Course Overview
This course will expand students' representation and visual communication abilities by introducing a variety of graphic techniques that emphasize visual analysis and narrative. Course content will draw examples from the fields of architecture, graphic design and information design in order to equip students with representational techniques that can enrich their analytical thinking and communication skills.

Over the course of six weeks, Lecturers will introduce principles of visual analysis and graphic excellence through lectures and reading assignments. Students will draw on these techniques to tackle one graphic representation exercise per week. The content for the exercises will focus on Boston City Hall, City Hall Plaza and the buildings surrounding it.

The techniques covered in this course build on traditional architectural representation methods such as plan, section, elevation, axonometric and perspective; and explore advanced methods for representation. It is expected that students have a strong facility with these drawing types and understanding of their deployment. Students are required to have a strong working knowledge of Adobe Illustrator, InDesign, Photoshop and at least one 3-D modeling program. The focus of this course is on the principles of graphic representation. Course content will emphasize the theory and design methodologies of representation, not software tutorials.

Class time will be devoted to lectures, work sessions and pin-ups.

Course Policies

Attendance
Class will meet two times a week, on M/W or Tu/Th. Class attendance and completion of all assignments are mandatory. Four absences will constitute an automatic failure, three will result in a full letter grade penalty for the course, and two may result in a partial grade deduction.

Grading
In accordance with Northeastern School of Architecture grading policy, grades will be distributed according to the scale found online here.
Assignment grade breakdown is as follows:
Exercise 1: 15%
Exercise 2: 15%
Exercise 3: 15%
Exercise 4: 15%
Exercise 5: 15%
Final Review (revisions to Exercises 1-5): 15%
Readings, effort, attendance and class participation: 10%

Sketchbook
Students are required to make sketches, and take visual notes during in-class lectures. Note-taking on the computer is not permitted.

Texts
There are two texts that are highly recommended for this course and that will serve as reference books as you continue in the architecture program:
The Visual Display of Quantitative Information by Edward Tufte
Thinking with Type by Ellen Lupton
These are available at most local bookstores or online book sellers such as amazon.com.
Additional readings will be provided to the students by the instructor as needed.

**Resources**
The student is responsible for completing each assignment in a timely manner and is also responsible for the output of the work and the costs involved. The instructors rely on eMail as a form of communication with the class. Important information about class events, assignment hand-ins, and general queries will be handled in this manner. As such, the student is required to check their eMail accounts at least once a day for such information. In addition, we will be using this web site to post items such as assignment PDF’s, links to readings and other items of interest. Students should be sure to keep track of information as it is posted to the site, even if it is not specifically addressed by their instructor. You may want to subscribe to the RSS feed for the site in order to keep on top of when things are posted. To find out how to subscribe to an RSS feed click [here](#).

In addition to course readings, it is an essential part of this course that you become familiar with several on-line sources for information on both computer-aided design and architecture. The internet provides many directories and resources that can both inform you and answer questions in times of need. A select few of these will be linked to on the course web site.

**In-class Work Sessions**
Instant Messaging (IM) during class time will not be tolerated, nor will viewing any kind of media that falls outside the content of the class. This time spent in class is intensive and should be spent on class assignments. If the instructor observes any IM sessions, or the like, in class, the student will initially be warned, any further reprimand will result in a grade deduction for that particular assignment. In order to facilitate this, each session will be instructed to disable their wireless connection to the NUWave system 15 minutes into class, or after an introductory lecture.

**Software**
If students do not already have them, they are responsible for purchasing the Adobe Creative Suite and a 3D modeling program of their choice.

**Digital Storage**
Any information that you create on the computer is susceptible to erasure. It is therefore in the students best interest to invest in at least two methods of backup. Northeastern’s [MyFiles](#) offers 2 GB for this use. In addition, the purchase of a USB flash drive for the storage of digital files, and transfer to the printers is recommended. Image files can be large, so the more storage space on the drive, the better. [Pantone](#) offer monogramming on the drive for easy identification. iPods can also be set to operate as external drives. Information on how to do this is [here](#). It is also advisable to keep a backup copy of your files on a CD or DVD. Loss of information relating to a project due to lack of backup will not be considered an acceptable excuse.

**Printing**
For each assignment, you will be required to submit both paper and digital files. This course relies on a number of output options for final hand-in, but also as an ongoing requirement during the assignments. The student is responsible for the printing of your work and the costs involved. The following are the available options for printing:
- **Inkjet Printers**: Small inkjet printers are a good option for day-to-day prints. Sharing the cost of a printer with fellow classmates can be a cost-effective solution to output.
- **School of Architecture**: There are two large format plotters, and an 11 x 17 color laser in the Ruggles Studio. You may use them yourselves on a first come, first serve basis. This is the easiest and most convenient method for large scale plotting. See the instructions [here](#) for printing information.
- **Off-Campus Printing**: There are multiple off-campus printing services that will plot PDF files, such as Copy Cop, Gnomon Copy, Kinko’s and BFS Printers. Many times these chain-service centers are open 24-hours a day, however in most cases they require a 24-hour period to process the print and are extremely expensive.

**File Naming**
You will be required to submit files along with prints for each assignment. These files should be named as follows: assignment number-lastname.filetype (for example: 01-yourname.pdf). Files named incorrectly will not be accepted.

**Academic Honesty**
Northeastern University is committed to the principles of intellectual honesty and integrity. All members of the
Northeastern community are expected to maintain complete honesty in all academic work, presenting only that which is their own work in tests and assignments. If you have any questions regarding proper attribution of the work of others, contact your professor prior to submitting work for evaluation.

**Additional Resources**
Maps, data and digital models of the City of Boston and Copley Square:
- The Boston Atlas
- Digital Models
- Pictograms:
  - AIGA Symbol Signs
  - National Park Service Map Symbols
- Color Resources:
  - Kuler
  - COLOURlovers
  - Color Brewer
- Other References:
  - Ellen Lupton-Thinking With Type
  - The Work of Edward Tufte

**Flickr Upload: How to submit your work**
You are required to submit digital files along with prints for each assignment. These files should be named as follows: assignment number-lastname.filetype (for example: 01-yourname.jpg). Files named incorrectly will not be accepted. Digital files must be uploaded to your flickr account and submitted to this course's flickr group. Files that are emailed to the instructors will not be accepted.
Click [here](#) to setup a free flickr account.

**SUMMER 1 - Links will be updated weekly**

**Exercise 1**
If you are in the **Monday/Wednesday** session, click [here](#) to upload your exercise to the flickr group.
If you are in the **Tuesday/Thursday** session, click [here](#) to upload your exercise to the flickr group.

**Contact**
**Summer 1: Monday/Wednesday Class**
Olga Mesa
omesa@risd.edu

**Summer 1: Tuesday/Thursday Class**
Anthony Piermarini
ajp@studioluz.net

**Week 1: Course Introduction**
May 11/12
Lecture Course Introduction and Overview

May 13 (Thursday Session) - No Class

**Exercise 1**
Using any mapping techniques, students are to create a drawing that describes a path from their home to their desk. In addition, each student is required to visit Boston City Hall and City Hall Plaza in preparation for the exercises throughout the semester. During the visit, create at least 3 pages of high quality sketches in your sketchbooks documenting the area. Include the area bound by Cambridge Street, New Sudbury Street, Congress Street, and State Street. Photographic documentation is encouraged but will not replace or be used in lieu of the sketchbook drawings.

**Week 2: Representation Basics**
May 17/18
Lecture Best Practices for typography, color, lineweights, legibility and relationships between text and image
Reading Assignments Thinking with Type p. 13-37, 80-85, Envisioning Information p. 81-95
May 19/20

Exercise 2 Students will implement the techniques and concepts introduced in the lecture as well as the readings to create the following: axonometric or annotated aerial photo of Boston City Hall, City Hall Plaza and its context in 11x17 format with careful attention to typeface selection, spacing, color, and line-weights. The drawing must be to scale and include at least the area bound by Cambridge Street, New Sudbury Street, Congress Street, and State Street. Include a north arrow and graphic scale. Write a 1-page statement describing your approach and the techniques you used to achieve your goals. Begin in class, finish for homework.

Students are to consider the development history of Boston City Hall and City Hall Plaza with careful attention to line quality, labeling, color, legibility and narrative. Themes that could be explored include the evolution of the shoreline, buildings, and transportation infrastructure.

Week 3: Data Maps

May 24/25

Lecture Diagrams that use space and environment as the primary organizing principle

Pin-Up Exercise 2

Reading Assignments The Visual Display of Quantitative Information p. 16-27, Maps-Finding Our Place in the World p. 207-253

May 25/26

Exercise 3 Students will use one of the techniques introduced in the lecture to create an informational data map of the area in and around Boston City Hall in 11x17 format with careful attention to line quality, labeling, color, legibility and narrative. Define the specific data filters to work with, for example: traffic flows, light and shadows, environmental conditions, programmatic shifts, infrastructure, etc. Discuss these filters with your instructor for clarity of intent. The diagram type can be a plan, axon or hybrid. Write a 1-page statement describing your intended message/narrative and the techniques you used to express it. Begin in class, finish for homework.

Week 4: Perspective and Narrative

May 31 / June 1

Lecture Survey of Sectional and Perspectival Representation Techniques (with an emphasis on narrative and meaning)

Pin-Up Exercise 3

Reading Assignments Practice: Architecture, Technique and Representation p. 1-17, Architectural Representation beyond Perspectivism p.21-39

June 2/3

Exercise 4 Students will use the combination of section and perspective techniques introduced in the lecture to create a perspective illustration describing the relationship between human activity/use and the spatial character of Boston City Hall and City Hall Plaza in 11x17 format with careful attention to the relationship between representation technique and narrative/meaning. Students must identify a specific theme, story or characteristic associated with the Area and clearly articulate it in the illustration (generic architectural perspectives are not acceptable.) Write a 1-page statement describing your intended message/narrative and the techniques you used to express it. Begin in class, finish for homework.

Week 5: Time Series: Space, Sequence and Experience

June 7/8

Lecture Diagrams that integrate time and space to describe spatial sequence and human experience

Pin-Up Exercise 4

Reading Assignments Representation of Places p. 49-61, Le Corbusier's "Rule of Movement" at the Carpenter Center p. 114-125

June 9/10

Exercise 5 Students will use one of the techniques introduced in the lecture to create a diagram or storyboard describing the experiential sequence through Boston City Hall and City Hall Plaza in 11x17 format with careful attention to line quality, labeling, color, legibility and narrative. The diagram type can be a storyboard, hybrid diagram-storyboard or 30-second animation/film. Write a 1-page statement describing your intended message/narrative and the techniques you used to express it. Begin in class, finish for homework.
Week 6: Time Series: Change and Evolution
June 14/15
M/T: Lecture Diagrams that use time as the primary organizing principle to describe changing spaces, buildings and environmental conditions.

Pin-Up Exercise 5

Readings: Envisioning Information p.97-119, Challenging the Pictorial: recent Landscape Practice p.110-120, Practice: Architecture, Technique and Representation p.31-45
June 15/16

Exercise 6 Students will use one of the techniques introduced in the lecture to create diagram(s) describing the development history of Boston City Hall and City Hall Plaza in 11x17 format with careful attention to line quality, labeling, color, legibility and narrative. Themes that should be explored include the evolution of the topography, urban morphology, infrastructural changes, etc... The diagram type can be based on an exploded axonometric or series of plans (small multiples) interactive website, or animation (30-60 seconds). Write a 1-page statement describing your intended message/narrative and the techniques you used to express it.

Week 7: Portfolio Workshop
June 21/22
M/T: Workshop Portfolio Design

Pin-Up Exercise 6
June 23/24

Working Session

FINAL REVIEW EXHIBIT
M/T June 28/29 - Schedule and Location To Be Determined
Discuss Possibility of a Saturday Review.