ARCH 423:

ARCHITECTURAL PROGRAMMING AND
CONCEPTUAL PLANNING AND DESIGN

FALL 2012

SYLLABUS

ADJUNCT PROFESSOR:
Daiva Peterson, RA
petersond@iit.edu  Office Hours: 10:15 – 11:15, 12:45 - 1:15, Tues and Thursday in Student Center; and by appointment

1. GRADES ARE DETERMINED BY:
   - class attendance: 10%
   - quizzes and homework: 40%
   - Final group project: 50% (grade based on grade for project as a whole, and modified for level of individual team member participation)

2. Class is from 11:25 am to 12:40 pm Tuesdays and Thursdays. To verify attendance on lecture days students must sign attendance sheets. When group projects commence, groups will meet with the Professor and TA as a group, for project updates and review at least once a week. (Attendance during group meetings will be verified at time of meeting.) When additional time for review will be desired, individual arrangements will be made to meet as a group at other than the posted class times.

3. There will be several quizzes during the semester based on lectures and suggested readings. Dates, times, and subjects to be covered on longer quizzes will be announced in advance. However, there may be several unannounced shorter pop quizzes.

4. Homework assignments and their due dates will be announced in class and posted on Blackboard. Late homework will be graded down. Homework must be turned in on 8.5” x 11” paper. Sloppy work will be graded down.

5. During group project phase weekly progress reports will be required. Specific group assignments and their due dates will be announced. They will be graded down if turned in late.

6. No computers, cell phones or other electronic devices, except for voice recorders, are allowed in the classroom.

7. Research material on Architectural Programming is on reserve in the Graham Resource Center. A listing is included with this syllabus.

Americans with Disabilities Act (ADA) Policy Statement
Reasonable accommodations will be made for students with documented disabilities. In order to receive accommodations, students must go through the Center for Disability Resources office. The Center for Disability Resources (CDR) is located in Life Sciences Room 218, telephone 312 567.5744 or disabilities@iit.edu.
Suggested but not required textbook may be purchased at the IIT Bookstore:

Programming For Design by Edith Cherry, FAIA

The following texts will be on reserve in the Graham Resource Center:

ARCHITECTS GUIDE TO FACILITY PROGRAMMING by Mickey Palmer

ARCHITECTURAL PROGRAMMING by Donna P. Duerk

ARCHITECTURAL PROGRAMMING by Robert R. Kumlin

FACILITY PROGRAMMING by Wolfgang F.E. Preiser

GREEN ARCHITECTURE by Brenda and Robert Vale

INQUIRY BY DESIGN by John Zeisel

METHODS OF ARCHITECTURAL PROGRAMMING by Henry Sanoff

PRACTICAL GUIDE TO BEHAVIORAL RESEARCH by Robert Sommer

PROBLEM SEEKING by William F. Pena

SPACE PLANNING BASICS by Mark Karlen

THE HOK GUIDEBOOK TO SUSTAINABLE DESIGN by Sandra F. Mendler, AIA and William Odell, AIA
CLASS 1 – Tuesday, August 21
LECTURE: INTRODUCTION TO ARCHITECTURAL PROGRAMMING
Definition, purpose, process. Introduction to class structure, goals and objectives.
(Suggested Reading for Class 2, August 23: Chapter 1: pages 1-19)

CLASS 2 – Thursday, August 23
LECTURE: The Thought Process; Value systems and impact on programming; Project organization
(Suggested Reading for Class 3, August 28:
Chapter 2: page 21 to Philosophers Think About Thinking, page 25; p. 33 The Roll of Value Systems to Problem Solving Process, p. 36; page 46. Phasing Architectural Programming to p. 49; All of Chapter 3( p.51-78- Clients)

CLASS 3 – Tuesday, August 28
LECTURE: Defining Goals and Objectives; Research; Project start-up; Client communication
(Suggested Reading for Class 4, August 30: Chapters 4 (p.87-93, Researching the Project Background) and 5 (p. 99-111, Identifying Goals and Objectives).

CLASS 4 – Thursday, August 30
LECTURE: Analysis of Information – what is relevant; Establishing Space Criteria; organization into spread sheets
(Suggested Reading for Class 5, September 4:  Chapter 6, pages 119 – 131; pages 138 – 141)

CLASS 5 – Tuesday, September 4
LECTURE: Space Criteria continued; Calculating Net SF and circulation. Calculating Gross SF
(Suggested Reading for Class 6, September 6:  Chapter 6, pages 141 – 159, 169-172 site analysis and impact of code and zoning).

CLASS 6 – Thursday, September 6
Quiz – on lectures (review notes from class and on Blackboard)
LECTURE: Review calculations; Spreadsheet and Adjacency diagrams; Blocking diagrams; Strategies – identifying key issues

Initial group project proposals (and list of team members participating). Minimum of 8 members per team. Maximum of 10 members per team. To be turned in on Tuesday, September 11 for review. Final groups will be formed on Thursday, September 13.

Suggested Reading for Class 7, September 11:  Chapter 7, pages 183-199. (Skim case studies for diagram examples.) Chapter 8, pages 213 – 222.

CLASS 7 – Tuesday, September 11
Quiz – on lectures (review notes from class and on Blackboard)
LECTURE: Basics of cost-estimating; Synthesis of the design problem (form, function, economy and time)
Reading Assignment for Class 8, September 13: Chapter 8, pages 222-229 (scheduling, costs, economic feasibility). Chapter 9 and pages 245–254 (skim case studies, pages 250-253).

CLASS 8 – Thursday, September 13

Quiz – NSF and GSF calculation – familiarity with spreadsheet format

1) Divide into teams – Be prepared with building type and names of team members. Those who have not join a team until this date will join a team in class. Teams will be given a schedule for days to meet in class with Professor, and days to work on assignments. Days for whole class lectures, guest lectures and quizzes will be announced.

2) LECTURE: Documentation and Design – program book requirements - handout

Developing a useful sequence of activities.
- Begin research of building type - Do literature search.
- Look for similar projects in publications. Find floor plans and analyze layout, sizes, Net to NOSF ratio.
- Must visit 3 similar building types and document visits with written description, photos, sketches or floor plans of layout.
- Research Chicago area architectural firms with experience on similar building types. Contact a firm and ask if a firm member will talk with your team about your building type and how their projects are programmed.
- Locate a site for your building and obtain site specific information, including demographics and basic zoning research.
- Identify users of your building type and begin to develop a questionnaire. Identify key information required. (people/activities driven?, equipment driven?, etc)
- Find respondent(s) for questionnaire. Establish a time frame for responses and review.
- Find three people to interview. May be an architect familiar with your building type, a manager of a building you are visiting, etc.

Team assignments for Classes 9 and 10, Tues., September 18 and Thurs., Sept. 20 - Prepare and be ready to discuss progress on the following items:
- Select a team Captain and Co-Captain. These positions are considered additional assignments when tallying individual student input into the team projects at the end of the semester.
- Prepare a chart listing the project assignments and the team members responsible for those assignments. The captain/co-captain are responsible for making sure that the work is divided evenly. Each team member should be included in decisions regarding the project.
- Develop a task list for each team member. Grades for team members who do not complete, or complete poorly their assigned work, will be affected.
- Develop a schedule of events.

NOTE: Team assignments are to be documented each week by turning in evidence of work done on the weekly team assignment form. One copy of the form must be turned in to mark progress. All team assignment sheets and work completed by the team should be organized in a 3-ring binder for periodic review.

CLASSES 9 and 10 – Tuesday, September 18 and Thursday, September 20

MEET WITH TEAMS

Team assignments for Class 11 – (Tues. Sept. 25) AND Class 12 (Thurs. Sept.27):
Progress report on:
- Site for project – provide map of area
- Three similar building types scheduled to visit
- Three people to interview.
- Architectural firms with similar projects
Arch 423 – 2012 Syllabus

- Plans/literature on similar existing projects

Turn in:
- **Draft Questionnaires** - In groups of 3 or 4, develop three questionnaires to obtain essential quantifiable information for your building type. Refer to guidelines in lecture notes. Keep in mind users, activities, equipment and storage. Must be properly formatted per lecture guidelines.