Home, Your Work, Lobby of a Hotel, a Store, Etc. using Tonal Values and Light, Shade and Shadow
- Critique of Assignment #9 (Wednesday)

Week 12: Chapter 6; "Proportion & Scale" – Monday and Wednesday

Harmonious relation of one part to another or to the whole

- Ching; Pages 305 to 325
- Proportions, Golden Section, Regulating Lines, Classical Orders
- Assignment #10: Schematic Design The First Phase in Design (Monday)
 - Using ¼" Graph Paper and Transparent Paper, begin sketching a FLOOR PLAN(S) and CONCEPTS of a house or building design from your imagination. You may produce as many diagrams as you like, using all the skills you have learned this semester.
- Critique of Assignment #10 (Wednesday)

Week 13: Chapter 6; "Proportion & Scale" – Monday and Wednesday

Harmonious relation of one part to another or to the whole

- Ching; Pages 326 to 348
- Renaissance Theories, Modular, KEN, Anthropometry, Scale
- Assignment #11: Site Design The First Phase in Design (Monday)
 - Using ¼" Graph Paper and Transparent Paper, begin sketching a SITEPLAN(S) of a house or building design from your imagination. You may produce as many diagrams as you like, using all the skills you have learned this semester.
- Critique of Assignment #11 (Wednesday)

Week 14: Chapter 7; "Principles" & "Conclusion" – Monday and Wednesday

Order in an Architectural Composition

- Ching; Pages 349 to 423
- Ordering Principles, Axis, Symmetry, Hierarchy, Datum Repetition, Transformation
- Assignment #12: Design Development The Second Phase in Design (Monday)
 - Using ¼" Graph Paper and Transparent Paper, continue developing your FLOOR PLAN(S) and ELEVATIONS of a house or building design from your imagination.
 You may produce as many diagrams as you like, using all the skills you have learned this semester.
- Critique of Assignment #12 (Wednesday)

Week 15: Final Presentation of Student's Design – Monday and Wednesday

- Critique of Assignment #12 (Monday)
 - o Making final adjustments and suggestions of each student's design.
- FINAL Critique of Assignment #12 (Wednesday)
 - o Celebration Critique of the Semester of Students Sketchbooks and Final Designs.

Week 16: Finals Week (May 11th to May 15th)

Students may continue to finish work on their Final Project, but it must be completed by end of class, Wednesday of Finals Week.

Suggested Reading List to increase your Knowledge:

| • | Story of Architecture | by Jonathan Glancey |
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| • | Basics: Design Methods | by Kari Jormakka |
| • | The Fundamentals of Architecture | by Lorraine Farrelly |

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| • | The Ten Books on Architecture | by Vitruvius |
| • | Towards a new Architecture | by Le Corbusier |
| • | Nature and Space: Aalto and Le Corbusier | by Sarah Menin |
| • | About Looking | by John Berger |
| • | Sacred Geometry | by Miranda Lundy |
| • | Objects of Design | by Paola Antonelli |
| • | Why Buildings Stand Up | by Mario Salvadori |
| • | ABC of Architecture | by James F. O'Gorman |
| • | What is Architecture? | by Paul Shepheard |
| • | Experiencing Architecture | by Steen Eiler Rasmussen |
| • | Think like an Architect | by Rodger Fullington |
| • | Becoming an Architect | by Lee W. Waldrep |
| • | Thinking Architecture and Atmospheres | by Peter Zumthor |
| • | World Changing | by Alex Steffen |