

GRADUATE CATALOG COURSE DESCRIPTION

606. Architectural Design II. (2-12). Credit 6.

Application of verbal, graphic, research, critical thinking and fundamental design skills to architectural projects that emphasize the integration of structural, environmental, life safety, building envelope systems, and building service systems; includes code compliance, resource conservation, cost control and economic analysis. Core design studio for professional degree candidates. Prerequisite: ARCH 605.*

STUDIO THEME: TOWARDS A NEW EDUCATIONAL PARADIGM: DESIGN IMPLICATIONS

Today, before they finish high school:

- More than 1/3 of all students drop out
- Almost 1/2 of all minority students drop out

Of all 12th grade high school students:

- Only 39% believe that schoolwork will have any bearing on their life
- Only 28% believe that schoolwork is meaningful
- A mere 21% believe their courses are interesting

Our Mission

Collaborate with architects and educators to create a new, innovative vision for education and design an equality innovative educational facility for that vision.

SPECIFIC STUDIO LEARNING OBJECTIVES (FROM COLLEGE CATALOG)

1. Application of verbal, graphic, research, critical thinking and fundamental design skills to architectural projects
2. An emphasis on the integration of:
 - a) structural,
 - b) environmental,
 - c) life safety,
 - d) building envelope, and
 - e) building service systems.
3. This will also include
 - a) code compliance,
 - b) resource conservation,
 - c) cost control (as determined by an analysis of net/gross sq. ft.)
4. Additionally, this studio will require working with a client to develop a source of inspiration and design criteria. All students will participate in a "visioning" session to help develop, with the client, initial visions that will help to guide the design process. Students will work with their "clients" throughout the semester.

THE PROJECTS

PROJECT 1: Programming and Case Studies

Any medium-to-large facility will usually require a good understanding of programmatic concerns by the architect. In most cases, an architectural program will be developed for a building. When designing schools, the term “educational specification” is frequently used as a synonym for architectural program. (For alternative views on the need for educational specification, see discussion http://www.designshare.com/Research/Ed_Specs/Ed_Spec_Forum.htm). While there are several different approaches used for architectural programming, we will use the “Problem Seeking” method (see bibliography) - primarily because of its simplicity and because it is easy to learn. This method consists of 5 basic steps:

1. Establish Goals.
2. Collect and Analyze Facts.
3. Uncover and Test Concepts.
4. Determine Needs.
5. State the Problem.

We will add one more step at the start: Establish the Mission.

In addition to developing an architectural program, we will want to become familiar with the high school as a building type. Sources available for learning about this building type include information from site visits, and various web sites including:

Design share <http://www.designshare.com>
<http://www.edfacilities.org>

This phase will be conducted by student teams of not more than 2 students with compatible clients. Final presentation will be both graphic and verbal and will identify the goals, concepts, facts (including a site analysis) and needs (including space needs) of the project as well as a concise problem statement. The program must be agreeable to the client. Case studies must include an evaluation of various technological systems described above.

PROJECT 2: Conceptual Design

This project will be the conceptual design of a learning community to be defined by the student in collaboration with the student’s client. This project may incorporate many different types of learning environments (e.g., centralized, decentralized, community-based, project-based), the type of learning philosophy and the facility and site that will support this philosophy. Therefore, each student will need to develop a teaching/learning philosophy, and a site, architectural program and design that that is consistent with the philosophy. Students should work with the client in developing this design.

Understanding the fundamentals of building technology is a requirement of this course and the NAAB (see course description). Therefore, each student will be required to present his/her conceptual approach to the building systems described above.

PROJECT 3: Conceptual Design Development

Continuation of the design project outlined above. Information about final design requirements will be forthcoming. In general, the final design presentation will require the design of a series of hard copy boards and a 3D animation of your project.

SCHEDULE

See attached preliminary schedule.

SITE

To be determined by students and client.

COLLABORATORS

Dr. Virginia Collier, College of Education
Frank Kelly, FAIA, Director of Planning/Programming and Sr. V.P., SHW, Houston
COE PhD students as “clients”

STUDIO COORDINATION AND REFERENCE INFORMATION: GOOGLE GROUPS

We will use Google Groups to help coordinate with clients outside the department and with each other.

Please provide me with your name and preferred email address. I will then invite you to one or more google groups for this studio.

OTHER RELEVANT WEB SITES

Please visit the class Google Groups site frequently. There is a wealth of information that you may find useful throughout the studio. In particular, you may find the web sites to be very useful sites for developing your program and conducting your building type analysis.

www.designshare.com

General web site on school design. A great source for case studies.

www.edfacilities.org

In general, very useful resource for all kinds of educational issues.

www.designshare.com/index.php/articles/2020-vision

Introduces the underlying ideas of this studio. It includes 2 videos of special interest

www.id.iit.edu/ThinkeringSpaces/index.html

Web site of an experiment in exploratory learning, funded by the MacArthur Foundation.

www.whatkidscando.org/specialcollections/student_learning/portfoliohome.html

Part of a larger web site focused particularly on unique, small schools.

www.greenbuildingstudio.com

Access to a variety of white papers describing BIM and sustainable design.

READINGS

The following books will serve as a constant source of inspiration and information to the assignments of this class:

*Prakash Nair and Randall Fielding (2007) *The Language of School Design*. Design Share. Additional patterns are constantly being added at the DesignShare web site. (previous edition acceptable)

*Francis Ching (2007). *Architecture: Form, Space and Order: Third Edition*. Wiley. This edition includes a CD ROM.

Ramsey, Sleeper, Bassler (2008) *Architectural Graphic Standards, Student Edition, 11th Edition*, NY: Wiley.

*Allen, Edward and Joseph Iano (2007) *The Architect's Studio Companion: Rules of Thumb for Preliminary Design*, NY: Wiley. (previous edition acceptable)

*=Required book.

PERFORMANCE EVALUATION

Grades for each student will be averaged using the following percentages:

15%	Project 1
30%	Project 2
50%	Project 2 (continued)
5%	Sketchbook

Each student will receive a grade based on the following issues:

The quality and clarity of your written and verbal presentation(s)

The quality and clarity of your visual presentation(s)

Evaluation of design content (More information about this will be handed out; see also learning issues above)

Evaluation of your sketchbook

At a MINIMUM, It is expected that students will work in the studio during normal, scheduled class hours. Much informal learning takes place among students as they work on projects. Unexcused absences will affect your grade.

EXCUSED ABSENCES

Rules concerning excused absences may be found at <http://student-rules.tamu.edu/rule7.htm>. In particular, except for absences due to religious obligations, the student must notify his or her instructor in writing (acknowledged e-mail message is acceptable) prior to the date of absence if such notification is feasible. In cases where advance notification is not feasible (e.g., accident, or emergency) the student must provide notification by the end of the second working day after the absence. This notification should include an explanation of why notice could not be sent prior to the class. If the absence is excused, the instructor must either provide the student with an opportunity to make up any quiz, exam or other graded activities or provide a satisfactory alternative to be completed within 30 calendar days from the last day of the absence.

COURSE POLICIES

- Only work that has been reviewed in its preliminary stages will be graded.
- Late or incomplete work will not be accepted. All projects are due 5pm before the date of the presentation.
- Attendance is required, unexcused absences will reduce your grade at the discretion of the instructor.
- Copyright Statement: The handouts used in this course are copyrighted. By "handouts," I mean all materials generated for this class, which include but are not limited to syllabi, assignments, web-sites, in-class materials, and additional problem sets. Because these are copyrighted, you do not have the permission to copy the handouts, unless that permission is expressly granted.

STUDIO CULTURE AT TEXAS A&M UNIVERSITY: A POLICY STATEMENT 1

All students, faculty, administration and staff of the Department of Architecture at Texas A&M University are dedicated to the principle that the Design Studio is the central component of an effective education in architecture. They are equally dedicated to the belief that students and faculty must lead balanced lives and use time wisely, including time outside the design studio, to gain from all aspects of a university education and world experiences. They also believe that design is the integration of many parts, that process is as important as product, and that the act of design and of professional practice is inherently interdisciplinary, requiring active and respectful collaboration with others.

OPERATIONAL PROCEDURES

Students and faculty in every design studio will embody the fundamental values of optimism, respect, sharing, engagement, and innovation. Every design studio will therefore encourage the rigorous exploration of ideas, diverse viewpoints, and the integration of all aspects of architecture (practical, theoretical, scientific, spiritual, and artistic), by providing a safe and supportive environment for thoughtful innovation.

Every design studio will increase skills in professional communication, through drawing, modeling, writing and speaking.

Every design studio will, as part of the syllabus introduced at the start of each class, include a clear statement on time management, and recognition of the critical importance of academic and personal growth, inside and outside the studio environment. As such it will be expected that faculty members and students devote quality time to studio activities, while respecting the need to attend to the broad spectrum of the academic life.

Every design studio will establish opportunities for timely and effective review of both process and products. Studio reviews will include student and faculty peer review. Where external reviewers are introduced, the design studio instructor will ensure that the visitors are aware of the Studio Culture Statement and recognize that the design critique is an integral part of the learning experience.

The design studio will be recognized as place for open communication and movement, while respecting the needs of others, and of the facilities.

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/

POLICY REGARDING VANDALISM IN THE LANGFORD ARCHITECTURE COMPLEX

The use of spray paint or other surface-altering materials is not permitted in the Langford Complex, except in designated zones. Students who violate this rule will be subject to sanctions described in Student Rule 27.

AMERICANS WITH DISABILITIES ACT (ADA) POLICY STATEMENT

The following ADA Policy Statement (part of the Policy on Individual Disabling Conditions) was submitted to the University Curriculum Committee by the Department of Student Life. The policy statement was forwarded to the Faculty Senate for information.

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.

PRELIMINARY SCHEDULE

Towards a New Educational Paradigm		PRELIMINARY	1/20/2010		
Prof Bob Johnson, AIA, Design Studio (ARCH 606) meets M,W,F 1:50-6:00 pm, 4th floor Langford A					
Sess	Date	Day	Activity	Time	Loc'n
PROJECT 1: Program and Case Studies					
1	1/20	Wed	General introduction; arrangement of studio; "small-group" pin-ups		
2	1/22	Fri	All day departmental charette		
3	1/23	Sat	VISIONING WITH FRANK KELLY, FAIA, Prof Collier, COE "CLIENTS"	2:30-5:30	569 Harrington Tower
4	1/25	Mon	Optional class (to make up for Saturday class)		
5	1/27	Wed			
6	1/29	Fri			
7	2/1	Mon	PIN-UP (Power Point and 3D model)		
8	2/3	Wed			
9	2/5	Fri			
10	2/8	Mon			
11	2/10	Wed			
12	2/12	Fri	Final project review, Project #1	2:00-5:00	??
PROJECT 2: Conceptual Design					
13	2/15	Mon	Introduction to Conceptual Design		
14	2/17	Wed			
15	2/19	Fri			
16	2/22	Mon	PIN-UP; Preliminary concept idea	2:00-5:00	??
17	2/24	Wed			
18	3/26	Fri			
19	3/1	Mon			
20	3/3	Wed	PIN-UP; Preliminary concept idea		
21	3/5	Fri	Mini PIN-Ups		
22	3/8	Mon			
23	3/10	Wed	REVIEW #2-PREJM CONCEPT with External Reviewers	2:00-5:00	??
24	3/12	Fri			
25	3/15	Mon	MARCH 15-19 SPRING BREAK		
26	3/17	Wed	MARCH 15-19 SPRING BREAK		
27	3/19	Fri	MARCH 15-19 SPRING BREAK		
PROJECT 3: Conceptual Design Development					
28	3/22	Mon	Introduction to Conceptual Design Development		
29	3/24	Wed			
30	3/26	Fri			
31	3/29	Mon			
32	3/31	Wed			
33	4/2	Fri	READING DAY, NO CLASSES		
34	4/5	Mon			
35	4/7	Wed			
36	4/9	Fri			
37	4/12	Mon			
38	4/14	Wed			
39	4/16	Fri			
40	4/19	Mon	PRESENTATION REVIEW		
41	4/21	Wed			
42	4/23	Fri			
43	4/26	Mon			
44	4/28	Wed			
45	4/30	Fri	"PREP" DAY		
46	5/3	Mon	Final presentation due today at 5:00 pm (a, boards and b, 3D-animation)		
47	5/5	Wed	FINAL PRESENTATION PROJECT REVIEW WITH EXT REVIEWERS (MORNING)		

****EXTERNAL REVIEWERS:**

Dr. Virginia Collier, College of Education
 Frank Kelly, FAIA, Director of Planning/Programming and S. V.P., SHW Group
 "Clients," PhD students in the College of Education
 May 15-16: Commencement