

COLLEGE OF ARCHITECTURE ART + DESIGN

# ARC 4990

HABITAT PROTOTYPE HOUSE

# **Course Syllabus**

Credits: Type of Course: Class Meetings:

Elective

3

TR 2:00 pm – 5:00 pm (Client presentations will change class time to 3:30 -6:30 pm to accommodate the work schedule of the client)

Prerequisites: None Enrollment Capacity: 12 Section 01 – Spring 2013

Instructor's Contact Information: Assistant Prof. Alexis D. Gregory Email: agregory@caad.msstate.edu Phone: 662.325.0722 Office hours: MWF 11:00 am to 12:00 pm or by appointment

Service-Learning Director's Contact Information: Associate Professor April Heiselt Director, Center for the Advancement of Service-Learning Excellence Email: aheiselt@colled.msstate.edu Phone: 662.325.7919 Office hours: By appointment only

# **Course Description**

This course is designed for the development of well-designed, low-cost housing for low-income clients of the Starkville Area Habitat for Humanity. Students will individually develop a concept and then one concept will be chosen for the class to work on as a group. The final designs will be given to the Starkville Area Habitat for Humanity for implementation.

# **Course Goals**

- To create an affordable house design that integrates good design to improve the lives of the clients
- To understand and integrate volunteer friendly construction techniques to achieve the construction goals of the client
- To develop a budget based on the design and construction detailing of the house
- To integrate sustainable design and healthy home ideas into the design to foster environmental consciousness and cost savings on the part of the client

# **Course Requirements**

This course is a three hour studio/seminar and meets once a week. A series of projects, exercises and assignments will be due at the beginning of each class meeting. Final documentation of the house will be provided to the Starkville Area Habitat for Humanity at the end of the course to allow for execution of the design.

# Course Calendar

899 Collegeview Street P.O. Box AQ Mississippi State, MS 39762-5541 Tel: 662,325,2202 • Fax: 662,325,8872 • www.caad.msstate.edu



Class	Date	Class Description	
Class 01	Thursday, January 10 <sup>th</sup>	Introduction/Site Visit/Research (Introduction to Clients) 3:30 -	
		6:30 pm	
Class 02	Thursday, January 17 <sup>th</sup>	Research	
Class 03	Thursday, January 24th	Conceptual Design	
Class 04	Thursday, January 31 <sup>st</sup>	First Client Presentation (Research and Conceptual Design) 3:30	
		– 6:30 pm	
Class 05	Thursday, February 7 <sup>th</sup>	Schematic Design	
Class 06	Thursday, February 14 <sup>th</sup>	Schematic Design	
Class 07	Thursday, February 21 <sup>st</sup>	Schematic Design	
Class 08	Thursday, February 28 <sup>th</sup>	Schematic Design	
Class 09	Thursday, March 7 <sup>th</sup>	Second Client Presentation (Schematic Design) 3:30 – 6:30 pm	
	Thursday, March 14 <sup>th</sup>	Spring Break – No class	
Class 10	Thursday, March 21 <sup>st</sup>	Design Development	
Class 11	Thursday, March 28th	Design Development/ARCC Conference	
Class 12	Thursday, April 4 <sup>th</sup>	Design Development	
Class 13	Thursday, April 11 <sup>th</sup>	Design Development	
Class 14	Thursday, April 18th	Design Development	
	Thursday, April 25 <sup>th</sup>	Reading Day – No class	
Class 15	Thursday, May 2 <sup>nd</sup>	Last Client Presentation during Final Exam time (Design	
		Development) 3:30 – 6:30 pm	

**Point spread: A** = 100-90, **B** = 89-80, **C** = 79-70, **D** = 69-60, **F** = 59 and below

#### **Course Requirements**

Required Texts:

- 1. Allen, Edward and Joseph Iano. The Architect's Studio Companion: Rules of Thumb for Preliminary Design. New Work: Wiley, 2006.
- 2. Allen, Edward and Joseph Iano. Fundamentals of Building Construction, Materials and Methods. Fifth Edition. New York: Wiley, 2008.
- 3. Ching, Francis D. K. and Cassandra Adams. Building Construction Illustrated, 4th Edition. New York: Wiley, 2008.

Recommended Texts:

- 1. Allen, Edward and Patrick Rand. Architectural Detailing: Function, Construction, Aesthetics, Second Edition. New York: Wiley, 2007.
- 2. Winkel, S. R., David S. Collins, Steven P. Juroszek, and Francis D. K. Ching. Residential Building Codes Illustrated: A Guide to Understanding the 2009 International Residential Code New York: Wiley, 2010.
- 3. Ramsey, Charles George, and Harold Reeve Sleeper. Architectural Graphic Standards, Student Edition, 11th Edition. New York: Wiley, 2008.
- 4. Simmons, H. Leslie. Construction Principles, Materials, & Methods, 8th Edition. New York: Wiley, 2006.

#### Required Software:

AutoCAD, Revit, Photoshop, InDesign, Adobe Illustrator, Adobe Acrobat Pro

#### Assignments

The semester will include the following assignments and weights:

- Assignment #1 – Reflective Journals (Individual Work) 15% Assignment #2 – Research (Group Work) 5% • Assignment #3 – Concept (Group Work) 10% • 20%
- Assignment #4 Schematic Design (Group Work)

•	Assignment #5 – Design Development (Group Work)	40%
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Assignment #6 – Class Portfolio (Group Work)

#### Assessment

Student performance in this studio will be evaluated on the basis of participation in class activities and the quality of submitted work, as both an individual and/or part of a group. **Participation in studio activities includes:** attending all class meetings; having new work to review at each class session; individually and/or collaboratively performing research; individually and/or collaboratively producing drawings and diagrams; and contributing to team focused projects in a collaborative and supportive manner. **Quality of submitted work includes:** depth and originality of insight; intensity and rigor of investigation; strength of involvement; willingness to venture into ambitious and unsettled possibilities; evidence of personal growth; etc.

10%

All projects and/or assignments shall be complete and submitted on the due date. Late and/or incomplete work will not be accepted and the project or assignment will receive an F grade. Exceptions must have prior approval of the studio critic and the submission of late or incomplete work due to personal and/or family related illness must be accompanied by the appropriate documentation. This policy is in effect to ensure an atmosphere of fairness with regards to late work and/or project extensions.

#### Grades

At a minimum, students are expected to exhibit architectural competency as a result of participating in this studio. While the quantity of time one spends working on design studies is often reflected positively in the quality of the work, it cannot - in itself - be a guarantee of a high grade in this course.

• An "A" (100-90) indicates an unusual development of insights based on the relevant materials considered. To earn the "A" grade, the student must demonstrate outstanding performance. Such performance includes innovative and sophisticated insights to theories transcending the "here and now" and have the potential to teach others; innovative, insightful, and thoroughly coordinated design proposals; student acts as a class leader.

• A "B" (89-80) indicates a thorough understanding of the relevant materials. To earn the "B" grade, the student must exhibit beyond competent understanding when employing in their own work the theories and methods covered in the course. Such performance includes solid work showing strong understanding of underlying concepts; work clearly exceeds project expectations through attempts to develop new insights; student contributes significantly to class discussions.

• A "C" (79-70) indicates a relatively perfunctory engagement. A "C" grade will serve as the standard grade for having competently fulfilled the minimum requirements for any project. Such performance includes work that is satisfactorily complete and attempts to exceed project requirements but demonstrates little or no deep understanding or insight. However, only submitting the minimum requirements does not guarantee the student will receive a "C" grade. Ideation, Process, and Skill/Craft will then enter into evaluating the work relative to the stated objectives and issues that will either bring the grade above or below a "C."

• A "D" (69-60) indicates insufficient performance. A "D" grade will be earned when student work does not meet the requirements and is minimally competent. A "D" is a minimally passing grade and is earned when the student fulfills the assignment but the work falls below the minimal expectations for competency. Such performance also includes little or no class participation and marginal attendance.

• An "F" (59 and below) indicates less than passing. An "F" grade is earned when student work fails to meet the minimum acceptable level of accomplishment within the stated objectives and issues. Such performance may also result from numerous absences from class, failure to submit assignments, or unsatisfactory performance on submitted work.

A grade of "I" (Incomplete) may be submitted in lieu of a final grade when the student, because of illness, death in his or her immediate family, or similar circumstances beyond his or her control, is unable to complete the course requirements or to take final examinations. A grade of "I" will not be submitted for reasons other than previously described. Except for circumstances noted above, an "I" grade will not be given to extend the semester so that a student may complete a required assignment(s). For more information refer to AOP 12.12-Credit, Grades, and Academic Standing

# Policies

Attendance:

- Attendance is mandatory and is taken daily. Attendance will be taken at the beginning of class. Being late to class is also unacceptable and unprofessional. A late is considered as arriving at any point after the class has begun. Attendance will be taken periodically during class. The attendance and tardy policy is as follows:
  - For every third absence a student accrues their grade will be reduced by ten points, or one letter grade, at the end of the semester.
  - For every third tardy a student accrues students will incur one absence, therefore adding to the absences considered in lowering their grade at the end of the semester.
- Leaving class early without permission will be considered an absence. Students are expected to be at their desks and ready to participate at the beginning of each class.
- Lecture topics and discussions may vary and discussions may result from guestions that arise during class. It is the individual student's responsibility to obtain from a classmate any information presented or discussed in class that a student may have missed due to an absence. The instructor is not responsible for updating students on information missed due to absences or tardiness. Excuses are accepted only in the case of an illness or emergency documented in writing. No make-up assignments will be allowed without a documented excuse.
- Students are expected to have new work to discuss in desk critiques for EVERY day of class, except presentation days where instead presentation materials are due. If students do not have any new work to discuss, or the work required by the professor from the previous desk critique, the professor reserves the right to not meet with the student. Professors will keep a record of what the student has each day of class and this record will be factored into the grading for each assignment for which the desk critiques were relevant and related. Students are expected to be ready for a desk critique every day of class and will not be allowed to opt out of the desk critique. Only the professor can make that decision. Professors may not be able to meet with every student every day of class due to the quantity of students and the necessity and depth of desk critiques with other students. However, the professor will make every effort to meet with all students every day.
- The Mississippi State University "Class Attendance and Reporting Absences" policy can be found at http://www.msstate.edu/dept/audit/1209.html

Communication:

- Cell Phones and Electronic Devices in the Classroom: In order to limit classroom disruptions, as well as to protect against academic misconduct, the use by students of cell phones, messaging devices and other electronic devices is prohibited in the classroom unless authorized by the instructor. http://www.msstate.edu/dept/audit/1008.html
- Students are expected to check their Mississippi State University e-mail and MyCourses mail every day, even on weekends, in case the professor needs to contact the students with announcements - NO EXCEPTIONS will be made to this policy. If the professor finds out that a student has not checked their e-mail and missed an important announcement then the student will incur a 1 point reduction form total course points for each infraction. Academic Misconduct:

As a member of the University community, all students will be held to MSU's Honor Code. Upon accepting admission to Mississippi State 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 Code. 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 MSU community from the requirements or the processes of the Honor Code. For additional information please visit: http://www.msstate.edu/dept/audit/1207A.html

# Mississippi State Honor Code:

# "As a Mississippi State University student I will conduct myself with honor and integrity at all times. I will not lie, cheat, or steal, nor will I accept the actions of those who do."

### Additional Information

- Student Support Services http://www.sss.msstate.edu/
- Disability Support Services <a href="http://www.sss.msstate.edu/disabilities/">http://www.sss.msstate.edu/disabilities/</a>
- School of Architecture Studio Culture <a href="http://www.caad.msstate.edu/caad\_web/sarc/pdf/sarc\_studioculturepolicy.pdf">http://www.caad.msstate.edu/caad\_web/sarc/pdf/sarc\_studioculturepolicy.pdf</a>
- School of Architecture Studio Culture Oath
  <a href="http://www.caad.msstate.edu/caad\_web/sarc/pdf/Studio%20Culture%20Oath%202010-2011.pdf">http://www.caad.msstate.edu/caad\_web/sarc/pdf/Studio%20Culture%20Oath%202010-2011.pdf</a>
- School of Architecture Student Handbook http://www.caad.msstate.edu/caad\_web/sarc/pdf/2010SARC\_student\_handbook.pdf