

2017-2018 Practice and Leadership

Renee Cheng, Professional Practice Class
32182

This course frames architects within the building industry now and in the future. Case examples show how design responds to present economic, ethical and contractual forces and how these might project forward to the future. Lectures and exercises encourage students to develop understanding of current practices and question where they can be transformed.

§ Context

History and tradition are contrasted with rapidly changing contemporary practice. Topics include the future of architectural practice to achieve Architecture 2030 goals, Integrated Project Delivery (IPD), and data-based technology such as Building Information Modeling (BIM).

§ Research

The relationship between academic and professional research is becoming ever more critical as the level of complexity in practice has grown. Topics include the nature of research, research typologies, and practice-based research.

§ Law and the Flow of Responsibilities

Tracking the responsibilities of a professional architect throughout a project from request for proposals (RFP) to construction administration. Lectures will cover challenges in understanding the legal role of the architect in light of changing project delivery methods, building production and performance criteria.

§ Collaboration, Leadership and the Flow of Relationships

Collaborative practices and their implications on interdisciplinary work, authorship and other possible areas of negotiation and tension. Case examples will be used to illustrate how stakeholders communicate and resolve issues.

§ Data and the Flow of Information

Case examples will illustrate how information is formed, tracked and communicated in the form of construction documents and management of changes over time, particularly in the context of data-driven technology and digital media.

§ Finances and the Flow of Money

Economic forces shape building development at multiple scales. Topics include basic mechanisms of financing and relate their effects to patterns of development, cost management in traditional and integrated project delivery methods.



P+L

Title: Arch 5621: Professional Practice required fall semester course for graduate professional students. For those student with non-pre-professional degrees, course is taken in the second year of the three year M.Arch. For students with B.S. degrees, course taken in the first year of the two year M.Arch program

ACSA Awards Practice and Leadership Award Entry: Professional Practice
nominated by Renée Cheng, FAIA, Professor, School of Architecture
College of Design, University of Minnesota

TEACHING NEXT GENERATION PRACTICE, NEXT

SIGNIFICANCE

Schools today are educating the architects who will reach their prime in 2025. Professional practice classes must address the fluid state of current practice and anticipate future change. This course weaves themes of change in each element of its structure. New practices are constantly juxtaposed with established methods and students challenged to anticipate what might likely evolve in the future. Most importantly, the course demands that students project forward their ideal profession, articulating their best ideas for the future. By asking students to understand their individual practice goals in context with their ideas for the whole of architecture, we teach future architects to lead better practices.

ABSTRACT

Undergoing profound change and pursuing experimental innovation, the profession has come to lead the academy. Practice education has not fully grappled with data-based technology, collaborative project delivery methods, performance-based directives and shifts in stakeholder relationships within the building industry.

POTENTIAL TO BE A MODEL

Considering how rapidly the profession is changing, it would be irresponsible to teach students only about practices of the past. Most schools have a required professional practice class but few have been able to address current topics affecting architecture. Unfortunately, the course material and structure of most professional practice classes today bear all too much similarity to those of courses from many decades ago. This course provides a model for a contemporary professional practice class, respectful of the past but looking to the future and demanding students take ownership of their roles in shaping it. Many aspects of the course can be easily implemented in other schools or expanded to continuing education; however, the greatest value of the course can be found in its manner of embracing change and orientation towards creating future architect/leaders.

COURSE DESCRIPTION

In this course, practice issues are grouped into four main areas or "flows": flow of relationships, flow of responsibilities, flow of information, and flow of money. Setting up these flows are two broad components, one providing context of past and future practice and the other on research. Course material is largely presented through case studies, using primary source project documentation. Similarly, student work is case-based, completed after interviewing practitioners about the firm's philosophy, business structure and documenting a case study project. Within each flow is a set of lectures covering case study examples, readings and a panel discussion. Students complete one small exercise for each topic and then choose one for in-depth study. The chosen focus area becomes the basis for students' case study project.

ADDRESSING KNOWLEDGE AND SKILLS

Flow of relationships: covers many areas of collaboration, including copyright ownership, communication, work with consultants and client negotiation. Case studies include international projects with multiple nested contracts requiring sophisticated communication skills and politically contentious projects such as Freedom Tower. Collaboration in integrated project delivery (IPD) is a theme carried through several lectures and readings within this segment. The increasing use of specialist consultants, particularly for energy/sustainability is another overlay.

Flow of responsibility: covers legal responsibilities of each stakeholder in building industry, risk management, ethical issues in practice, contracts, marketing and insurance principles. Case studies

cover what to do when things go wrong – such as resolving construction failures, managing risk in the IPD context, how to get work and keep it, and how typical architect's responsibilities like programming can be leveraged to improve design. Shifts in responsibility with IPD and performance-based metrics such as LEED are discussed.

Flow of information: lectures and panels highlight digital and analog project communication. Issues include: construction documentation, BIM, and model protocols such as AIA E202. Case studies illustrate the general sequence of construction documentation handoff points in a variety of delivery models, including use of BIM model data and changes due to IPD.

Flow of money: covers a range of financial issues from fee structuring principles, quantity surveying processes, reading developer proformas, business management within a firm, use of risk/reward incentives in IPD, and project financing. This section has the largest number of guest lecturers providing specific expertise areas. Course material in this topic area has changed rapidly in the past year, reflecting the effects of the financial crisis on the building industry.

Additionally, critical areas are covered in research-based practice and practice-based research which contribute to an understanding of entrepreneurship and alternatives to traditional practice.

CONNECTING PRACTICE AND ACADEMY

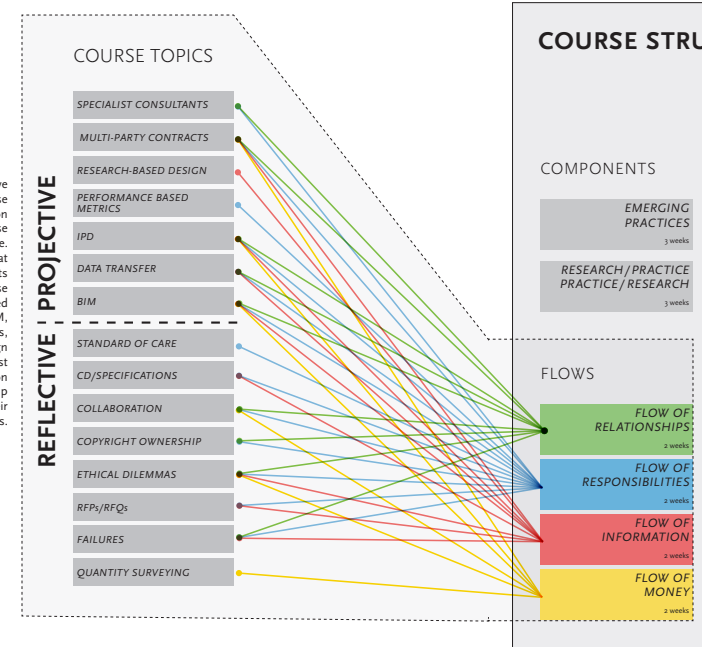
The school's strong ties to an active practice community make contact-intensive student exercises possible. One course goal was to structure direct connection between students and architects, notwithstanding the logistical challenges of engaging a large number of architects and firms. It was also important to promote their interaction in both classroom settings and office settings. The overall number of registered architects participating ranges from 30-60 each year, including lecturers, panelists, and interviewees. A few play multiple roles, but most serve only as interviewees. Many architects repeat involvement each year, though there is some rotation so firms can adjust internal workload. A few of these architects also teach but for most practitioners this is the only point of contact with the school. Approximately 25 firms have at least one architect involved with the course.

NON-FACULTY PRACTITIONERS CONTRIBUTIONS

Non-faculty practitioners serve in critical roles in the classroom as guest lecturers and panelists as well as in the office providing material for the two major student projects: firm interview and case study. For those two reports, students work in pairs, requiring collaboration and providing richer student interaction with practitioners. Some of the participating firms provide contact with only one person (usually the firm principal), while others give the students access to the entire firm leadership and/or project team. For the firm interview, students are specifically asked to go beyond the marketing or promotional view presented by the firms' website by asking respectful but pointed questions to the practitioners. This interview is structured to take 90 minutes of the architects' time, with the students spending additional hours preparing and synthesizing the interview for their report. Students write narrative and create diagrams of the firm's structure as they understand it. Report is shared with the firm, who are also invited to attend a class discussion on the cases.

All participating firms agree to a second interview documenting a mini-case study. This is not a full case study requiring months of preparation; instead it is a highly focused 90 minute interview on a particular aspect of a project illuminating a decision moment related to one of the four major course topics: collaboration, contract/ownership, information or money. Students tie the mini-cases with what they have learned in lectures and readings and with knowledge gained from firm interview.

By being both reflective and projective, this course provides perspective on architecture to those who will form its future. Students understand that their roles as architects will be different than those of the past. Pressured by forces such as BIM, IPD, global practices, and sustainable design imperatives, architects must be skillful in collaboration and entrepreneurship while maintaining their professional values.



CASE-BASED LECTURE SERIES 1

One set of lectures, delivered by practitioner faculty, crosses over several topics, covering multiple aspects of the same complex high-profile building. Spread over the semester, these lectures use one project repeatedly to illustrate issues in each topic area, also revealing differences and continuity between topics. Other lectures complement this thread by providing general information and additional case examples for each topic.



GENERATION LEADERS

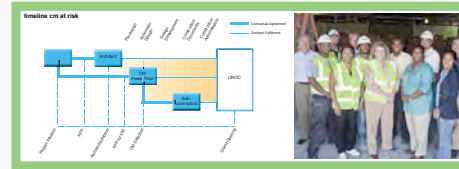
LECTURE

IN CLASS ACTIVITIES			OUT OF CLASS ACTIVITIES		
LECTURES (case-based)	PUBLIC PANELS	READINGS	STUDENT WORK (case-based)		
1.25 1.25 1.25	1.25	6 hrs.	6 hrs.	Firm interview	
1.25 1.25 1.25	1.25	6 hrs.	6 hrs.	Research Firm analysis	
1.25 1.25 1.25	1.25	6 hrs.	6 hrs.	Mini case study addressing one of the four flows	

CASE-BASED LECTURE SERIES 2-4

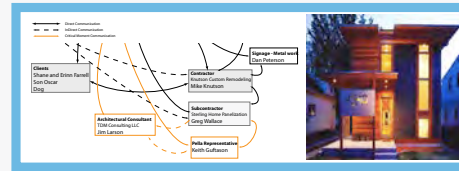
MINI CASE STUDIES ADDRESSING ONE OF FOUR FLOWS

STUDENT PROJECT 1: RELATIONSHIPS



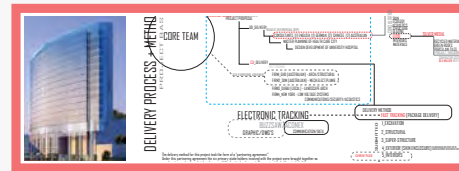
A large state institution building in a minority neighborhood required both contractor and architect to have 30% participation by minority owned businesses in order to qualify. Students examined the decisions by the architect and contractor on choosing partners and arranging collaborative relationships. Two architecture firms successfully partnered, one minority owned with experience in project type, but with no previous experience with the institution and one who had extensive experience with the client and CM at Risk project delivery. Their collaboration was a true partnership. By contrast, the contracting firms' collaboration was intended to be mentor/mentee but resulted in a superficial relationship and without much benefit for either party. Students observed that if marketing is the primary driver for collaboration, it may not be sufficient to ensure success, while mutual trust and complementary expertise form a good basis for collaboration.

STUDENT PROJECT 2: RESPONSIBILITIES



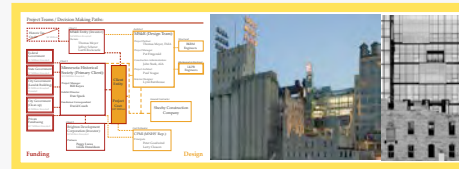
Decision moment of this case arose when windows began to show signs of rust during the course of construction of a net zero house. Due to the high level of technical requirements for the enclosure, there were several factors that might have attributed to the window failure. The architect chose to become a detective, hiring a detailing consultant to perform field tests and talking with the window manufacturer to trace all steps between fabrication and installation. It was discovered that improper storage of windows during transport exposed the units to water and the window manufacturer replaced the windows. The architect went over and above his contract to service the client and ensure that the net zero goals were met. Students observed that the architect was the only one who had the expertise to gather information and identify the problem.

STUDENT PROJECT 3: INFORMATION



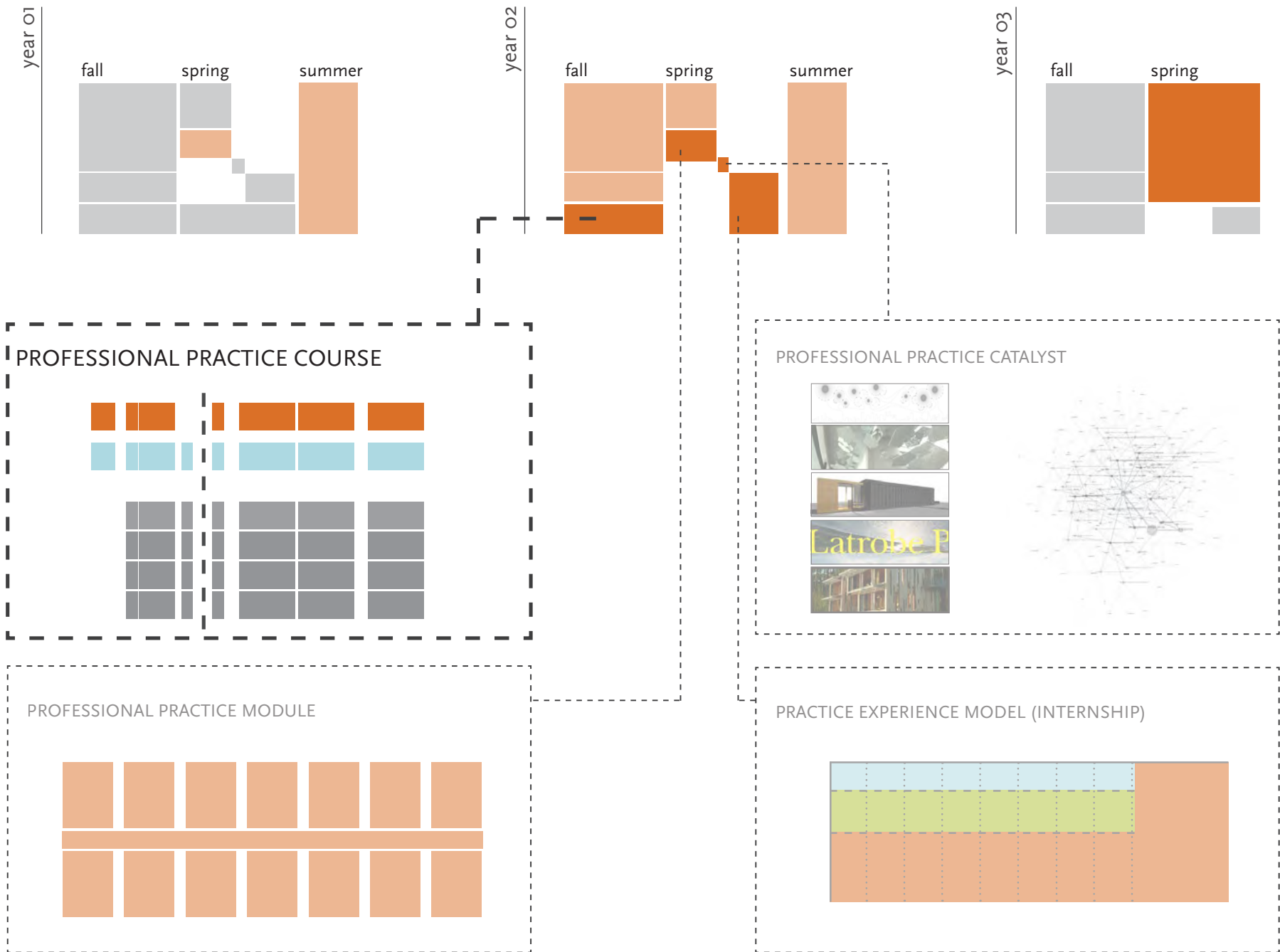
In this large scale international project, the client was a partnership between a Dubai teaching hospital and a major US medical school. The US architect worked with numerous consultants worldwide. The demanding healthcare program adjusted US medical standards to Muslim cultural norms. Students focused on the exchange of information between clients, architects, consultants and contractors. Stakeholders were spread across all time zones so electronic information sharing was key. Communication difficulties required a restructuring of information flow. Students focused on decisions made on protocols, level of detail and dimensioning systems developed between the various offices. This allowed for effective use of the BIM model and implementation of software tracking other information.

STUDENT PROJECT 4: MONEY



Students focused on the financing of a historic renovation project. The main owner was a state historical society partnering with several state and federal entities. When the project did not qualify for an anticipated S/M in Historic Tax credits, the project was put in jeopardy. The architect decided to invest in the building as an owner and occupy two floors of the building. The decision to do so was informed by analysis of the financial health of their own firm, the expected return on investment on the project, and the marketing value of the project to bring in future projects. Hindsight showed that the decision to invest their own capital has yielded high returns on all fronts.

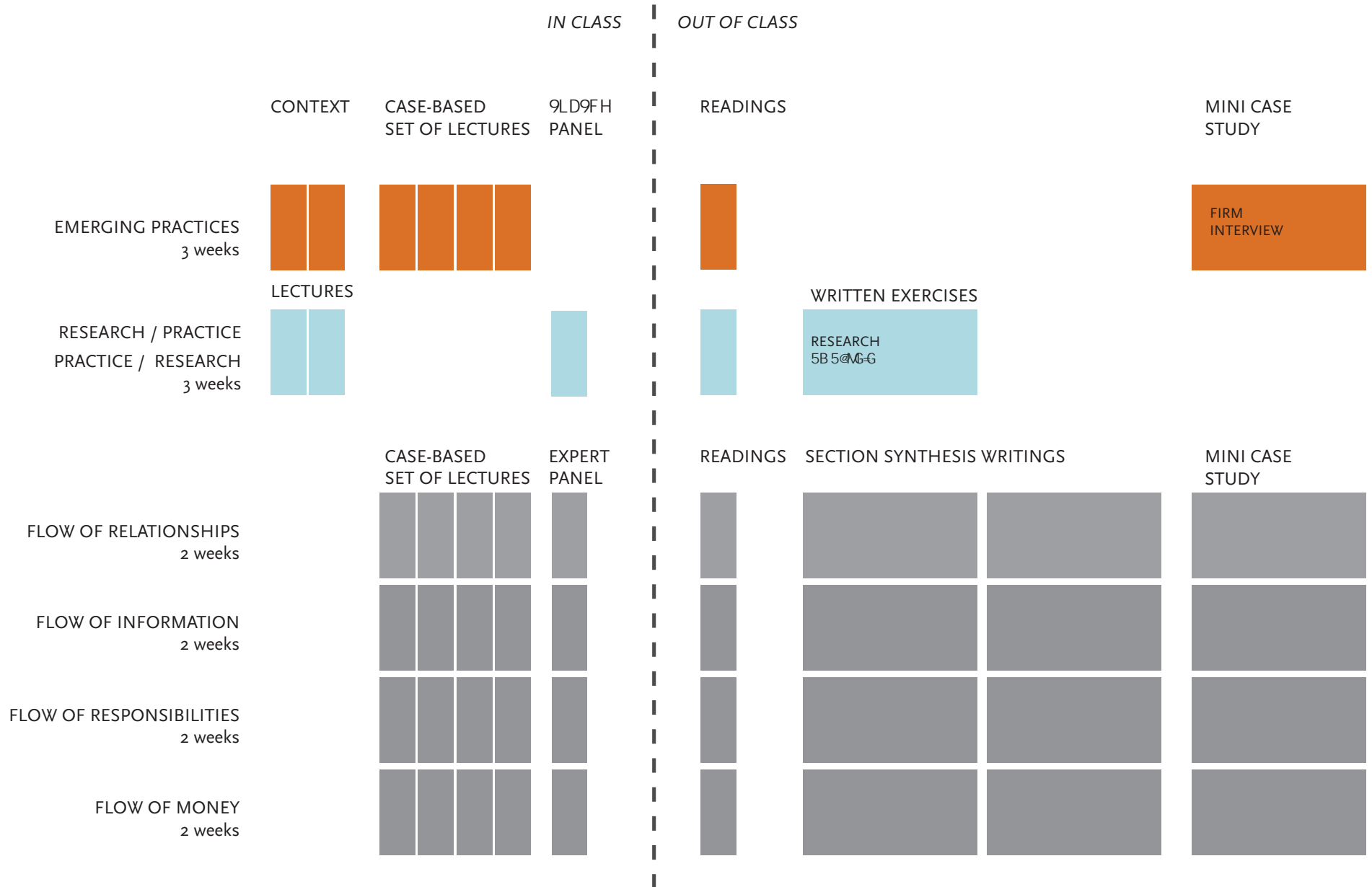
The firm interview and case study are heavily illustrated with diagrams that show relationships, decision-making sequence and business strategies. Narratives complement the diagrams and together they demonstrate students' grasp of the many practice issues embedded within each topic. The case study illustrates an example of a specific project decision directly related to one of the four topic areas. Students work in teams of two for firm interview and case study, facilitating team-work and professional communication.



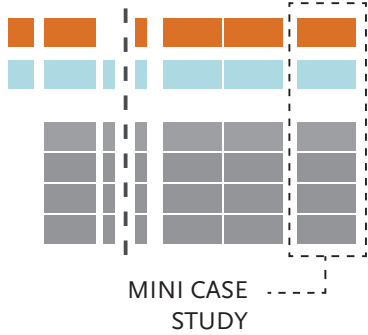
SCHOOL OF ARCHITECTURE - UNIVERSITY OF MINNESOTA
PROFESSIONAL PRACTICE COURSE
 Diagram of Class Structure

1 FACULTY
 1 PRACTITIONER
 1 INTERN TEACHING ASSISTANT
 1 STUDENT TEACHING ASSISTANT
 48 STUDENTS

FALL SEMESTER
 15 WEEKS
 3 CREDITS
 REQUIRED



ARCH 5621 PROFESSIONAL PRACTICE IN ARCHITECTURE



Example of Student Work, Mini Case Study with Focus on the Flow of Responsibilities

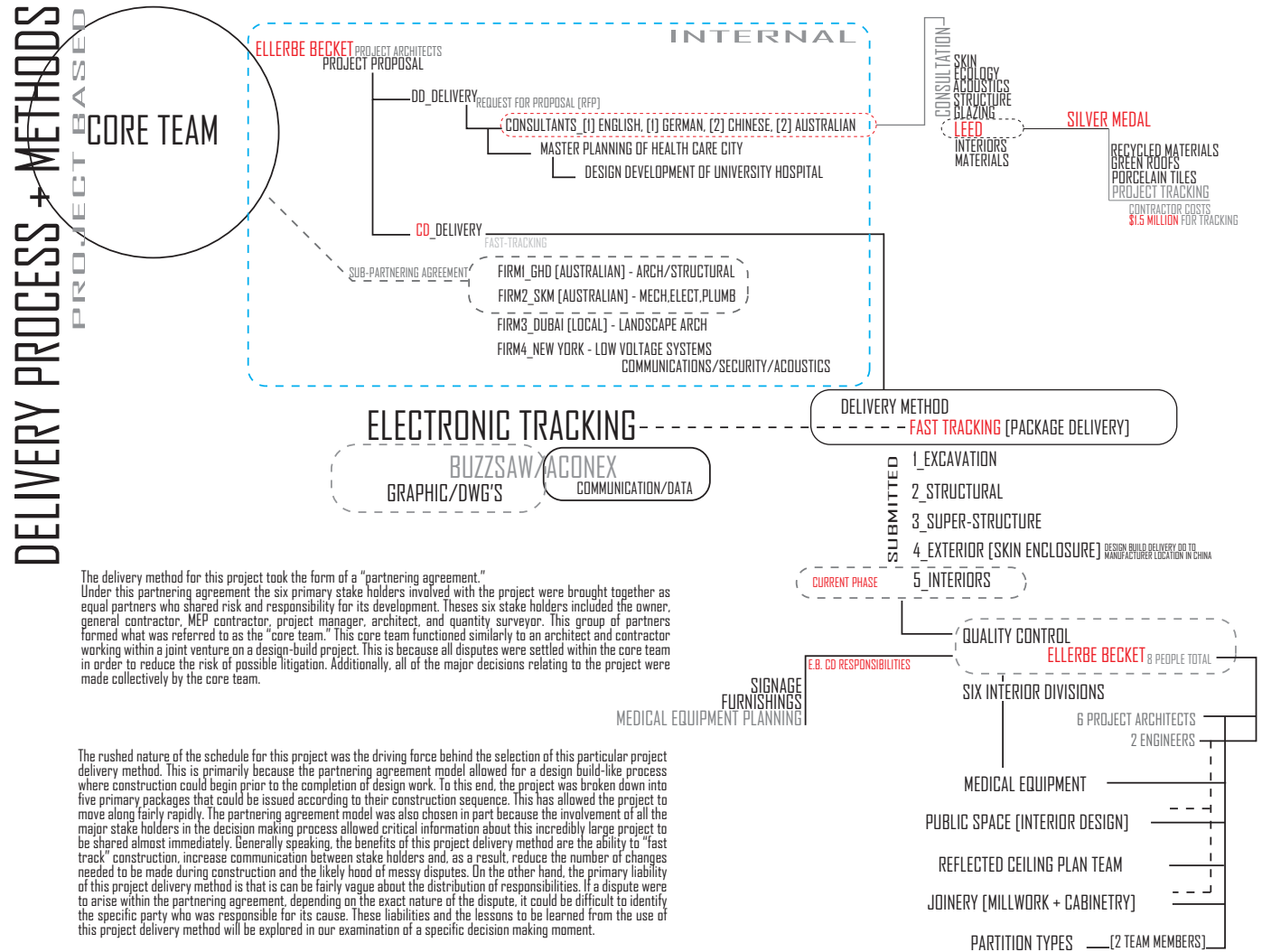
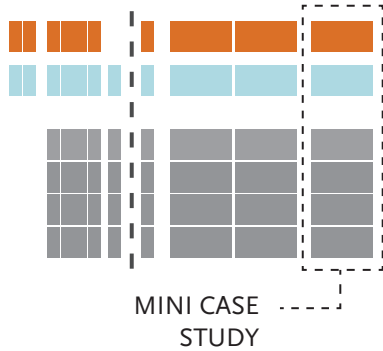
CASE STUDY_ **ELLERBE BECKET**
 CASE FOCUS_ **RESPONSIBILITIES**
 INTERVIEWERS_ ANDREW MCGEHEE
 INTERVIEWEE_ PETRO MERTIS
 INTERVIEWEES_ JEFF FRUSH, AIA, NCARB
 PRINCIPAL_ PROJECT DIRECTOR
 SUBMIS. DATE_ 11.18.2008



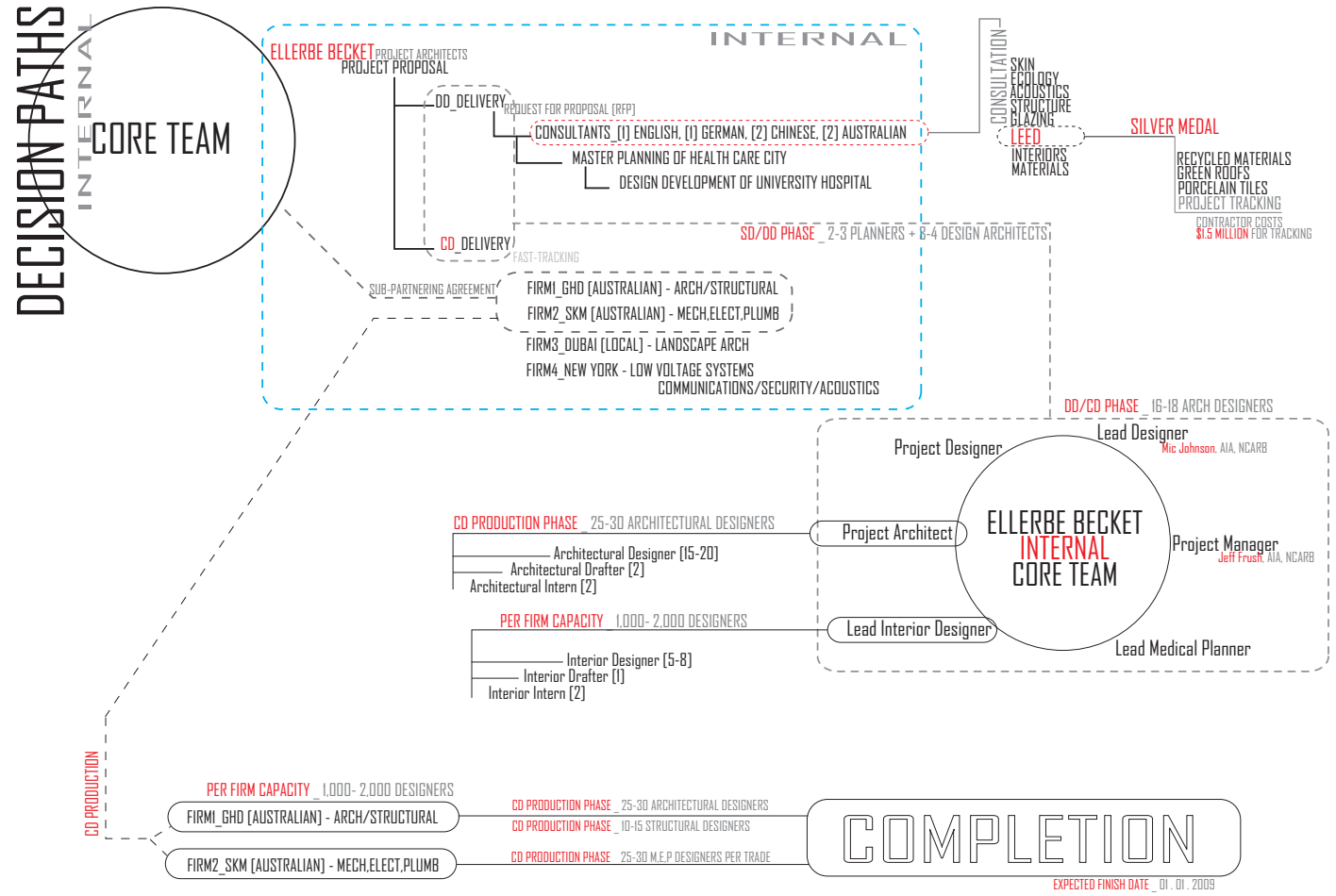
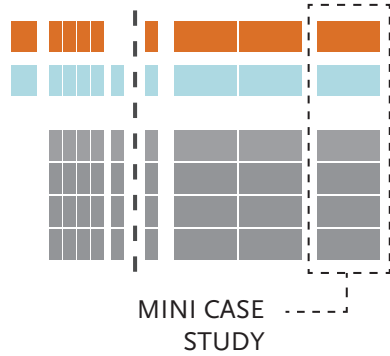
CASE DESCRIPTION

PROJECT NAME_ UNIVERSITY HOSPITAL
 PROJECT LOCATION_ DUBAI, UNITED ARAB EMIRATES
 CLIENT_ DUBAI HEALTHCARE CITY (DHCC)
 BUILDING TYPE_ INPATIENT+OUTPATIENT HOSPITAL
 BUDGET AND PROJECT COST_ \$700 MILLION (TOTAL PROJECT) DESIGN FEES_ \$35 MILLION
 SIZE_ 1,450,000 SQ. FT.
 SCOPE OF SERVICES_ MASTER PLANNING+MEDICAL PLANNING/ARCHITECTURAL DESIGN/INTERIOR DESIGN/MECHANICAL+ELECTRICAL ENGINEERING DESIGN
 COMPENSATION TYPE_ MONITARY VIA CONTRACTUAL OBLIGATION
 PROJECT DELIVERY METHOD_ PARTNERING AGREEMENT + FAST TRACKING PACKAGE DELIVERY
 SCHEDULING AND DATES_ SD COMPLETION APRIL 2006
 DD COMPLETION APRIL 2007
 CD COMPLETION JANUARY 2009
 CONSTRUCTION BEGAN FALL 2007 COMPLETION SPRING 2011

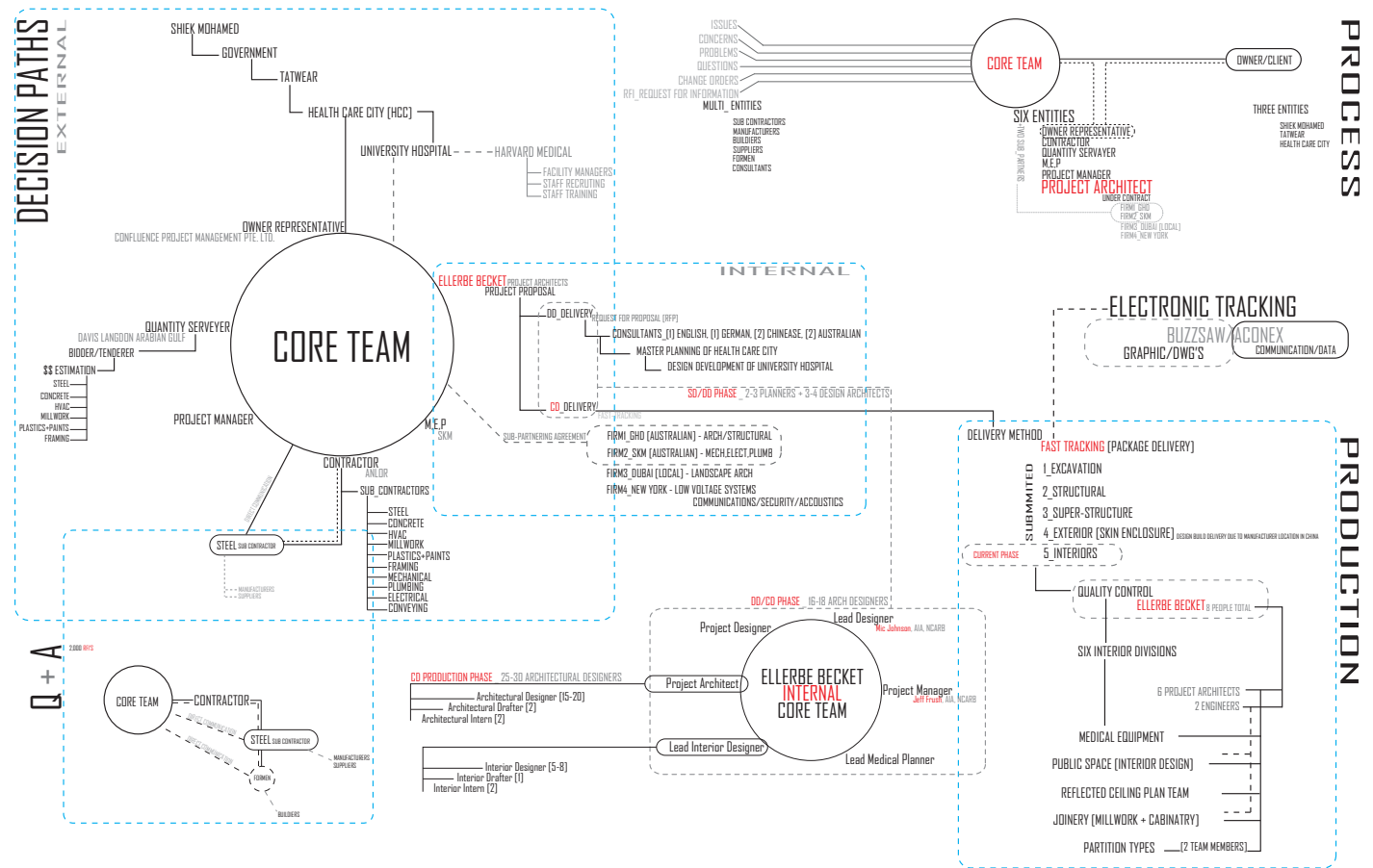
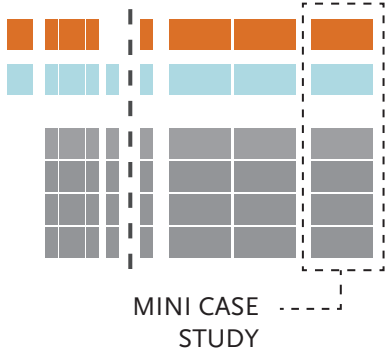
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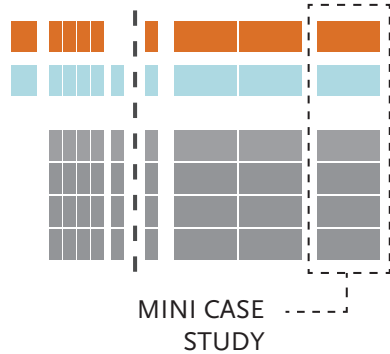
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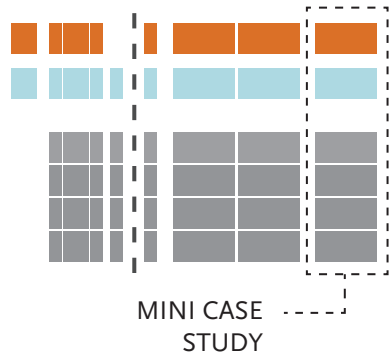
Example of Student Work, Mini Case Study with Focus on the Flow of Relationships

UrbanWorks **Firm**
Dan DeVeau, Mark Nordall **Interviewers**
Tod Elkins, Principal **Interviewee**
Associate AIA, LEED AP
Collaboration **Case Focus**
October 29th, 2013 **Date**

Minneapolis Public School Headquarters **Project**
(Educational Service Center - Davis Center)
1250 W. Broadway Avenue **Address**
Minneapolis MN, 55411
Minneapolis School District **Client**
Civic: Educational Administration **Building Type**
\$36,000,000 **Cost**
200,000sf **sf.**
Architectural **Scope**
Stipulated Lump Sum (\$1,150,000) **Compensation Type**
Negotiated Contract **Delivery Method**
June 4th, 2009 -August 18th, 2012 **Project Schedule**



ARCH 5621 PROFESSIONAL PRACTICE IN ARCHITECTURE



Minneapolis Public School District

Mark Bollinger, Deputy Chief Operating Officer
 | Steve Liss | Legal Council Minneapolis School District

Mortenson M.A | Ken Sorenson | Vice President

Mortenson Development | Dan Lessor | Development Manager

Mortenson Construction | Dan Mehis | VP Director of Project Development

Thor Construction | Ravi Norman | CEO

UrbanWorks LLC

Tod Elkins | Principal, Associate AIA, LEED AP
 Jeff Schoeneck | Project Manager, Associate AIA,
 Scott Beckman | Project Architect, BIM Coordinator, AIA, LEED AP
 David Miller | Project Designer, AIA, LEED AP

Dunham Associates | Tod Grube | Partner, PE, LEED AP BD + C

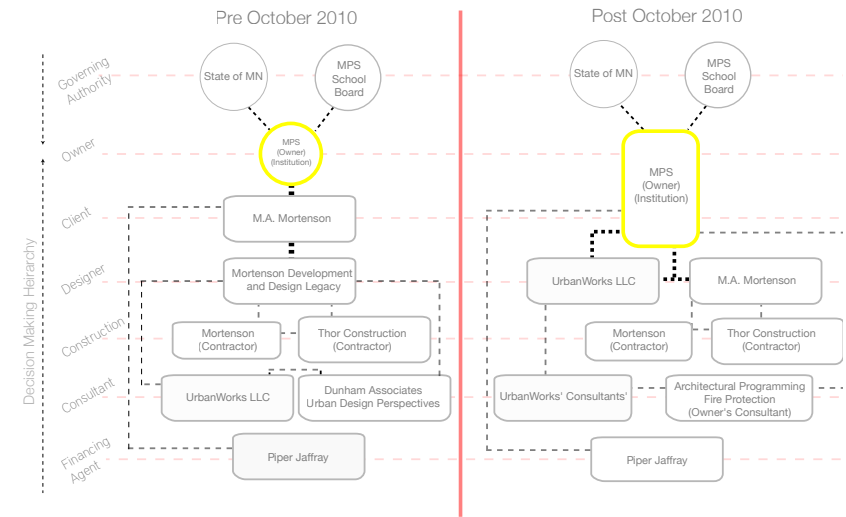
Urban Design Perspectives | Alishia Belton, AIA

Piper Jaffray | Non-specific personnel

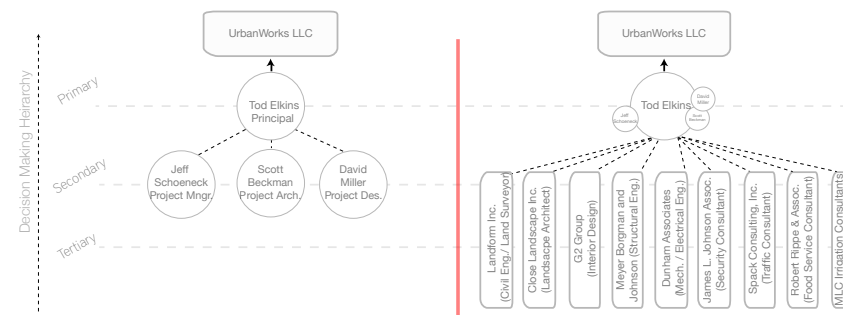
State of MN | Non-specific personnel

The beginning stages of the MPS Headquarters project delivery method was conceived as design-build, which meant that all decisions for the design would be routed through a single entity, Mortenson M.A.. After the change to a design-bid-build project delivery method, UrbanWorks signed a separate contract that granted them a larger stake in the decision making process. Gaining a larger stake in project decisions allowed UrbanWorks to have greater control over the design of the project but also added extra levels of communication, liability and responsibility to the project. Internally, the UrbanWorks hierarchy of decision making changed. The project architect, project manager, and project designer still reported to the project principal directly, however external consultants were now overseen by UrbanWorks as well.

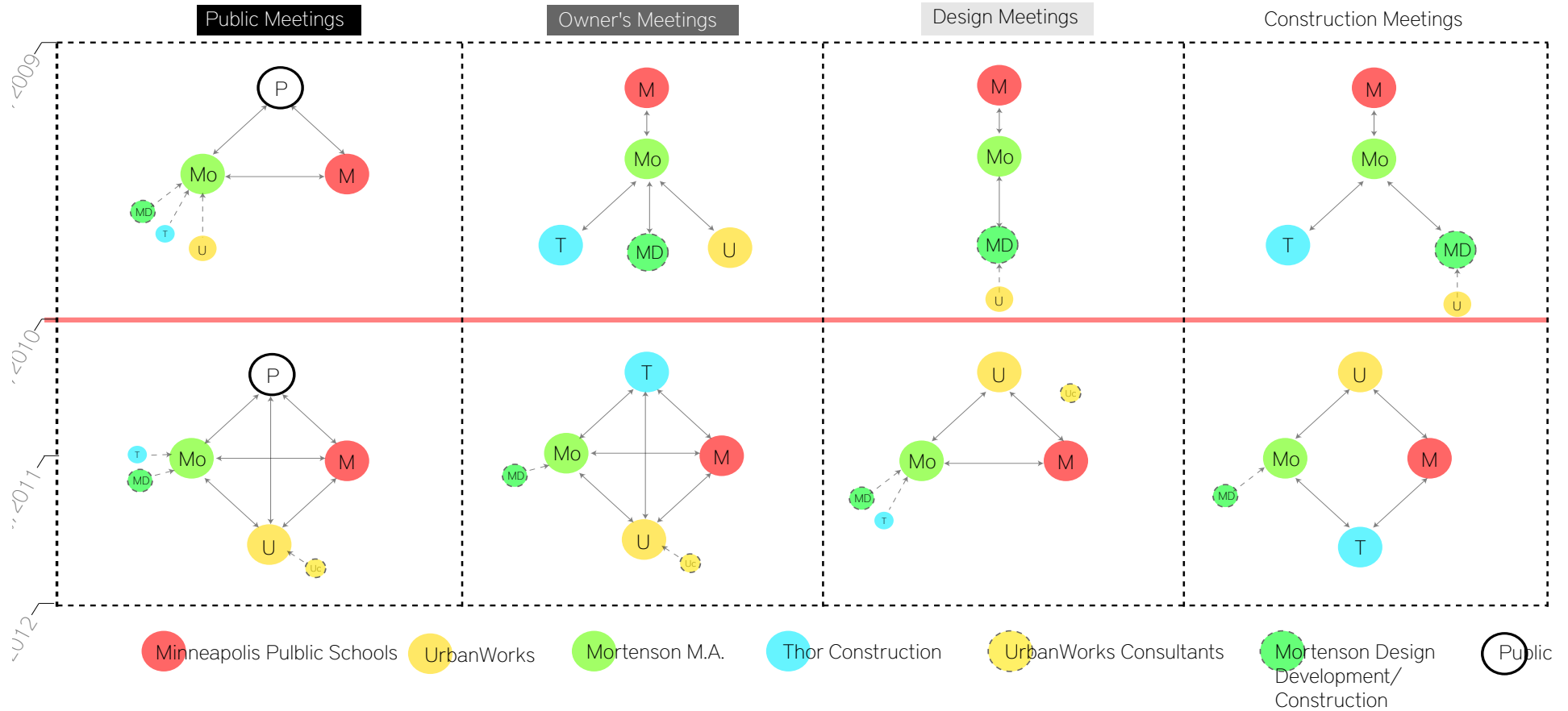
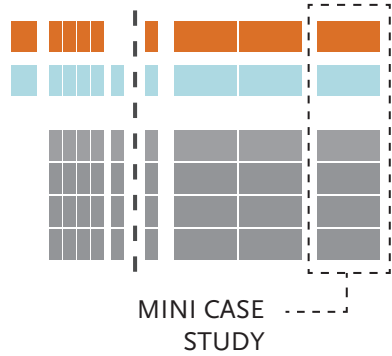
External Teams



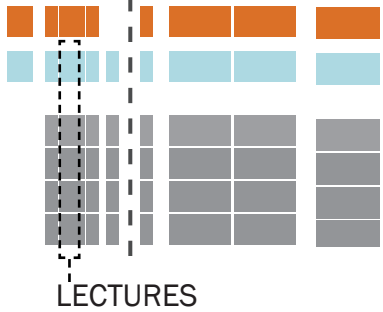
Internal Teams



ARCH 5621 PROFESSIONAL PRACTICE IN ARCHITECTURE



ARCH 5621 PROFESSIONAL PRACTICE IN ARCHITECTURE



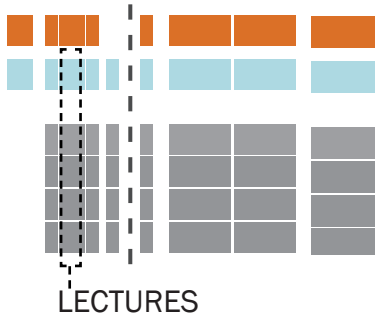
American University in Beirut was designed by VJAA and has won major design awards. There are many aspects of the building worthy of study. In this professional practice class, VJAA partners talk about the project repeatedly. The repetition is intentionally woven into the course, using AUB as a constant among the many case study examples that the students see over the course of the semester. AUB is used to illustrate practice based research, flow of responsibilities, flow of relationships, flow of data, and flow of money.



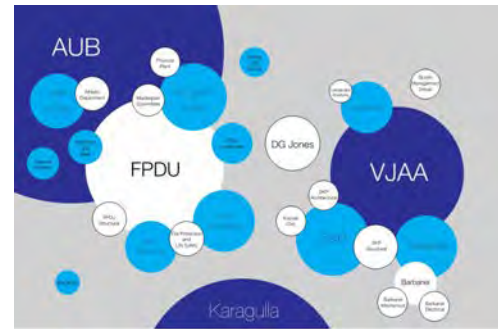
Images here are from lectures discussing practice-based research and introducing the project



ARCH 5621 PROFESSIONAL PRACTICE IN ARCHITECTURE



VJAA's team was drawn from a global network of consultants, some with previous relationships and others new. Issues around the contract, fees and responsibilities are explained in a series of lectures. The client was complex with several stakeholders and decision making layers.



Construction Team



Distance



"Phases"

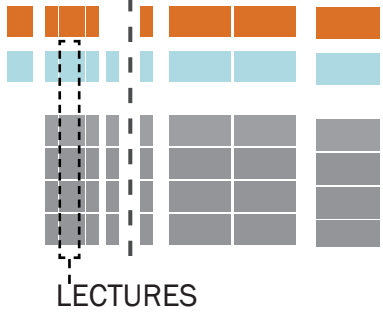
- Schematic Design
- Design Development
- Construction Documents
- Bidding and Negotiations
- Construction Administration



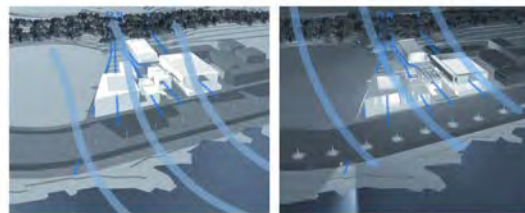
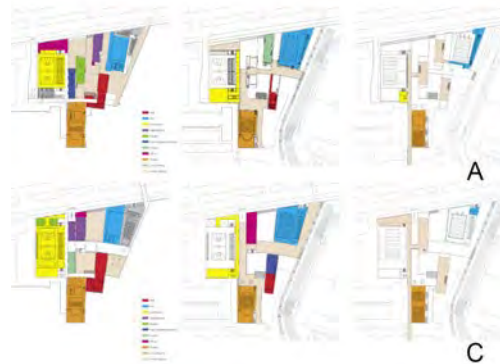
"Stages"

- Preliminary Design
- Design Development
- Detail Design and Contract Documentation
- Tendering
- Supervision

ARCH 5621 PROFESSIONAL PRACTICE IN ARCHITECTURE



To fully understand how research and the flows of responsibilities, relationships, data and money worked in this project, original design documents are used to illustrate the range of analysis, inclusion of the consultants and decision making by the client



Syllabus

NAAB Criteria: A.11, B.7, C.3, C.4, C.5, C.6, C.7, C.8, C.9

Instructors

Renée Cheng, FAIA, Professor
Nathan Knutson, AIA, Professor in Practice
Jessica Horstkotte, Instructor, (support for Firm Interview and Mini-cases)
Lucas Glissendorf, Teaching Assistant

Looking forward, what can we anticipate? Like every burgeoning epoch, the twenty-first century will contour research and practice with its own unique signature. The interdependence between practice and applied research will surely intensify in the future, as we have already witnessed by the recent advances in digital imaging, virtual construction, and information design; accelerating developments in building science and sustainability; greater understanding of rapidly changing global economics; and new paradigms in architectural theory with new significance for practice. Undoubtedly, as research in architecture stimulates greater degrees of precision in our design, production, and management of the constructed world, it will increasingly influence our evolving professional identity.

Daniel Friedman, Reflections on Research, 2006

What we are really doing is changing the conversation.

Ed Mazria (founder Architecture 2030), Interview

If you want to survive, you're going to have to change. If you don't change you're going to perish....since [1986] architecture has been eviscerated. We're cake decorators, we're stylists. If you're not dealing in direct performance of a work and you're not building it and taking responsibility for it, and standing behind your product, you will not exist as a profession.

Thom Mayne, Change or Perish, 2006

COURSE OBJECTIVES

The objective of this course is to make clear the connection between design and the building production industry now and in the future. Climate change and data-driven technology are transforming practice, creating a new relationship between architectural design and research and new roles for architects in multidisciplinary teams. Case examples will show how design choices are made in the context of present economic, ethical and contractual forces and how these might project forward to the future. Course material will cover issues related to design and construction documentation, sequence, coordination, and communication, as well as financial and legal responsibilities and how such concerns impact the design. Exercises are intended to encourage students to develop understanding of current practices and question where they can be transformed.

COURSE STRUCTURE

Lectures

Class sessions will include lectures, panels and in class exercises. Prompt attendance for every session is required, if only as a courtesy to our many guest lecturers. Following each session, students will use Twitter to state a question that advances the topic of discussion. These reflections are not graded but used for continuous course improvement as well as NAAB accreditation documentation, showing evidence of student engagement with specific course material. Additionally it records attendance.

Lectures are divided into the following sections:

Context

The introduction will place the history and traditions of practice in contrast to the rapid changes occurring in contemporary practice. Lectures will cover recent projections on the future of architectural practice through Sustainable Design described in the Architecture 2030 goals, Integrated Project Delivery (IPD), and data-based technology such as Building Information Modeling (BIM).

Research

The relationship between academic and professional research is becoming ever more critical as the level of complexity in practice has grown. These lectures will examine the nature of research, research typologies, and practice-based research.

Law and the Flow of Responsibilities

Lectures will focus on the responsibilities of a professional architect throughout a project from request for proposals (RFP) to construction administration. Lectures will cover challenges in understanding the legal role of the architect in light of changing project delivery methods, building production and performance criteria.

Collaboration, Leadership and the Flow of Relationships

Lectures will describe various modes of collaborative practices and their implications on interdisciplinary work, authorship and other possible areas of negotiation and tension. Case examples will be used to illustrate how stakeholders communicate and resolve issues.

Data and the Flow of Information

Case examples will illustrate how information is formed, tracked and communicated in the form of construction documents and management of changes over time, particularly in the context of data-driven technology and digital media.

Finances and the Flow of Money

This section will concentrate on economic forces that shape building development at multiple scales. Lectures will cover the basic mechanisms of financing and relate their effects to patterns of development. Cost management in traditional and integrated project delivery methods will be discussed.

ASSIGNMENTS

Student projects will be assigned to complement the lecture sequence, readings and panel presentations. Assignments are to be treated as absolute deadlines, no extensions or make-ups will be given except in extenuating circumstances. Note deadlines are heavily front loaded in the semester to avoid conflict with final studio charrette, this requires you to stay on top of deadlines starting on the first day of class.

Context: Local Firm Interview 15%

A list of firms in the Twin Cities will be the source for interviews by teams of two students. Interviews will cover the firm's profile, organization and business structure. A comprehensive graphic and written report is required, forming the basis for a second meeting with the firm later in the practice section of the course.

Research: Research-based Practice Futures 15%

A list of national and international practices will serve as a basis for analyzing research-based practices and understanding how they frame effective research questions. Work will be done individually.

Practice Exercises: Section Synthesis 24%

There are four practice sections: Responsibilities, Collaboration, Data, and Finance. Individual students are required to produce a 500 word essay for each section, synthesizing lectures, readings and panel discussions. This is not an objective report but a critical reflection on the topic that advances the class dialogue and draws connections between in-class material and outside sources where appropriate.

Practice Exercise: Twitter/Convention 6%

AIA Minnesota Convention is the third largest AIA component event in the US. World-class speakers participate and there are knowledge-rich exhibits. Students are required to demonstrate active engagement with at least one speaker and one exhibit through Twitter activity. Additional activity relevant to the course is required through the semester. Criteria for this segment are quantity and relevance.

Practice Exercises: Mini-case Study 35%

This is a continuation of the Firm Interview. Complete a mini-case study highlighting any one of the four practice sections. Case studies are intended to provide an orientation to the complexity of practice by recording the interrelationships of people, contracts, information and money. The mini-case study explores the decision-making process and examines the consequences of a critical moment within a project. Mini-cases produced by students are part of a class-wide dialogue with professionals, selected studies will be presented in class and may be shared beyond the class to firm or others.

WRITING

High-quality, clear and jargon-free writing is expected for all student work. Quality of writing will be consistently used as grading criteria for each exercise, poorly written exercises will be required to revise and resubmit with late penalty. The University Center for Writing <<http://writing.umn.edu/sws/index.htm>> provides excellent support. We recommend you use this resource before you submit work.

REQUIRED MEMBERSHIPS/ACCOUNTS

The following course requirements are intended to facilitate engagement with important organizations in the broad architectural community. If any of the following requirements poses undue hardship, see the instructor during the first week of class.

It is a course requirement that all students register in one or both of the following organizations: American Institute of Architecture Students (AIAS) Minnesota Chapter, Internship Development Program (IDP)

Students are required to have Twitter accounts and are encouraged to use this medium to share articles or thoughts relevant to the topics in the class. The instructor and TA should be added to your “follow” list.

GRADING

Grades will be on a hundred point system. Points will be determined by how well the objectives of the exercise are met and the quality of the execution of those objectives. It is extremely important that you ask questions to clarify the intentions and ground rules for each assignment. Late submissions and revisions are accepted at the discretion of the instructor and are subject to a 20% grade reduction. Team projects will be graded by team, and it is important that work is coordinated between individuals and that each team member participates fully. Peer grading will be factored into the evaluation of team exercises.

The grading for the course is broken down as follows:

Attendance and participation	5%
Context: Firms Interview (team of two)	15%
Research: Research-based Practice	15%
Practice: Section Syntheses (4 @ 6% each)	24%
Practice: Convention/Twitter Activities	6%
Practice: Mini-case Study (team of two)	35%

5621: Professional Practice 2017 Fall Schedule

5621: Professional Practice 2017 Fall SCHEDULE		Rapson 43 (draft 8/29/17)
Week #	Tuesday 1:00-2:15	Thursday 1:00-2:15
Week 1	Context: Introduction/ Past and Present Professional Practice (rc)	Context: Emerging Practices (rc)
Sept 5/7	Firm interviews issued	<i>Reading Friedman, Bernstein</i>
Week 2	Context AXP, EPC, ARE Internship and beyond (andrea, meg parsons)	Research: Research in Practice Panel (stefnee and adam)
Sept 12/14	<i>Reading Fisher</i>	
Week 3	Research: The Nature of Research (rc),	Research: Emerging Research Topics (rc)
Sept 19/21	Firm Interviews due	Research critique issued
Week 4	Responsibilities: Case Beirut 1 (nk)	Responsibilities: Beirut exercise (nk) <u>IN CLASS EXERCISE</u>
Sept 26/28		
Week 5	Responsibilities: Architect Do's and Don'ts (o'connor)	Responsibilities: Programming (rc)
Oct 3/5	Mini-cases issued Research critique due	
Week 6	Responsibilities: Programming exercise: SJU (nk)	Responsibilities: Ethical Dilemmas in Practice (<u>tom fisher</u>)
Oct 10/12		
Week 7	Responsibilities: RFP's and RFQ's (ed kodet)	Responsibilities: Failures: Cases _ Citicorp Hancock (rc)
Oct 17/19		
Week 8	Collaboration: Case Studies Engineers (rc)	Collaboration: Behavioral/Cultural (rc)
Oct 24/26	Section Synthesis due (Responsibilities)	
Week 9	Collaboration: Intellectual Property and Copyright (nk)	Collaboration: Case_Beirut 2 (nk)
Oct 31/Nov 2	Mini-cases due	
Week 10	Data: Emerging Issues of Data Transfer Panel	Data: Construction Sequence & Critical Path: Case Tokyo Forum (rc)
Nov 7/9	Section Synthesis due (Collaboration)	
Week 11	Data: Case_EMP (rc)	No class: required attendance at one convention session (your choice)
Nov 14/16	<i>AIA MN convention ongoing</i>	<i>AIA MN convention ongoing</i>
Week 12	Finance: Client Role (Tom LaSalle)	
Nov 21/23	Section Synthesis due (Data)	Thanksgiving Holiday, No class
Week 13	Finance: Public v Private Development (Chris Wilson, PPL, Kit Richardson)	Finance: Entrepreneurial financial models
Nov 28/30		
Week 14	Finance: Cost Control/Life Cycle Costing (Faithful/Gould)	Mini case discussion with firms
Dec 5/7		
Week 15	Finance: Running a Practice Panel	Exam week, No class: Thurs DEC 15 Final Due Date
Dec 12		Section Synthesis due (Finance), Revisions on any previous exercises due