ADVANCED URBAN DESIGN SKILLS
OBSERVING, INTERPRETING, AND REPRESENTING THE CITY

INSTRUCTORS:
Mary Anne Ocampo | maocampo@mit.edu | 617.923.7229 | Office Hours: dusp.mit.edu/officehours
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TAs:
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Yingu Pan | yingu@mit.edu

SCHEDULE
Friday 9:00 am - 1:00 pm | Class 10-485
URL: https://mit.zoom.us/j/99508904277

Wednesday 6:00-9:00 pm | Recitation 10-485 | 9-554 computer lab
URL: https://mit.zoom.us/j/96544013696

RELATED COURSES
For students without a prior design degree:
• Both 11.328 and 11.329 courses are recommended for urban design studios and practica that have a design component.
• Both 11.328 and 11.329 are required for the Urban Design certificate.

COURSE DESCRIPTION
Advanced Urban Design Skills is a studio-based course in planning and urban design that builds on the foundation acquired in 11.328 (Urban Design Skills) by engaging in creative exploration of how design contributes to resilient, just, and vibrant urban places.

The course aims to supplement existing courses that cover theory and history of city design and planning by preparing students without design backgrounds for the studio sequence. The course will concentrate on the design of urban spaces, informed by (but independent of) the demands of decision-making frameworks, economic forecasting, quantitative analysis, or planning implementation.

Through the planning and design of a mixed-use development project, students will creatively explore spatial ideas and utilize various digital techniques to communicate their design concepts, giving form to strategic thinking. Students will focus on Cambridge, Massachusetts, as a learning laboratory for exploration, working in groups to prepare comprehensive design proposals that build on the relationship among stakeholder concerns, environmental forces, and other factors that shape cities.

Through field analysis, discussions, and physical design exercises, all focusing on the iterative process of design and representation, students will learn to draw on their senses and develop an ability to infer, inquire, and investigate hypotheses about how the environment is used, valued, and for whom. Beyond familiarizing students with the lenses and methods of urban design, the course will equip them with an understanding of the social, economic, and environmental implications of their decisions. Invention, creativity, and innovation will be required.
FORMAT AND REQUIREMENTS
The course will develop around three major themes: observing the city, interpreting the city, and representing the city. Walks and field surveys around Cambridge will focus on developing a planning and physical design vocabulary, and contribute to observation tools for reading the city. Students will learn to interpret patterns that influence the built environment with analytic mapping exercises. Finally, through the use of urban design tools used to communicate ideas graphically, students will learn to represent future visions of the built environment. Each week, the scheduled course time will consist of walks, recitations (presentations and skill-developing sessions), and studio. Lectures will be integrated throughout the semester to focus on key urban design topics.

Coursework is divided into three categories:

**Sketchbook/Observation Journal:** Students will keep a sketchbook to record their observations of the built environment during walks, lectures, and as part of their design process for the exercises assigned in the course. Up to 10 pages of your sketchbook will be submitted at the end of the term.

**Recitation Exercises:** During skill-development sessions, students may be asked to complete short exercises that will be handed in to the TAs at the end of each recitation.

**Assignment:** Students are required to complete one assignment comprised of multiple parts that synthesize the skills acquired in the course. The assignment requires students to work in groups and analyze a local area within its broader urban context, and develop a design proposal that includes the integration of building form, mobility infrastructure (a network of streets and paths), and open space.

COURSE OBJECTIVES
- Learn methods of studying the urban environment by physical observation and analysis. These methods include:
  - “Reading” the built environment in its current urban condition
  - Understanding the history and dynamics of a place, when it was built and for whom
  - Studying the physical and sensory indicators of economic and social change, trends, challenges, and opportunities
- Develop design thinking skills to understand the physical structure of the city across scales
- Develop the ability to analyze built form in 3 dimensions, understand relationships of building use to physical form, and the impacts of building form on the public realm
- Understand how zoning requirements affect building form and site planning
- Acquire techniques of recording and representing what is observed and enhance the ability to communicate urban design ideas graphically and through written form
- Understand that urban design and planning ambitions are influenced by a wide variety of factors: physical, political, economic, social, and cultural
- Become familiar with studio culture and the development process of design proposals, aspects that will prepare students to engage in advanced urban design skills and planning studios within DUSP
CRITERIA FOR EVALUATION

15% Class Involvement (comprised of attendance and discussions)*
10% Sketchbook
25% Assignment - Part A
50% Assignment - Part B

*Attendance is mandatory for all classes and recitations. Any known absence must be arranged with the instructor or teaching assistants in advance and work is expected to be turned in on time or per alternate arrangements.

SUGGESTED MATERIALS

Advanced Urban Design Skills is a studio, meaning there is learning by doing. Analog representational methods will be part of the course with hand drawing. Below is a suggested list of materials that will be used throughout the semester:

- Sketchbook (bound) – sizes that could work: 5” x 8.5” or 7.5” x 10”
- Roll of white trace paper (minimum 12” width)*
- Black Pen - Pentel Felt-tip s (your choice)
- Markers – Prismacolor (black, and different tones of grey, green, blue, yellow, etc.)*
- Color pencils – Prismacolor*
- Mechanical Pencils (soft lead; F and H)
- Drafting dots or masking tape (optional) *
- Engineering scale (decimal inches) *
- Eraser
- Graphic reference reader (on canvas)
- Computer mouse (will help with using graphics software)

*Teams can share supplies.

SOFTWARE

In the design field, professionals are required to be fluent in software in order to communicate and represent their ideas. This course will cover the fundamentals of programs that are commonly used in the industry. Since teaching software is not the main objective of the course, students are expected to invest their personal time to continuously improve their skills. Below is a list of programs that will be used during the semester:

- Adobe Illustrator, InDesign and Photoshop
- ArcMap GIS
- Sketchup *
- Rhino

*Note that the Canvas class site contains some free online tutorials for these applications. Many of these programs are provided for free or at a discount by the institution and its partners. Please see the CRON website http://cronlasso.mit.edu/cron/p.lasso?t=1:0:0 for additional information.

RESOURCES

MIT Visualization, Inquiry, and Analysis (VIA) Learning Lab https://vialab.mit.edu/
The Visualization, Inquiry, and Analysis (VIA) Learning Lab develops resources for critical and contextual pedagogy in mapping, design, and data science for city planners. Online tutorials are available on the website.

Eric Robsky Huntley
Lecturer in Urban Science and Planning ehuntley@mit.edu // Book Office Hours
MATERIALS
Readings and other auxiliary resources will be distributed in class. They will be updated weekly and can be downloaded from the class website:
Canvas:  https://canvas.mit.edu/courses/10029

SCHEDULE

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<th>MODULE 2: 11.329J</th>
<th>Assignments</th>
<th>Begin</th>
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<th>Format</th>
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<tr>
<td>WK 1</td>
<td>Wed 27-Oct Welcome and Course Objectives</td>
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<td>Introduce: Assignment 2 Part A Building Typologies Presentation</td>
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<td>Fri 29-Oct Walk 6: Central Square and Cambridgeport Project Site</td>
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<td>WK 2</td>
<td>Wed 3-Nov Walk 6: Central Square and Cambridgeport Project Site</td>
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<td>Fri 5-Nov Walk 6: Central Square and Cambridgeport Project Site</td>
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<td>WK 3</td>
<td>Wed 10-Nov Studio Introduce Assignment 2 Part B</td>
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<td>Fri 12-Nov Studio Introduce Assignment 2 Part B</td>
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<td>WK 4</td>
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<td>WK 5</td>
<td>Wed 24-Nov Studio Introduce: Assignment 1 Part C</td>
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<td>Fri 26-Nov Studio Introduce: Assignment 1 Part C</td>
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<td>WK 6</td>
<td>Wed 1-Dec Studio Introduce: Assignment 1 Part C</td>
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<td>Fri 3-Dec Studio Introduce: Assignment 1 Part C</td>
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<td>WK 7</td>
<td>Wed 8-Dec Studio (Last day of classes)</td>
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<td>Fri 10-Dec Assignment 2 Final Review (With guest critics)</td>
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*Semester schedule subject to change.
Readings and online tutorials should be completed and viewed for dates listed.
Anti-Racist Statement
Urban design has long served as a tool of white supremacy, where oppressive polices, practices, and attitudes are translated into built form. This course is committed to identifying how systems of oppression have been instrumentalized through urban design, and seeking out examples of spatial practice that support liberation and racial justice.

Land Acknowledgement Statement
MIT acknowledges Indigenous Peoples as the traditional stewards of the land, and the enduring relationship that exists between them and their traditional territories. The land on which we sit is the traditional unceded territory of the Wampanoag Nation. We acknowledge the painful history of genocide and forced occupation of their territory, and we honor and respect the many diverse indigenous people connected to this land on which we gather from time immemorial.

Inclusive Classroom
MIT values an inclusive environment. We hope to foster a sense of community in this classroom and consider this classroom to be a place where you will be treated with respect. We welcome individuals of all backgrounds, beliefs, ethnicities, national origins, gender identities, sexual orientations, religious and political affiliations – and other visible and nonvisible differences. All members of this class are expected to contribute to a respectful, welcoming, and inclusive environment for every other member of the class. If this standard is not being upheld, please feel free to speak with us.

Special Accommodations
MIT is committed to the principle of equal access. Students who need disability accommodations are encouraged to speak with Disability and Access Services (DAS), prior to or early in the semester so that accommodation requests can be evaluated and addressed in a timely fashion. If you have a disability and are not planning to use accommodations, it is still recommended that you meet with DAS staff to familiarize yourself with their services and resources. Please visit the DAS website for contact information.

If you have already been approved for accommodations, class staff are ready to assist with implementation. Please inform Mary Anne Ocampo and Marie Law Adams, who will oversee accommodation implementation for this course.

Academic Integrity
In this course, I will hold you to the high standard of academic integrity expected of all students at the Institute. I do this for two reasons. First, it is essential to the learning process that you are the one doing the work. I have structured the assignments in this course to enable you to gain a mastery of the course material. Failing to do the work yourself will result in a lesser understanding of the content, and therefore a less meaningful education for you. Second, it is important that there be a level playing field for all students in this course and at the Institute so that the rigor and integrity of the Institute’s educational program are maintained.

Violating the Academic Integrity policy in any way (e.g., plagiarism, unauthorized collaboration, cheating, etc.) will result in official Institute sanction. Possible sanctions include receiving a failing grade on the assignment or exam, being assigned a failing grade in the course, having a formal notation of disciplinary action placed on your MIT record, suspension from the Institute, and expulsion from the Institute for very serious cases.

Please review MIT’s Academic Integrity policy and related resources (e.g., working under pressure; how to paraphrase, summarize, and quote; etc.) and contact me if you have any questions about appropriate citation methods, the degree of collaboration that is permitted, or anything else related to the Academic Integrity of this course.
Graduate Students: GradSupport
As a graduate student, a variety of issues may impact your academic career including faculty/student relationships, funding, and interpersonal concerns. In the Office of Graduate Education (OGE), GradSupport provides consultation, coaching, and advocacy to graduate students on matters related to academic and life challenges. If you are dealing with an issue that is impacting your ability to attend class, complete work, or take an exam, you may contact GradSupport by email at gradsupport@mit.edu or via phone at (617) 253-4860. Website: https://oge.mit.edu/development/gradsupport/