Syllabus
ARC 350R | ARC 386M | ARI 350R | ARI 386M  SPRING 2017

Managing the Design Project
Project Management for the Design Professional

Professor:  Dr. Richard W. Jennings, FAIA
Time:  Thursday, 2:00-5:00 pm
Room:  3.108 WMB

Course Description
The project is the basic defining element of architectural, engineering, interiors, and planning practice. It is through the process of managing and leading projects that design concepts are translated into reality. This course addresses the management and leadership of design projects, including buildings, interiors, planning, and other types of projects.

Valuable to students of architecture, architectural engineering, interior design, landscape architecture, civil, structural, mechanical and electrical building engineering, planning, and students in real estate and business who want learn about the process of managing and delivering projects.

This course provides a solid introduction to project management, including: project start up; scoping, budgeting, and scheduling; financial management and control of projects; owner and client relationships; establishing and negotiating professional fees; project revenue recognition, earned value management, and percent complete determination; overview of both traditional and newer alternate project delivery approaches, including traditional design-bid-build, design-build, bridging, fast-track, and Integrated Project Delivery (IPD); introduction to Gantt charts, critical path scheduling and other scheduling techniques; team building; coalescing owner-designer-contractor relationships; professional services delivery; project risks and mitigation; life cycle costing analysis; project close-out, commissioning, post-occupancy services; and other project management topics.

The course is comprised of lectures, written assignments, readings, real-world cases, role-playing using real-world situations, and expert guest speakers from the design and construction field. This course complements other practice-related courses.

Assignments
There are Assigned readings and short written assignments. In addition, in lieu of examinations there is a 5-page Midterm and 5-7 page Final Paper, double spaced preferred, on the student’s choice of relevant topics, such as the project management process, client relationship management, advantages and disadvantages of various design service delivery methods, team building, integrated project delivery, project communications, or design team leadership.

Evaluation
Student evaluations will be based on class attendance, preparation and participation (20%), written assignments (25%), the midterm paper (25%), and the final paper (30%).

Revised October 20, 2016
Texts and Readings

All assigned readings are posted on the course website in PDF format and intended as background to supplement class discussions. The readings include excerpts from The Architect’s Handbook of Professional Practice, 14th Edition, American Institute of Architects; (An Electronic version is available via library website) Integrated Project Delivery: A Guide, published by the American Institute of Architects and the AIA California Council, The Project Management Institute’s Body of Knowledge (BOK), and various other relevant articles and papers.

Syllabus

<table>
<thead>
<tr>
<th>Session 1 January 19</th>
<th>Course Overview and Introduction to Project Management</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Course overview, discussion of topics to be covered, assignments, grading, review of syllabus, pedagogical expectations, and an introduction to the scope and unique dimensions of project management; discussion of forms of project organizations, roles and relationships; overview of the different types of projects; and the perspectives of owner, client, developer, architect, designer, contractor in project management.</td>
</tr>
<tr>
<td></td>
<td>Read: AIA, Thinking Like a Client and AIA, Client Perceptions Study.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 2 January 26</th>
<th>Essential Skills and Attitudes of the Project Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Essential skills and attitudes needed by the effective project manager in the design firm environment; sustaining the often juxtaposed goals of design quality, satisfied clients, and effective project management; team building and coordination; importance of appropriate and special attitudes and techniques necessary in coordinating design professionals and design projects.</td>
</tr>
<tr>
<td></td>
<td>Read: The Architect’s Handbook of Professional Practice, Section 13.1, “The Effective Project Manager” posted in the course Readings folder. In addition, the AIA Handbook is available electronically at the following link: <a href="http://www.utxa.ebloc.com/patron/FullRecord.aspx?p=818987">http://www.utxa.ebloc.com/patron/FullRecord.aspx?p=818987</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 3 February 2</th>
<th>Project Delivery Approaches</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Introduction to various project delivery approaches including the traditional approach, alternate approaches such as Fast-Track, Bridging, CM at Risk, Hyper-Track, and Integrated Project Delivery; the merits, disadvantages and applicability of each approach will be discussed.</td>
</tr>
<tr>
<td></td>
<td>Assignment No. 1: Recommend a Project Delivery Approach. Due February 16.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 4 February 9</th>
<th>The Project Management Process</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Discussion of managing a design project, both delivery of design services and the design professional’s involvement in project planning and build phases; discussion of the functions of project management including planning, organizing, staffing, facilitating, coordinating, obtaining and providing feedback; consultant selection and coordination; the project work plan; team coordination; introduction to agreement analyses; role definitions;</td>
</tr>
</tbody>
</table>
responsibility matrices; checklists; schedules; and other project management tools.

**Guest: Stephi Motal, AIA, Project Manager, Black & Vernoy Architecture and Urban Design.**

**Read:** Pressman, Chapter 4, “Project Management;” Haviland, Chap. 1, “Understanding Project Management;” and AIA, “Project Management Techniques.”

---

**Session 5 February 16**

**The Project Triad – Scope, Cost, Time**

Scope, cost and time are critical elements of any project; a change in one of these elements affects the other two; discussion of importance of defining and documenting project scope, quality, and client expectations; discussion of purpose and development of project budgets, cost estimates, and schedules; presentation of sample exhibits that are used in actual practice.

**Guests:** Derek Villemez and Jeffrey Scott, PE, LEED AP, Bury Engineers.


**Assignment No. 1 Due Before Midnight**

**Assignment No. 2:** Prepare an Overall Project Budget, due before midnight, March 9.

---

**Session 6 February 23**

**The Economics of Design Services and Financial Control of Design Projects**

Introduction to the economics of architectural practice; staff utilization modeling, multiple concept, and economic billing rates; setting and negotiating compensation; agreements and their analysis; budgeting and scheduling the delivery of design services, professional staff and consultants; reporting and controls; introduction to design services reporting software such as Deltek Vision® that architects and large and small design firms employ to manage project services.


**Assignment No. 3:** Prepare Economics of a Firm and Calculate a Fee, due before midnight, March 23.

---

**Session 7 March 2**

**Understanding the Client & Trusted Advisor Concept**

Discussion of types of clients, their expectations, needs and perspectives; coalescing the client; discussion of client view versus design professional view of new projects; strategies and tactics for more effective client management; introduction to the “trusted advisor” concept by David Maister and how it can facilitate improved client relationships and interactions with the design professional; discussion of how design professionals can become more than consultants to their clients.

Session 8  March 9  Managing Innovative Projects
Effectively managing the innovative project; discussion of the project management requirements of unique and innovative projects. Assignment:

**Guests:** Paul A. Bielamowicz, AIA, LEED AP, Associate Principal, and Daniel Brooks, AIA, LEED AP, Principal, Page Southerland Page, Inc. (PAGE) Architecture Engineering Interiors Consulting.

**Assignment 2 Due Before Midnight**

**Read:** Fischer, “Virtuoso Teams” and Thurm, “Master of the House.”

No Class  March 16  Spring Break

Session 9  March 23  Project Budgeting, Estimating, Control, & Life Cycle Costing
Introduction to the overall project budget, cost estimating, and cost reporting and control; discussion of the various techniques that can be employed to assist the client with more than construction costs; brief overview of basic real estate economics; introduction to life cycle costing.


**Assignment No. 4:** Prepare a Life Cycle Cost Analysis, due April 13.

Session 10  March 30  Project Scheduling
Project scheduling as it relates both to delivering design services and construction; introduction to Gantt Charts, Critical Path Method (CPM), and Precedent Diagramming Method (PDM) techniques of scheduling design services and construction; review of scheduling software applications.

**Read:** AIA, “Project Scheduling: A Way to Evaluate Workload” and review the scheduling part of The Architect’s Handbook of Professional Practice, Section 13.3, “Project Controls.”

Session 11  April 6  Project Risks and Mitigation
Introduction to various risks that design professionals incur in delivering design services in the project management context, and how those risks can be mitigated; importance of acting within the scope and dimensions of professional liability insurance in managing the design project; discussion of appropriate project documentation and communication to minimize risk.

**Guests:** Crowell Builders.

**Read:** Simpson, “Risky Business” and AIA, “Quality Control – Managing the Top 5 Risks.”

Session 12  April 13  Project Communications, Team Building, Leadership & Conflict Resolution
Importance of communications in the management of design projects; strategies and tactics for effective communication; making client recommendations and client decisions; ethics involved in making recommendations and analyses; importance of and techniques for confronting project issues early and resolving conflicts amicably; project directories, meeting documentation, correspondence, and other communication techniques for effective use among project teams.
Assignment 4 Due Before Midnight.


Session 13 April 20

Project Close Out & Post-Occupancy Services
Definition and obligations of the project manager in project close out; discussion of final documentation and transmittal of information to the client; discussion of importance of following up to ensure the final details of a design project are completed; overview of post-occupancy services and their benefits to both the client and design professional.


Session 14 April 27

Project Management and the Future
Discussion of new forms and concepts of design project management, trends, and future challenges and opportunities for the design and construction professional, including the future of disruptive technologies such as wider adoption of fully integrated BIM, cloud computing, VPNs and others.


Session 15 May 4

Final Class Session
A summary presentation of the topics and concepts covered during the semester and discussion of topics of interest to the students.

Assignments:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Topic</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment 1</td>
<td>Recommend a Delivery Approach</td>
<td>February 16, 2016</td>
</tr>
<tr>
<td>Assignment 2</td>
<td>Prepare an Overall Project Budget</td>
<td>March 9, 2016</td>
</tr>
<tr>
<td>Assignment 3</td>
<td>Prepare Economics of Firm and a Fee</td>
<td>March 23, 2016</td>
</tr>
<tr>
<td>Midterm Paper</td>
<td>Choice of Topic</td>
<td>April 7, 2016</td>
</tr>
<tr>
<td>Final Paper</td>
<td>Choice of Topic</td>
<td>May 18, 2016</td>
</tr>
</tbody>
</table>
Guests:

<table>
<thead>
<tr>
<th>Date</th>
<th>Guests</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 9</td>
<td>Stephi Motal, AIA, Project Manager, Black &amp; Vernoy</td>
</tr>
<tr>
<td>February 16</td>
<td>Derek Villemez and Jeffery Scott, PE, LEED AP, Bury Engineers</td>
</tr>
<tr>
<td>March 9</td>
<td>Paul A. Bielamowicz, AIA, LEED AP, and Daniel Brooks, AIA, LEED AP, Principals, Page Southerland Page (PAGE)</td>
</tr>
<tr>
<td>April 6</td>
<td>Crowell Builders</td>
</tr>
</tbody>
</table>

Professor:  

Dr. Richard W. Jennings, FAIA is an Adjunct Professor of Architecture at The University of Texas at Austin School of Architecture and Lecturer in Architecture at the Harvard University Graduate School of Design. He is also a Senior Consultant with a New York City investment banking firm providing advisory services to architecture and engineering firms in the areas of valuations, mergers and acquisitions and business consulting. Dr. Jennings has more than 30 years of professional experience leading design firms and in the design and construction of large-scale commercial projects. He was co-founder, president and CEO of a nationally-operating architectural and planning firm. Prior to founding that firm, he was a Principal and Division Director of a 700-person firm global architecture, engineering and construction management firm. A Fellow of the American Institute of Architects, Dr. Jennings holds the National Council of Architectural Boards (NCARB) certificate and is registered to practice architecture in multiple states. He is a member of the College of Fellows of the American Institute of Architects (FAIA), Project Management Institute (PMI), Academy of Management (AOM), American Planning Association (APA) and a director of the Charles Moore Foundation. He was a founding member of the Integrated Practice and Infrastructure Sustainability research initiatives at Harvard University where he authored a number of case studies and papers. Dr. Jennings taught Professional Practice at Rice University School of Architecture. He received a Doctor of Design (DDes) degree and Master of Design Studies (MDesS) degree with Distinction from the Harvard University Graduate School of Design. He also holds Master of Business Administration (MBA), Master of Architecture (MArch) and Bachelor of Science degrees.

Contact & Hours:  

Dr. Richard W. Jennings, FAIA  
The University of Texas School of Architecture  
Email: rjenn@msn.com  
Telephone: 512-496-6450  
Office Location: Sutton 4.116  
Office Hours: By Appointment

Notes:  

1. Please refer to and familiarize yourself with the UT Office of Campus Safety and Security recommendations regarding emergency evacuation:  
   [https://www.utexas.edu/safety/](https://www.utexas.edu/safety/)  
2. Dates of guest speakers are subject to change;
3. The UT Honor Code Applies:
http://deanofstudents.utexas.edu/sjs/spot_honorcode.php

4. In accordance with UT Attendance Policy, regular attendance at all class meetings is expected. A student who misses classes or other required activities, including examinations, for the observance of a religious holy day should inform the instructor as far in advance of the absence as possible, so that arrangements can be made to complete an assignment within a reasonable time after the absence.