Design Management

Design is all around us and subtly influences our daily personal and business lives. Practitioners who understand the attributes, quantitative and qualitative aspects and process of achieving successful project design can positively influence the success of their Projects and improve the quality of the built environment in the process.

This course distinguishes between objective and subjective design qualities and the effect of both on outcomes. It identifies and explores design attributes that positively influence a projects performance and the pitfalls that can derail a project. We will discuss how to build and manage a successful design team that can reliably deliver a quality project. These issues will be examined as applied during the design process and across several real estate product types with focused case studies looking at what is successful and yields results while acknowledging efforts that were less successful and why.

The following is a week by week description of the course:

Week 1- Design Team Creation and Management
The roles and the organization of design team members will be explored within the context of project schedules and objectives. Success or missteps are ultimately dependent on the selection and organization of team members. Methods of identification and selection of team members will be evaluated. Owner’s interactions with the design team will be considered as they impact optimal results. The importance of design on perception and marketing will be considered. The phases of the design process and schedule are defined and evaluated.

Week 2- Effective Design as part of the Regulatory Approval Process
Projects don’t go forward without having designs that comply with regulations and secure sufficient support from needed stakeholders. Design team member roles in the process, common pitfalls and pathways to success we be reviewed. The essential roles of Civil, Environmental, Traffic engineers and Architectural design we be considered. Understanding the right amount of design needed to secure approvals. Effective techniques for Engineers and Architects to support an Owners approval process are considered.

Week 3- Site Plan Design and its results
Having a site plan that address the municipal requirements functional needs, and users’ needs is essential to moving a project forward with a predictable time frame, and acceptable economic return. A small scale retail examples addressing roadways, curb cuts, view corridors, signage, parking and loading and other aspects will be explored. A Large-scale master planned development will be evaluated and the elements of its design exploring the difference between superficially attractive design and a successful project will be considered.
Week 4-Conceptual Design and its importance in the Design Process
Conceptual design involves the start of the design process showing design inspiration and expression for the first time, all within the context of defining the potential components and key functional issues such as horizontal and vertical arrangement, size of uses, public, pedestrian and vehicular access storage and sufficient provisions for delivery's and rubbish removal. We will consider the future impacts of ride sharing and autonomous vehicles impact on design.

Week 5 & 6 – Architectural Design and its contribution to Project Value creation
The architectural design can attract or repel buyers and users and is often used to project a sense of what is within, reinforcing image and brand. Different product type designs having different design objectives that will be explored. Quantitative aspects of program and efficiency and how they affect outcomes will be considered. Industry standards of area measurement, program definition is defined and their importance illustrated. We will contrast a limited service hotel against a luxury resort’s design. Understanding the main points of perception from arrival and entry, common uses and special places similarities and differences between these very different offerings. We will consider an Office buildings formulaic design vs innovation and change.

Week 7- Technical Design and Engineering what works and what doesn’t
Details matter, they influence the functionality and cost of designs. Inspired designers know what’s best for the projects objectives. The balance between costs and performance will be explored. Material selections and their impact on design. Areas that most users interact with, entrances, common areas, transitional spaces and restrooms that are often not considered important will be understood. Maintenance and service considerations on cost and productivity. Allocation of design budgets and reserves and how they are impactful.

Week 8- The Architect Engineer interface and its impact on project success
In this session, we evaluate the contractual and practical relationship between an Architects his sub consultant team members, third parties including owner direct consultants and the owner’s representative. The importance of basis of design statements, energy efficiency issues and the maintenance of discipline and efficiency in the design process. The place of newer processes such as CAD, BIM their use and limitations, ownership and risk mitigation will be evaluated. We will discuss building systems and how choices are made.

Week 9- The Power of Project Design and Branding
To most people, Design is what they see and how they feel about it. In reality it is a small part of project expenditures and timing but it is the most visible and can be very powerful in influencing the success of a project. We evaluate both small scale design successes as simple a as a road side Taco stand and also evaluate the design attributes of larger and more complex projects. We will consider amenities that are expected by Product type. Style and its influence will be considered. The impact of illustrative techniques and Virtual design and virtual reality will be considered.
**Week 10- Book report Essays and Discussion**
In this concluding class, we will review each student book report essay considering one of the four books describing relevant issues in detail the process of Design and Construction and meaningful lessons gained from these candid stories.

At the beginning of the quarter each student will select one of the below books to read and create their essay which will be submitted in week 9.

1. **Building Seagram** - Phyllis Lamperts scholarly history of the design and construction of one of Mies Van der Rohes most famous buildings.
2. **High Rise** - Jerry Adler’s book describing how 1,000 men and women worked around the clock for 5 years and lost $200 million dollars building a skyscraper.
3. **Skyscraper the making of a building** - Karl Sabbaghs story of the design and construction of Worldwide Plaza. Sabbagh is also the creator of the PBS TV series Skyscraper which features this project.
4. **Hongkong Bank The building of Norman Fosters Masterpiece** – Stephanie Williams’s narrative of the six-year effort to create one of the world’s most expensive buildings.

**Grade Determination**
- Homework & Assignments 30%
- Class Participation 40%
- Final Essay 30%