

## **DEA 4590/6500 Programming Methods in Design**

Instructor: Professor Lorraine E. Maxwell

Credits: DEA 4590 - 3 credits  
DEA 6500 - 4 credits

Room: MVR 166N

Time: Tues/Thurs: 10:10 – 11:25 AM

Office hours: Tuesdays 1:30 – 3:30 PM or by appointment

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Jenna Lipson [jrl257@cornell.edu](mailto:jrl257@cornell.edu)

Web address: <http://blackboard.cornell.edu>

### **Description**

An architectural program (called a “Brief” in Europe) is used to guide the design process and to evaluate design solutions. This course will present a variety of architectural programming approaches and techniques. Students will have the opportunity to develop skills in preparing a program document while keeping in mind the potential audiences, namely facility managers, architects and interior designers, and the occupant users. This course will emphasize the role of research and environment - behavior interaction in the facilities, or design, programming process.

### **Learning Outcomes**

1) Grounding in disciplines and fields: Students will be able to identify different design programming methods and understand key issues to consider in selecting and implementing a particular programming approach through lectures, readings, and hands-on exercises.

- 2) Knowledge generation or creativity: Students will develop a programming approach and apply it to a project to create a design program that meets the client's needs.
- 3) Multidisciplinary perspectives: Students learn to use social science research, facility management skills, and design concepts to develop a program of space requirements.
- 4) Communications: Students learn to formulate and communicate programmatic requirements to a client and designers
- 5) Critical Thinking: Students will develop an understanding of the critical success factors in developing and managing an effective programming process by participating in a major programming project for a real client.

### **Course Structure**

This course consists of lecture/discussion sessions, small group sessions, and team work. The lecture/discussion sessions will present various programming approaches and techniques using examples from the workplace, educational, and healthcare industries to illustrate particular issues. There will be 3 small group sessions conducted by the instructor and/or the TAs. The small group sessions will give students the opportunity to practice some of the skills taught in the lecture sessions and to get feedback on these skills. **All students are to attend the small group sessions.**

There will also be several sessions of class time devoted to individual team work. All team members are required to attend these sessions. During these sessions we will not meet as a class. If your team is not meeting with the instructor or TA the team can use this time to meet or to collect information in the field (additional time will also be required). At the end of the semester each team will make a presentation of the program to the class and their client. A final program document will also be prepared and given to the client.

### **Major Project**

This semester we have two clients for our major programming project, New Roots High School (Ithaca NY) and Rasa Spa (Ithaca, NY). The class will be

divided into undergraduate teams and a graduate student team. Each team will have its own project. Detailed information will be given separately about this project. Final program documents will be due **Monday, December 6th**. Additional details to follow.

### **Course Website**

The course syllabus, assignments, selected readings not in the required texts, announcements, etc. will be available on the class Blackboard Site. Some of the readings required for this course may be placed on reserve either at Mann Library or the DEA Resource Room. Readings with an asterisk are placed on reserve. Please “bookmark” the Blackboard site and visit it regularly as it will be the primary source of information for the course – <http://blackboard.cornell.edu>. You will need to go to this web site to enroll in the course website in order to have access to the readings. Once you have logged on to Blackboard click on this course and self enroll. You will need the pass word, “**program**” to enroll.

### **Course Requirements and Due Dates**

Your understanding of the course material will be assessed through 4 projects and an in-class prelim. Two of the projects are individual projects and two will be done in teams. For the team projects all team members receive the same grade unless unusual circumstances arise. Class attendance, class participation, and small group sessions and team meeting attendance are expected.

First assignment: 15 points – Due August 31<sup>st</sup> Individual project

Second assignment: 25 points – Due September 7<sup>th</sup> Individual project

Third assignment: 50 points/75 points – Due September 28<sup>th</sup> Team project

Exercises for Small Group sessions: 15 points – Individual work

Draft program document – Due November 11<sup>th</sup> Team project

RASA presentation: 25 points – Due November 30<sup>th</sup> Team project

New Roots Presentation: 25 points – Due December 2<sup>nd</sup> Team project

Final program document: 125 points – Due December 6<sup>th</sup> Team project

Prelim: Points TBD

## **Assignments, Late Assignments**

All assignments are expected on the due dates. Assignments completed more than 24 hours late will be subject to 5 points deducted and 1 additional point for each subsequent 24 hours. Exceptions may be granted at the discretion of the instructor. All assignments are to be given in hard copy and a digital copy for assignments 3 and the major project. Please send the digital copies to the TAs and the instructor.

If you are ill on the day the assignment is due please notify the instructor or graduate TA PRIOR to class for that day and send your assignment electronically. Gannett will not give excuses for students who are ill. No extra credit assignments will be given.

## **Absences**

All students are expected to attend all classes, small group sessions, and team meetings with the instructor and TAs. If you are ill please notify the instructor or Graduate TA prior to class.

## **Academic Integrity**

Each student in this course is expected to abide by the Cornell University Code of Academic Integrity. Any work submitted by a student in this course for academic credit will be the student's own work, including the prelim. For this course, collaboration is allowed in the following instances: the team project for Project #3 and the major project.

In addition, please consult the following website for guidelines related to copyright issues, plagiarism, and other academic integrity issues related to the use of the internet. <http://digitalliteracy.cornell.edu/>

## **Human Subjects**

Data collection for use in the programming process involves interviewing and observing people. Therefore, each student must be knowledgeable of issues related to research with human subjects. All students are required to take and pass the online exam related to the use of human subjects in research. Please have your results emailed to the TA, Zigi Wu,

[zw74@cornell.edu](mailto:zw74@cornell.edu). If you have already taken the exam please provide proof of this to the TA. You must provide us with this information prior to the beginning of Project #3 (September 9<sup>th</sup>). The website for the Cornell Institutional Review Board is: <http://www.irb.cornell.edu/training/>

### **Required Texts**

Duerk, D.P. (1993). *Architectural programming: Information management for design*. New York: Van Nostrand Reinhold.

Zeisel, J. (2006). *Inquiry by Design: Environment/Behavior/ Neuroscience/ in architecture, interiors, landscape, and planning*. New York: W.W. Norton & Co.