School of Architecture University of Waterloo Arch 655 - 02 Architectural Professional Practice, Spring 2016 Course Coordinator: John McMinn

9:00 am - 12:45 pm, 1:30 - 5:00 pm Monday - Friday, May 2-6, 2016

INTRODUCTION

This course discusses the nature of professional practice for architects. It examines the roles of participants in the building industry and their responsibilities and the dynamic relationship among stakeholders. The course will examine the theoretical framework of the architect's role in society and how this is realized in the practical world of managing a practice. Topics will include the structure of the profession, regulation and self-governance, ethics, project management, office administration, liability exposure, project control cost analysis and estimating techniques, cost control during design and construction, modes of project delivery and building regulations.

LEARNING OBJECTIVES

- To understand the various instruments used during design, approval, documentation and construction phases of a project.
- To understand the legal and legislative underpinnings of the profession.
- To understand and appreciate the ethical, legal and technical standards of practice.
- To understand the principals and procedures for the management of projects and the ability to apply cost control techniques.
- To develop an awareness of the issues and challenges facing contemporary professional practice
- To explore the meaning and application of ethical conduct in professional and business affairs and its relationship to personal integrity and reputation.
- To understand the application of the Building Code and its impact on design
- To develop an awareness of the many roles and contexts in which architects operate.
- To develop an appreciation for the key role of collaborative thinking and teamwork in the profession

TEACHING APPROACH

The purpose of this class is to introduce the students to practitioners in architecture and the allied professions of Engineering, Landscape Architecture, Interior Design and Property Development. There will be discussions and presentations of a variety of collaborative case studies illustrating the roles that are often played by architects and allied design professions, as well as their collaborative relationships in the integrated design process.

COURSE SCHEDULE

Monday May 2

9:00 am - 12:45 pm - Loft

1.1 INTRODUCTION TO PROFESSIONAL PRACTICE

John McMinn / Rick Haldenby

The theoretical framework of the architects' role in society and how this is realized in the practical world of managing a practice.

Professional practice

- Overview of professional practice
- Defining the profession(s)
- Philosophical underpinnings of architectural practice
- Self-governance
- The public interest

- Architects Act and General Regulation
- Ethics and professional judgement

1:30 - 5:00 pm - Main Lecture Hall

1.2 STRUCTURE OF THE PROFESSION

Lashmi Ollivierre, Leanne Mohammed, Joel Leon, *OAA /* Luc Bouliane, *Architecs Luc Bouliane* Legal and Regulatory Framework

- OAA and other provincial associations national picture
- Code of ethics, complaint review, practice review

Qualification Process

- Professional education
- Canadian Architectural Certification Board
- National Council of Architectural Registration Boards
- Internship and employer/intern relationship
- Professional examinations

Assignment 1 Hand-out

Tuesday May 3

9:00 am - 12:45 pm - Loft

2.1 CONSTRUCTION METHODOLOGIES

Carol Philips, Moryama Teshima Architects

The Construction Contract

- · Modes of delivery
- Design Bid Build
- Design Build
- Construction Management
- Private Public Partnership
- · Forms of contract and architect's role
- Royal Architectural Institute of Canada (RAIC)
- Canadian Construction Documents Committee (CCDC)
- Contract Documents
- · Specifications
- · Bid process

1:30 - 5:00 pm - Main Lecture Hall

2.2 CLIENTS / SERVICES

Tim Scott, Forrec Archtiects Ltd. / Dave Wex, Urban Capital Clients

- · Corporate clients
- · Public sector
- Entrepreneurs and developers
- Individual as client
- · Communities and citizens as clients

Architect's Responsibility

- Client
- Project team
- Community
- Authorities Having Jurisdiction

Wednesday May 4

9:00 am - 12:45 pm - E-Classroom

Assignment 1 DUE

3.1 BUILDING PROCESS / REGULATION

Tom Knezic, Solaris Architecture

Development Permit Process

- Land Use Bylaw
- Planning regulations
- · Development permit

Building Permit Process

- Ontario Building Code objective based
- Authorities having jurisdiction
- Building permit

Accessibility and the Built Environment

- · Principle and rationale
- · Authorities having jurisdiction
- Access design standards
- · Mobility, vision cognitive, hearing

1:30 - 5:00 pm - E-Classroom

3.2 CONSTRUCTION CONTRACT / COST CONTROL

Diarmuid Nash, Moryama Teshima Architects

Scope of Services

- OAA defined scope of basic services, additional services
- Traditional breakdown and implications

The Construction Contract

- The Process: change orders, construction communications, site review reports
- Certificate for progress payment
- Commissioning and turnover

Cost control

- · Overview of building cost estimating
- · In-house estimating
- Value engineering process
- Review methodology used to cost a project

Assignment 2 Hand-out

Thursday May 5

9:00 am - 12:45 pm - Main Lecture Hall

4.1 STRUCTURE OF THE PROFESSION

Walter Moffat, Black and Moffat Architects

Remuneration, Scope and Liability

- OAA Recommended Conditions of Engagement + Schedule of Fees
- · Fee negotiation
- Competition and fees
- Effects on practice and professional organization
- · Liability exposure and liability insurance
- Why cost matters
- Request for Proposal

1:30 - 5:00 pm - Main Lecture Hall

4.2 PRACTICE MANAGEMENT/THE BUSINESS OF ARCHITECTURE / PROJECT ACQUISITIONS

Sydney Browne, Diamond Schmitt Architects Inc. / Merike Bauer, Reigo & Bauer

Practice organization and management

- Modes of Practice; sole proprietorship, partnership, corporate models, joint ventures, joint practice (architecture and engineering)
- Organizational structures
- Operating profitably
- Managing staff

Marketing architectural services

- Key approaches to marketing architectural services
 - Community involvement, politics

Niche markets

Understanding the role of client

- Client expectations
- · Relationships and modes of interaction with client
- Architect responsibilities to project communication
- Client project management responsibilities

Friday May 6

9:00 am - 12:45 pm - Main Lecture Hall Assignment 2 DUE

5.1 STRUCTURE OF THE PROFESSION / ALLIED PROFESSIONS

Meg Graham, superkül / Dave Bowick, Blackwell Structural Engineers Consultant Team / Working with allied professionals

- Core Team
- Specialists/Allied professions; landscape architects, urban design, planners, engineers
- Architect-Consultant Agreements
- Fees for Core vs Specialists
- · Communication with Specialists + Knowledge
- · Engaging allied professionals
- Working with allied professionals
- · Integrated design and collaboration
- · Education of allied professionals
- How allied professionals are governed

The Changing Nature of the Profession and Alternative Modes of Practice

Various roles for architects

1:30 - 5:00 pm - Loft

5.2 IN CLASS FINAL EXAM

RELEVANT READINGS

Ava J. Abramowitz, Architect's Essentials of Contract Negotiation, John Wiley & Sons Inc., 2002

American Institute of Architects, The Architecture Students Handbook of Professional Practice, Fourteenth Edition John Wiley & Sons, 2009

American Institute of Architects, The Architects' Handbook of Professional Practice, Washington DC

American Institute of Architects, Handbook on Project Delivery, Washington DC

American Institute of Architects http://www.aia.org/ Practice of Architecture

Canadian Standard Form of Contract for Architectural Services - DOCUMENT SIX

Canadian Standard Form of Agreement Between Client and Architect (Abbreviated Version) - DOCUMENT SEVEN

Short Form Agreement Between Client and Architect - DOCUMENT EIGHT

Canadian Standard Form of Contract Between Architect and Consultant - DOCUMENT NINE, 2007

Cultural Policy Centre, Set in Stone Building America's New Generation of Arts Facilities 1994-2008, University of Chicago Press,

culturalpolicy.uchicago.edu/sites/culturalpolicy.uchicago.edu/files/setinstone/index.shtml

James P. Cramer, Scott Simpson, The Next Architect A New Twist on the Future of Design, Greenway Communications, 2007

Michael D. Dell'Isola, Architect's Essentials of Cost Management, John Wiley & Sons Inc., 2002

Thomas Fisher, Ethics for Architects 50 Dilemmas of Professional Practice, Architecture Briefs The

Foundations of Architecture Princeton Architectural Press Series 2010

E. Fisk, Construction Project Administration. Prentice-Hall Canada Inc.

Simon Foxall, Good Practice Guide: Starting a Practice, RIBA Publishing, 2006

Brad Hardin, BIM and Construction Management Proven Tools Methods and Workflows Wiley Publishing Inc., 2009

Ralph L. Klein, The Secret of Successful Project Management, Wiley & Sons, Inc.

David Koren, Architect's Essentials of Marketing, John Wiley & Sons Inc., 2005

Raymond Kogan Cara Bobchek, Strategic Planning for Design Firms, Kaplan Publishing, 2007

Barry B. Lepatner, Broken Buildings, Busted Budgets How to Fix Americas Trillion Dollar Construction Industry, The University of Chicago Press, 2007

R. Lewis, Architects? A Candid Guide to the Profession. The MIT Press, Cambridge, MA

R.S. Means, Building Construction Data, RS Means Company Inc. Kingston, MA

Ontario Association of Architects http://www.oaa.on.ca/Practice Bulletins

William M. Piggott, BA. LLB, Paul Sandori Dipl. Ing. Arch., O.A.A., F.R.A.I.C, Bidding and Tendering What is the Law, 4th Edition, LexisNexis Canada, 2009

Andy Pressman AIA, *Professional Practice 101 A Compendium of Business and Management Strategies in Architecture*, John Wiley and Sons Inc.

Royal Architectural Institute of Canada: CHOP The Canadian Handbook of Practice, 2nd Edition, Ottawa 2009

Royal Architectural Institute of Canada: Practice Builders Series (Free for Members)

INTERNET RESOURCES

http://www.goodreads.com/book/show/166443.Petra Blaisse Insid

Outside http://www.insideoutside.nl/

http://www.youtube.com/watch?v=wGaCLWaZLI4&feature=related

EVALUATION

| Course Diary | 20% |
|---|-----|
| Assignment 1 May 2, Due May 4, 8:50 am | 15% |
| Assignment 2, May 4, Due May 6, 8:50 am | 20% |
| Final exam in class, May 6 | 45% |

Total 100%

COURSE DIARY

After each day of the course describe the following:

- A. For each speaker in the course, provide feedback on how effective you think the speaker was in overall communication, and in the depth and clarity of the points covered in their presentation.
- B. Pick one key topic point presented within each lecture during the course of the day and summarize the issue discussed, providing any relevant reference material cited, and implications in professional practice of the particular issue.

The course diary is done individually by each student. It should NOT be done jointly as Assignments 1 and 2 are. The intention is that you discuss your own topic choice and provide your own individual feedback about each lecture / lecturer. The maximum length submission for each day is 1 page typed, so you must organize your thoughts, and provide a thoughtful, structured response. Point form elements for some aspects of each entry may be helpful and are recommended.

The Course Diary must be submitted each day during the course on LEARN, and no later than the following morning by 8:30 am.

ASSIGNMENTS AND HAND-IN

Assignments 1 and 2 are to be done in groups of four. Groups will be established and recorded on the first day, and you are required to stick with the same group for both assignments. You are expected to work collaboratively doing the required research, comparing course notes and researching provided references, as well as doing additional relevant research, as required by the assignment questions.

Assignments 1 and 2 are to be handed in as typed paper copies. Hand-written assignments will not be accepted. Assignments are to be handed in at 8:50 am on the due date, prior to the 9:00 am start of class. The assignments test your knowledge of the relevant portion of the course they cover - Assignment 1 covers the Monday class, Assignment 2 covers Tuesday, Wednesday, and the final exam covers Thursday, Friday as well as the full course. In addition, the assignments will be practice runs for questions on the final exam, so active participation within your group completing the assignments will be critical, for success in the final exam.

FINAL EXAM

The final exam will take place on Friday afternoon May 6.1:30 - 5:00 pm. The exam will be done individually and will be open book, and will cover material from the full course. A passing grade in the Arch 655 - 02 section of the course is contingent on your receiving a passing grade on the final exam. Exam failure constitutes course section failure.

LATE WORK

All assignments are due in class at the specified time and date. Arch 655 project deadlines can be extended only in cases of illness or incapacity, or documented special circumstances. Requests for such extensions must be made before the project deadline to the course coordinator, using the Request form/Extension form available from the front office, and be accompanied by a medical certificate when appropriate.

Work submitted after the hand in date and time without a confirmed extension will be subject to a penalty of 5% per day thereafter, and after five business days a mark of zero will be recorded.

SCHEDULE AND COURSE ATTENDANCE

The course runs Monday – Friday, May 2-6:

9:00am-12:45 pm, 1:30pm - 5:00 pm

The course sessions will include lectures, and interactive discussions and exercises. Class attendance and participation is mandatory and will be noted and evaluated by the course coordinator and, via the Course Diary.

COMMUNICATION WITH COURSE COORDINATOR

During the course, the coordinator may need to send communications to ARCH 655 students. This will be done via LEARN. Any official correspondence should be addressed to the course coordinator at icmcminn@uwaterloo.ca

ACADEMIC INTEGRITY AND AVOIDANCE OF ACADEMIC OFFENSES:

In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. [Check www.uwaterloo.ca/academicintegrity/ for more information.]

Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70, Student Petitions and Grievances, Section 4.

<u>www.adm.uwaterloo.ca/infosec/Policies/policy70.htm</u>. When in doubt please be certain to contact the department's administrative assistant who will provide further assistance.

Discipline: A student is expected to know what constitutes academic integrity [check www.uwaterloo.ca/academicintegrity/] to avoid committing an academic offence, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course instructor, academic advisor, or the undergraduate Associate Dean. For information on categories of offences and types of penalties, students should refer to Policy 71, Student Discipline, www.adm.uwaterloo.ca/infosec/Policies/policy71.htm. For typical penalties check Guidelines for the Assessment of Penalties, www.adm.uwaterloo.ca/infosec/guidelines/penaltyguidelines.htm.

Appeals: A decision made or penalty imposed under Policy 70 (Student Petitions and Grievances) (other than a petition) or Policy 71 (Student Discipline) may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72 (Student Appeals) www.adm.uwaterloo.ca/infosec/Policies/policy72.htm.

Note for Students with Disabilities: The Office for Persons with Disabilities (OPD), located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the OPD at the beginning of each academic term.