

Revised January 28, 2019

Subject to Revision

SYLLABUS : SPRING 2019

ARC 327R | ARC 386M | ARI 350R | ARI 386M

Managing the Design Project

Project Management for the Design Professional

Professor: Dr. Richard W. Jennings, FAIA

Time: Thursday, 2:00-5:00 pm

Room: SUT 2.110

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 professional services 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 to 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 exercises based on real-world situations, and expert guest speakers from the design, construction and real estate fields. 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%).

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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 and 15th Editions, 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

Session 1 January 24	<p>Course Overview and Introduction to Project Management</p> <p>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.</p> <p>Suggested Readings: AIA, <u>Thinking Like a Client</u>; AIA, <u>Client Perceptions Study</u>; AIA, <u>Plan for Success</u>; CURT, <u>Owner Study 2018</u>; Whitemer, <u>4 Things You Must Do at the Start of Every Project</u>.</p>
Session 2 January 31	<p>Essential Skills and Attitudes of the Project Manager</p> <p>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.</p> <p>Suggested Readings: <u>The Architect's Handbook of Professional Practice</u>, 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: http://www.utxa.eblib.com/patron/FullRecord.aspx?p=818987</p>
Session 3 February 7	<p>Project Delivery Approaches</p> <p>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.</p> <p>Suggested Readings: <u>The Architect's Handbook of Professional Practice</u>, Section 11.4, "Project Delivery Methods;" AIA, <u>Primer on Project Delivery Terms</u>; AIA, <u>Integrated Project Delivery: A Guide</u>, and <u>Drive On!: A Project Manager Story</u>. Will discuss case in class.</p> <p>Assignment No. 1: <u>Recommend a Project Delivery Approach</u>. Due February 21.</p>
Session 4 February 14	<p>The Project Management Process</p> <p>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,</p>

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organizing, staffing, facilitating, coordinating, obtaining and providing feedback; consultant selection and coordination; the project work plan; team coordination; introduction to agreement analyses; role definitions; responsibility matrices; checklists; schedules; and other project management tools.

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

Suggested Readings: Pressman, Chapter 4, "Project Management;" Haviland, Chap. 1, "Understanding Project Management;" and AIA, "Project Management Techniques."

Session 5 February 21

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.

Guest: Derek Villemez, Design Manager, DPR Construction

Suggested Readings: The Architect's Handbook of Professional Practice, Section 13.5, "Construction Cost Management;" AIA, "Managing the Contingency Allowance;" and AIA, "Elements of Realistic Project Budgets."

Assignment No. 1 Due Before Midnight

Assignment No. 2: Prepare an Overall Project Budget, due before midnight, March 14.

Session 6 February 28

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.

Guest: TBA.

Suggested Readings: Dickenson, "A Better Value;" AIA 8.1, "Financial Planning;" and AIA 13.3, "Project Controls."

Assignment No. 3: Prepare Economics of a Firm and Calculate a Fee, due before midnight, March 28.

Session 7 March 7

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

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professional; discussion of how design professionals can become more than consultants to their clients.

Suggested Readings: Maister, "The Trusted Advisor Notes;" Maister, "Professionalism in Consulting;" Maister, "A Matter of Trust;" and The Architect's Handbook of Professional Practice, Section 6.3, "Building Client Relationships."

Session 8 March 14

Managing Innovative Projects

Effectively managing the innovative project; discussion of the project management requirements of unique and innovative projects. Assignment:

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

Assignment No. 2 Due Before Midnight

Suggested Readings: Fischer, "Virtuoso Teams" and Thurm, "Master of the House."

No Class March 21

Spring Break - No Class

Session 9 March 28

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.

Suggested Readings: The Architect's Handbook of Professional Practice, Section 12.12, "Life Cycle Costing" and review Section 13.5, "Construction Cost Management."

Assignment No. 4: Prepare a Life Cycle Cost Analysis, due April 18.

Assignment No. 3 Due Before Midnight

Session 10 April 4

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.

Suggested Readings: 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 11

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.

Guest: Shawn Brown, Principal, Crowell Builders.

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Suggested Readings: Simpson, "Risky Business" and AIA, "Quality Control – Managing the Top 5 Risks."

Midterm Paper Due Before Midnight.

Session 12 April 18

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.

Suggested Readings: AIA, "The Art of Listening," and The Architect's Handbook of Professional Practice, Section 6.2, "Communicating with Clients."

Assignment No. 4 Due Before Midnight.

Session 13 April 25

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.

Suggested Readings: The Architect's Handbook of Professional Practice, Section 12.6, "Project Closeouts" and Gonchar, "Looking Back and Moving Forward : Post Occupancy Evaluations."

Session 14 May 2

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.

Suggested Readings: Bernstein, "Repositioning Practice for the Future;" Whitemyer, "Future Evidence Based Design;" Fisher, "Architecture and the Third Industrial Revolution;" Baker, "Can Technology Solve Architects' Productivity Challenge?"

Session 15 May 9

Final Class Session

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

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Assignments:

Assignment	Topic	Due Date
Assignment 1	Recommend a Delivery Approach	February 21
Assignment 2	Prepare an Overall Project Budget	March 14
Assignment 3	Prepare Economics of Firm and a Fee	March 28
Midterm Paper	Choice of Topic	April 11
Assignment 4	Prepare a Life Cycle Cost Analysis	April 18
Final Paper	Choice of Topic	May 16

Guests:

Date*	Guests
February 14	Stephi Motal, Project Manager, Black & Vernooy
February 21	TBA
February 28	Derek Villemez, Design Manager, DPR Construction
March 14	Paul A. Bielamowicz, Senior Project Manager, PAGE
April 11	Shawn Brown, Principal, Crowell Builders

* Exact dates to be confirmed.

Professor:

Dr. Richard W. Jennings, FAIA is an Adjunct Professor of Architecture at The University of Texas at Austin School of Architecture and previous faculty member at the Harvard University Graduate School of Design. He is a Senior Consultant with the Environmental Financial Consulting Group (EFCG), 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. With more than 35 years of professional experience, Dr. Jennings has lead large design firms and managed the design and construction of numerous large-scale commercial office buildings, hotels, planning and mixed-use projects. He was co-founder, managing principal, president and CEO of Sikes Jennings Kelly & Brewer (SJKB) a nationally-operating architectural and planning firm (Acquired by Gensler). Prior to founding that firm, he was a Principal and Director of the Architecture and Technical Services Division of 3d/International (Parsons) 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),

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and the American Planning Association (APA). He is a director of the Charles Moore Foundation in Austin, Texas. Dr. Jennings was a founding member and researcher of both the RMJM Integrated Practice Research Program and Zofnass Infrastructure Sustainability Research Initiative at Harvard University where he authored a number of case studies and was a contributor to the book Infrastructure Sustainability and Design, Routledge, 2013. Dr. Jennings previously taught Professional Practice at Rice University School of Architecture. He received Doctor of Design (DDes) and Master of Design Studies (MDes) degrees with Distinction from the Harvard University Graduate School of Design where he won the Dimitris Pikionis Award for highest academic achievement. He also holds Master of Business Administration (MBA), Master of Architecture (MArch) and Bachelor of Science degrees.

Contact & Hours:

Dr. Richard W. Jennings, FAIA

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School of Architecture

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Telephone: 512-496-6450

Office: GOL 2.204. Hours by Appointment

Notes:

Grading Policies

Assignments are flexible, but grades are firm; there is no curve.

Grade	Cutoff
A	94%
A-	90%
B+	87%
B	84%
B-	80%
C+	77%
C	74%
C-	70%
D	65%
F	<65%

Late work

Late work will be handled on a case-by-case basis.

Absences

Class attendance is important and is part of the course grade. Excused absences are for religious holidays, illnesses, or extenuating circumstances due to an emergency.

Attendance

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 professor in advance of the absence so arrangements can be made to complete an assignment or cover the class material within a reasonable time after the absence.

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Guest Speakers

Dates of guest speaker appearances are subject to change. Guest speakers take time from their day to speak to the class. Attendance is important at all times but is essential when a guest speaker is present.

Disabilities

Students with disabilities may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Services for Students with Disabilities, 512-471-6259, <http://diversity.utexas.edu/disability>

University Policies

Academic Integrity

Each student in the course is expected to abide by the University of Texas Honor Code: **“As a student of The University of Texas at Austin, I shall abide by the core values of the University and uphold academic integrity.”** Plagiarism is taken very seriously at UT. Therefore, if you use words or ideas that are not your own (or that you have used in previous class), you must cite your sources. Otherwise you will be guilty of plagiarism and subject to academic disciplinary action, including failure of the course. You are responsible for understanding UT’s Academic Honesty and the University Honor Code which can be found at the following web address: http://deanofstudents.utexas.edu/sjs/acint_student.php

Q Drop Policy

If you want to drop a class after the 12th class day, you’ll need to execute a Q drop before the Q-drop deadline, which typically occurs near the middle of the semester. Under Texas law, you are only allowed six Q drops while you are in college at any public Texas institution. For more information, see: <http://www.utexas.edu/ugs/csacc/academic/adddrop/qdrop>

University Resources for Students

Your success in this class is important to me. We will all need accommodations because we all learn differently. If there are aspects of this course that prevent you from learning or exclude you, please let me know as soon as possible. Together we’ll develop strategies to meet both your needs and the requirements of the course. There are also a range of resources on campus:

Services for Students with Disabilities

This class respects and welcomes students of all backgrounds, identities, and abilities. If there are circumstances that make our learning environment and activities difficult, if you have medical information that you need to share with me, or if you need specific arrangements in case the building needs to be evacuated, please let me know. I am committed to creating an effective learning environment for all students, but I can only do so if you discuss your needs with me as early as possible. I promise to maintain the confidentiality of these discussions. If appropriate, also contact Services for Students with Disabilities, 512-471-6259 (voice) or 1-866-329- 3986 (video phone). <http://ddce.utexas.edu/disability/about/>

Counseling and Mental Health Center

Do your best to maintain a healthy lifestyle this semester by eating well, exercising, avoiding drugs and alcohol, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress.

All of us benefit from support during times of struggle. You are not alone. There are many helpful

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resources available on campus and an important part of the college experience is learning how to ask for help. Asking for support sooner rather than later is often helpful.

If you or anyone you know experiences any academic stress, difficult life events, or feelings like anxiety or depression, we strongly encourage you to seek support.

<http://www.cmhc.utexas.edu/individualcounseling.html>

The Sanger Learning Center

Did you know that more than one-third of UT undergraduate students use the Sanger Learning Center each year to improve their academic performance? All students are welcome to take advantage of Sanger Center's classes and workshops, private learning specialist appointments, peer academic coaching, and tutoring for more than 70 courses in 15 different subject areas. For more information, please visit <http://www.utexas.edu/ugs/slc> or call 512-471-3614 (JES A332).

Undergraduate Writing Center: <http://uwc.utexas.edu/>

Libraries: <http://www.lib.utexas.edu/>

ITS: <http://www.utexas.edu/its/>

Student Emergency Services: <http://deanofstudents.utexas.edu/emergency/>

Important Safety Information:

If you have concerns about the safety or behavior of fellow students, TAs or Professors, call BCAL (the Behavior Concerns Advice Line): 512-232-5050. Your call can be anonymous. If something doesn't feel right – it probably isn't. Trust your instincts and share your concerns.

The following recommendations regarding emergency evacuation from the Office of Campus Safety and Security, 512-471-5767, <http://www.utexas.edu/safety/>

Occupants of buildings on The University of Texas at Austin campus are required to evacuate buildings when a fire alarm is activated. Alarm activation or announcement requires exiting and assembling outside.

- Familiarize yourself with all exit doors of each classroom and building you may occupy. Remember that the nearest exit door may not be the one you used when entering the building.
- Students requiring assistance in evacuation shall inform their instructor in writing during the first week of class.
- In the event of an evacuation, follow the instruction of faculty or class instructors. Do not re-enter a building unless given instructions by the following: Austin Fire Department, The University of Texas at Austin Police Department, or Fire Prevention Services office.
- Link to information regarding emergency evacuation routes and emergency procedures can be found at: www.utexas.edu/emergency

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