

COURSE OUTLINE – Spring 2009

ARCH 206

ARCH 206- 503 ARCHITECTURAL DESIGN II (4 Credit hours)

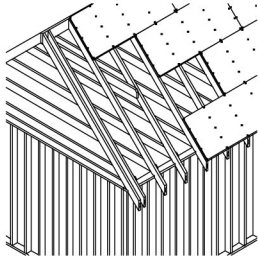
MW 3:00PM – 5:50PM – ARCC 204BB

F 3:00PM – 4:40PM – ARCC 204BB

Instructor: Susan Rodiek, Ph.D., NCARB - rodiek@tamu.edu; (979) 862-2234

Office: Center for Health Systems & Design Research Annex, W014 (Williams Building, ground floor)

Hours: Wed. 1:30 -3:00, or by appointment



In the end, the lasting product of architecture is the shape and reality of the finished building. Everything in architecture comes from layout, organization, form, shape. And how elusive this is!

Christopher Alexander (2001). *The Nature of Order: The Process of Creating Life*, p. 432. Berkeley, CA: The Center for Environmental Structure.

1. COURSE DESCRIPTION

Fundamental issues of innovative design processes and creation explored through the creative use of past, present and future materials, tools, and technologies; with an emphasis upon the research of materials, methods, scale, craft and technique as instruments of design, fabrication, and production.

(from catalogue) Prerequisites: ENDS 105, 106, 115, 116.

2. INTRODUCTION

This course provides an opportunity to study different facets of a problem at multiple levels of scale, using diverse design methods. The overall theme of the semester will be focused on providing accessible, sustainable housing and services for wounded veterans. To accomplish this, in Project 1, students will work to understand and design appropriate living space at the level of the individual dwelling unit, using large-scale physical models, and visualizing the space mainly from the inside, from the user's perspective. Project 2 will focus on developing the exterior form of the dwelling units, including multi-family formats such as duplexes, with community infrastructure. Project 3 will give students an opportunity to develop a small medical/ education facility with common services. In Project 4, students will document the work produced during the semester, in printed and electronic format. Small projects throughout the semester will involve research, writing, sketching, photography, and graphic design.

3. COURSE OBJECTIVES

Primary objectives in this course are a) to develop an awareness of the needs of the human user; b) to learn to design with accessibility and sustainability concepts in mind; c) to gain experience with diverse methods of design and communication, both conventional and innovative.

4. METHODS

This studio will explore a wide range of approaches to design and communication, ranging from hand sketching and model-building, to 3-D design in a virtual environment (Second Life). Students will work in teams and as individuals, and may also collaborate with other students from other courses, on portions of the projects. Brief projects will give students the opportunity to conduct and present research in oral and written format.

<u>PROJECT 1: HOME FOR A WOUNDED VET</u>	
Jan 21	Begin Project 1 , set up studio, prepare for Design Charrette
Jan 23	DESIGN CHARRETTE -- all Architecture studios
Jan 26	<i>ARCH 406 project kickoff (collaborative studio - Post-traumatic Stress Center in VA)</i>
Jan 28	Studio work session
Jan 30	Studio session
Feb 2	ROWLETT LECTURE 12:00-5:30 PM (studio will attend lecture)
Feb 4	Studio work session
Feb 6	Studio session (<i>ARCH 406 Mid-point review</i>)
Feb 9	Pre-final Pinup review
Feb 11	PROJECT 1 -FINAL PRESENTATION
<u>PROJECT 2: HALO HOUSING</u>	
Feb 13	Begin Project 2
Feb 16	Studio session (<i>ARCH 406 Final review</i>)
Feb 18	Studio work session
Feb 20	Studio desk crits/ Studio work session
Feb 23	Pinup review
Feb 25	Studio work session
Feb 27	Studio desk crits/ work session
Mar 2	Studio work session
Mar 4	Studio work session
Mar 6	PROJECT 2 - FINAL PRESENTATION
<u>PROJECT 3: MEDICAL/ EDUCATIONAL FACILITY</u>	
Mar 9	Begin Project 3
Mar 11	Studio work session
Mar 13	Studio desk crits/ work session
<i>Mar 16-20</i>	<i>SPRING BREAK</i>
Mar 23	Pinup review
Mar 25	Studio work session
Mar 27	Studio desk crits/ work session
Mar 30	PROJECT 3 - MID-POINT REVIEW
Apr 1	Studio work session
Apr 3	Studio desk crits/ work session
Apr 6	Pinup review
Apr 8	Studio work session
Apr 10	Studio desk crits/ work session
Apr 13	Pinup review – pre-final presentations
Apr 15	Finalize presentations
Apr 17	Finalize presentations
Apr 20	PROJECT 3 - FINAL PRESENTATION
<u>PROJECT 4: STUDIO REPORT</u>	
Apr 22	Begin Project 4
Apr 24	Studio work session
Apr 27	Begin Portfolio
Apr 29	Studio work session
May 1	Studio work session
May 4	LAST DAY / work session
May 6	(optional work session)

Project 1: Home for a Wounded Vet - Individual project (Two Weeks)

Students will design an independent residential unit to reflect the ergonomic, functional, and psychological needs of users. The emphasis is on the space and circulation within the dwelling, rather than the exterior form.

Project 2: Halo Housing - Team project (Three Weeks)

Students will design housing units for veterans with special needs -- physical, functional, and psychological. The emphasis is on the overall exterior form of the units, how their interior spaces relate to the exterior, and how the housing units relate to each other. Accessibility will be an important consideration.

Project 3: Medical/ Educational Facility – Individual project (Five Weeks)

Students will design an 8,000-12,000 SF multi-purpose facility that will function as a community center for the veteran's community, with medical and educational functions. This project will emphasize the exterior form of the building, the functional relationship between spaces, and the flow of interior circulation. Sustainability will be emphasized, and students may collaborate with students from other courses.

Project 4: Studio Report- Team project (Two Weeks)

Students will work as a team to document this group of projects as a report/ portfolio, to be reproduced in both electronic and hard copy format.

6. PERFORMANCE EVALUATION AND CRITERIA

Students are expected to be self-motivated and strive constantly to improve their own skills and knowledge base while contributing to the learning environment shared with other students. Evaluation involves examination and review of products by the instructor, external reviewers, client representatives, and other students. The primary areas of evaluation are: PARTICIPATION, KNOWLEDGE/ SKILL DEVELOPMENT, and PRODUCTS.

- A Exemplary work habits and contributions to the class
 Exceptional evidence of learning and growth
 Highly successful products for assigned work objectives*

- B Good and consistent work habits and contributions to class
 Clear evidence of learning and growth
 Satisfactory products that meet assigned objectives*

- C Inconsistent attention to work and class participation
 Moderate development of skills and knowledge base
 Work products do not fully meet assigned objectives*

- D Poor attention to work and class activities
 Limited understanding of concepts and weak skill development
 Work products do not meet assigned objectives*

- F Little indication of interest in the class or architectural education
 Failure to demonstrate understanding of basic concepts and skills
 Inadequate work products*

Students will be evaluated on individual merit, and members of a team may receive different grades. Projects will be evaluated based on design concept, development, and presentation. Design concept refers to the clarity and

inventiveness of your design, development refers to making the concept feasible and realistic, and presentation refers to the craftsmanship and execution of your solution.

GRADE DISTRIBUTION:

Project 1: Home for a Wounded Vet	15%
Project 2: Halo Housing	25%
Project 3: Medical/ Educational Facility	40%
Project 4: Studio Report	10%
Mini-projects/ attendance/ team coordination	10%
	<u>100%</u>

7. ATTENDANCE AND TIMELINESS

You are expected to be present during scheduled meeting times, ready to work, and with appropriate materials on hand. You are expected to work primarily in studio, both during and aside from scheduled class hours. Most sessions will begin with a critique of previous work, and a discussion of new information and assignments, so students should plan to arrive early or on time. Lateness or unexcused absence will result in substantially lowered grades (excused absence requires written verification for medical or University-mandated reasons). **When you know you will be late or absent, it is your responsibility to notify the instructor IN ADVANCE of the class session, by PHONE, EMAIL, or preferably both.** This will not excuse the absence, but allows the rest of the group to begin on time. Individuals who are late or absent are **responsible for finding out about any missed information and assignments, and completing all work on the assigned schedule.** Students are expected to coordinate closely with their partners on team projects.

Assignments must be turned in on time, even if incomplete - late submittals will automatically lose 30% or more of the credit possible for that project. Students will lose grade points for late or missed classes.

8. MATERIALS AND FIELD TRIPS

This studio requires typical digital and manual media for sketching, drafting, and rendering, as well as model making tools and materials, photographs and prints (see attached list for suggested materials). Additional materials may be required for specific projects. Field trips are expected to be in the local and regional areas, including visits to the project site and other example sites. Students should inform their other instructors as early in advance as possible of scheduled activities that will require them to be absent from other classes.

9. REQUIRED AND RECOMMENDED TEXTS

Students are expected to have access to basic reference texts and resources on architectural design, including structures, building systems, and design detailing. In addition, this course will require an environment-behavior design text, that forms a basis for understanding the human purpose of building design, and will be a useful reference in future studios.

REQUIRED TEXT:

Alexander, C., Ishikawa, S., Silverstein, M., Jacobson, M., Fiksdahl-King I., Angel, S. (1977). *A Pattern Language: Towns, Buildings, Construction*. New York: Oxford University Press.

REQUIRED READINGS:

To be assigned during the project, from handouts, online sources, and text-based resources.

RECOMMENDED READINGS:

Ching, F. D. K. (1996). *Architecture: Form, Space, and Order*. New York: Wiley.
Laseau, P. (2001). *Graphic Thinking for Architects and Designers*. New York: Wiley.

Additional text-based readings and online research materials will be referenced as work progresses.

10. DOCUMENTATION OF STUDENT WORK

Reviews and critiques – **students are expected to make tangible progress between each studio session**, unless otherwise noted. Most sessions will begin with group or individual review of the most recent progress made. Students without documentation of substantial progress may not receive reviews, and will receive lower evaluations as a result. For desk crits, students should have their current work available for review **in printed format in advance each studio session**, even if small-scale and black & white. Students should also have tracing paper available before desk crits begin.

Digital information -- **students should frequently backup their all work on external media** such as CDs, external hard drives, flash drives, etc. to safeguard against the possibility of laptop crashes and other losses. Also, network folders and temp drives are frequently erased by IT staff, so any work produced on university equipment must be saved on the student's own external media. Students will develop a course folder for sharing images, maps, and research information, but all material should be backed up in a second location.

Optimal file size should be used for images – adequate to provide good resolution for the medium to be used, but not large enough to slow down operating systems.

Printing, especially for reviews and presentations, should be done EARLY, due to unexpected delays and obstacles – you should assume that anything can go wrong, and will.

Studio products such as models and drawings may be retained by the instructor for accreditation or other purposes. Students should plan to document and/ or make copies of their work for their own use in the form of copies, photographs, slides, or digital images.

Multiple copies are typically required of all papers, reports, etc., to share with other students, and so the instructor can mark up one copy to return to the student, and retain the other copy.

11. AMERICANS WITH DISABILITIES ACT (ADA) POLICY STATEMENT

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities, in Cain Hall, or call 845-1637.

12. ACADEMIC INTEGRITY STATEMENT

AGGIE HONOR CODE

"An Aggie does not lie, cheat, or steal, or tolerate those who do."

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System.

For additional information please visit: www.tamu.edu/aggiehonor/

DRAWING / DRAFTING/ MODELMAKING

- ❑ Laptop with graphics software (*CAD, Photoshop, Powerpoint, etc.*); capable of running *Second Life*
- ❑ Storage media (*CDs, external hard drives, flash drives*)
- ❑ Cover for drawing board: borco or illustration board (*must be taped down*)
- ❑ Tracing paper (*rolls, NOT pads*) in different-width rolls - 12", 18", 24" (*white is most versatile*)
- ❑ Drafting tape or dots (*not ordinary masking tape – it leaves a sticky residue*)
- ❑ Black ink pens in different line widths: thin, medium, and thick
- ❑ Soft "fat" sketch pencils (*'Ebony' or 'Berol Drafting Pencils'*)
- ❑ Sketchbook
- ❑ Architects scale (*pref. triangular*)
- ❑ Engineers scale (*should be in feet, not metric or proportional scale*)
- ❑ Gray markers in different values (*try 20%, 40%, 60%, 80% - pref. WARM gray*)
- ❑ Colored markers and pencils (*for sketching and rendering*)
- ❑ Parallel drafting bar or T-square
- ❑ Drafting triangles, a few in 45 and 30/60; also an Adjustable triangle
- ❑ Very small triangle to use for lettering (*either 45 or 30/60*)
- ❑ Pencils and/or leads with holder - from 4H to 4B (*not mechanical pencils*)
- ❑ Pencil sharpener or lead pointer, and Sandpaper pad for beveling pencil
- ❑ Compass and/or circle templates
- ❑ Erasers: white, and kneaded
- ❑ Erasing shield, thin metal

MODELS / PRESENTATION

- ❑ Desktop cutting surface
- ❑ Mat knife / X-acto knife
- ❑ Foam-core board for models and for mounting drawings
- ❑ Non-hardening modeling clay: 1 or 2 pkgs (*off-white or ivory*)
- ❑ Brown cardboard, chipboard, foamcore board
- ❑ Rubber cement, straight pins, ordinary masking tape
- ❑ White glue (*"tacky" type preferred*)
- ❑ Glue gun and glue sticks
- ❑ Black metal binder clips (*small-size*) for mounting drawings

(also: museum/ mat board, bass/ balsa wood, flexible foam sheets, materials for specific projects)

MISCELLANEOUS

- ❑ Drafting lamp, adjustable
- ❑ Small pocket-size measuring tape, 8' or 10' (*from hardware store*)
- ❑ Scissors, bond paper, white-out, scotch tape (*pref. tape that can be repositioned*)
- ❑ Photographic equipment and supplies