How the course works (Attendance/Class Participation):

This is a course where you learn the content in class, which means student participation is expected and encouraged. Class time will consist of a mix between, short lectures, large and small group discussions, presentations, hands on activities, and/or field work. Students must come to class prepared to discuss the readings and/or presentation for that week. If you are going to be absent, it is still your responsibility to make sure your assignment is on time. I will not provide lecture notes to students. This is a studio class, and if you are not here, your chances of succeeding in this class are not good.
ARCH 2501 Design Communication 1  
*Dalhousie University*  
*School of Architecture*  
*Fall 2019*

**Class Time:** Thursday, 2:35pm to 5:25pm  
**Room:** IND. ENG. & CONT. ED. 121, Sexton Campus  
**Course Instructor:** Ken Kam  
**Course T.A.:** Lauren Abbass, Yan Yuan  
**Office:** HA-15 (Ralph M. Medjuck Building)  
**Contact:** 494 3283, ken.kam@dal.ca  
**Credit hours:** 3

### Calendar Description

This course studies principles and techniques for documenting, analyzing, and presenting characteristics of the built and natural environments. Using manual and digital media, students learn freehand drawing, mapping, and photographic narrative.

### Additional Description

Architects, scientists, political activists, manufacturers, and others employ a variety of visual tools to study and engage with the world. Students in this course learn to evaluate maps, simple technical drawings, and other visual devices, and use them to analyze actual situations and to generate and present innovations. Hands-on work is emphasized, but no prior experience in drawing or design is needed.

### Learning Objectives

- learn to observe, document, and present formal and spatial qualities of the built environment  
- gain an awareness of manual media for describing the built environment

For this a three-credit-hour course, each student is expected to spend approximately nine hours per week on course-related activities, including classes, readings, and assignments.

### Assignments

Students must complete all assignments to finish course. More details during class.

### Equipment and Materials: TBA

- Dalhousie University and the Faculty of Architecture and Planning provide student access to digital software.  
- Printing is available from the Faculty’s print shop and commercial printers (Staples, Wade, etc.).

### Evaluation Criteria and Standards

Assignments are graded by the instructors, in consultation with the course assistants. Each assignment is evaluated according to two basic criteria:

- ability to observe, document, and present formal and spatial qualities of the built environment  
- awareness of manual media and techniques for describing the built environment

There are no group assignments in the course, so all assignments will be assessed individually. There are 12 assignments, each worth from 10% (best 10). Undergraduate standards are noted in the undergraduate calendar (Academic Regulations > 17.1):

- **Excellent (A–, A, A+):** Considerable evidence of original thinking; demonstrated outstanding capacity to analyze and synthesize; outstanding grasp of subject matter; evidence of extensive knowledge base.  
- **Good (B–, B, B+):** Evidence of grasp of subject matter; some evidence of critical capacity and analytical ability; reasonable understanding of relevant issues; evidence of familiarity with the literature.  
- **Satisfactory (C–, C, C+):** Evidence of some understanding of the subject matter; ability to develop solutions to simple problems; benefiting from his/her university experience.  
- **Marginal pass (D):** Evidence of minimally acceptable familiarity with subject matter; critical and analytical skills.  
- **Inadequate (F):** Insufficient evidence of understanding of the subject matter; weakness in critical and analytical skills; limited or irrelevant use of the literature.

Without medical documentation, the grade for a late assignment will be deducted 5% per weekday (more detail in class). No assignments will be accepted after Dec.5.

### Student Rights and Responsibilities

Please see the School’s “Academic Regulations” page (tinyurl.com/dal-arch-regulations) for a summary of university policies affecting academic courses:

- Accommodation Policy for Students  
- Academic Integrity  
- Code of Student Conduct  
- Services Available to Students
FALL 2019

Freehand Drawing
1. Freehand Sketch & Contour Drawings
2. Perspectives
3. Tone
4. A Wanderer's Sketchbook

Mapping
5. The Visible City
6. The Hidden City
7. The Invisible City
8. The Urban Map

Photographic Narrative
10. Photographs - a time machine
11. The Approach
12. A Narrative Structure
13. Final Thoughts
Objectives:
Investigation through Freehand Sketching and Contour Drawing | Looking at Landscapes: careful observation and description, construction lines, expressive and communicative lines, control, pressure, line weight, placement on the page.

Exercise 1.1: Freehand Sketch Exterior Elevations
You will be assigned to one of three downtown Halifax locations to sketch a series of exterior building elevations/facades. Include a 100-word companion text to describe what you have learned from the sketches.

General process (more details are presented during class):
1. How to build a drawing.
2. Knowing the “Tools of the Trade”.
3. Understanding - Line stroke, quality, weights, and types.

Goal:
Using drawing as a mean of description. You will be able to analyze and sketch/draw well-proportioned building elevations, and apply proper line properties.

What you need:
- Wood graphite pencils (4H - 8B)
- Multiple sheets of letter size paper

Readings:
Freehand drawing

Drawing of Palazzo Chiericati, Vicenza, Italy, scanned at six different stages from guidelines to finished drawing

How to build a drawing

A building is an assemblage of elements layered one on another. Upon conceptual and physical foundations rest more complex frames that, in turn, support increasingly detailed elements and ideas. The building materializes as a whole so that, in the end, the overall and the detail interlink as a totality.

Likewise, when drawing at a site, it is helpful to start with the framework and then allow the drawing to grow into a complete entity. Developing out of a process, the drawing in turn reinforces the process of seeing layers and hierarchies and of seeing the comprehensive interrelationship of detail and whole.

For more practical reasons, beginning with the overall proportions and then adding increasingly detailed information helps ensure that the sketch fits on the page. Beginning a drawing in an upper corner and working at all levels simultaneously toward a lower corner may result in a drawing that, if finished, is off the page’s edge. Additionally, a correctly proportioned façade is more likely to support correctly proportioned bays, which in turn fit correctly proportioned windows. If the overall form is out of proportion, each subsequent element necessarily will also be out of proportion to make it fit.

Two ways to establish a framework and mapping the proportions are using either a length of a pencil or pacing out dimensions of a façade, an interior volume or an object. For the pencil technique, while holding a pencil between your forefinger and thumb, fully extend your arm so that the distance from your nose to the pencil remains constant. Look down your arm at your subject with your pencil in the foreground. Adjust your pencil’s length as needed to match an element on the façade, such as a bay or floor height and let the pencil-to-thumb length be a standard unit of measurement.

Count the number of units for verticals and horizontals and then convert and transfer those units and their multiples to a unit on your page. Continue to adjust your pencil-to-thumb length for smaller elements as needed. You can also establish overall proportions by pacing off a room’s width and length or a building’s length. Make normal steps and count them out. Note the overall number and, most importantly, the number at significant moments, for example the column bays or changes in material. Transfer the number of steps to units on your page as in the pencil technique. For example, a courtyard may be 30 steps by 45 steps, with colonnades five steps on all sides. Those units, 35 x 45 with five on each side, can then be drawn to a scale so that the drawing fits on the page.

Draw the larger framework to its complete extent, using only guidelines while noting significant subdivisions. With those guidelines in place, begin to slowly but steadily overlay increasingly detailed information. Even if you do not complete all of the detail, you will have the overall idea of the building firmly established.

Eric J. Jenkins, Drawn to Design, 26-27
students’ work (Arch 2000, 2013), elevation on Barrington Street

http://bobthelurker.deviantart.com/art/Freehand-Architectural-Street-Elevation-No-1-278900115
Investigation through Perspective Drawing | Botanizing on the Asphalt: concepts of vanishing points, picture plane, eye level and the difference between one-point and two-point perspective.

Exercise 1.2: one and two point perspective
You will be assigned to three Halifax downtown locations and sketch a series of freehand one and two point perspective drawings. Include a 100-word companion text to describe what you have learned from the sketches.

General process (more details are presented during class):
1. Understanding perspective drawing.
2. Knowing the terms.
3. Understanding the relationship between plan and perspective drawings.

Goal:
Using drawing as a mean of observation. Through the act of creating perspective drawings, you will learn how to analyze/study volumetric fluctuations, textures, and the scale of buildings.

What you need:
- Wood graphite pencils (4H - 8B)
- Sketchbooks

References:

Readings:
1. Gill, W. Robert, 2006 “Introduction to Basic Perspective”. In Perspective From Basic to Creative.
A perspective drawing describes an optical viewpoint of a place or object transferred onto paper. These drawings illustrate the aesthetic quality, function, and form of a subject as perceived by the eye, the three dimensions, and capture our experience. Perspectives, unlike technical drawings, are not drawn from an objective viewpoint.

Creating perspective drawings require a different set of techniques than those used to generate technical drawings. To accurately draw a perspective, the focus point must be level with the eyes of the viewer. Objectives far away in the distance appear smaller than those closer to the viewer. Draw what you see, and not what you think you are seeing.

A series of small sketches through an urban route serve as snapshots of a city.
Investigation through Tone, Shade and Shadow | Urban Moods: modeling common objects in tonal media, attention to light and shadow, object and background, drawing by implication, thumbnail sketches, and positive shape and negative space.

Exercise 1.3: Representation of private, semi-private, and public space.
You will be assigned to three Halifax downtown locations to sketch a series of tonal drawings to represent private, semi-private, and public space. Include a 100-word companion text to describe what you have learned from the sketches.

General process (more details are presented during class):
1. Understanding variations in shades and tones.
2. Understanding diminution of details, texture, and pattern as distance increases.
3. Understanding the use of texture and pattern to represent different atmosphere and space.

Goal:
Using drawing as a mean of learning. Through the act of creating tonal drawings, you will learn how to describe (using tone) the overall layout/plan of a “place” and how is the building interwoven with the public.

What you need:
• Wood graphite pencils (4H - 8B)
• Sketchbooks

Readings:
Freehand drawing

House in Maine II
Penobscot Bay, Maine, 2004
Toshiko Mori House

Skeppet House
Tammisaari, Finland, 1970
Alvar Aalto

Eric J. Jenkins, Drawn to Design 26,27
Freehand drawing

students' work (Arch 2000, 2016)
private, semi-private, and public tonal drawings
Description:
Investigation, observe, and learn about a site through a series of facades, perspective, and tonal drawings.

Exercise 1.4: Serial views through a city
You are assigned to a location in Halifax downtown to sketch a series of freehand drawings. These drawings are to demonstrate a clear understanding of the wanderer’s journey. Include a 100-words companion text to describe what you’ve learned from the sketches.

General process (more details are presented during class):
1. Develop a walking plan or strategy.
2. Develop a plan drawing.
3. Select view points and decide how many drawings are necessary to show a clear understanding of the site/journey.

Goal:
Using drawings to understand a site.

What you need:
- Wood graphite pencils (4H - 8B)
- Sketchbooks

Readings:
NO reading this week

Due Date: TBA
Freehand drawing

Freehand drawing

students’ work (Arch 2000, 2016)
serial view through the city
Creating minimal, elemental line drawings is a good discipline, as the process encourages an understanding of the essential mood of a city. The drawings do not attempt to portray realism, but are cartoons of the streets and spaces.
Freehand drawing

Hauische: May keep trees - leaves could hang till it reaches the site.

Instanauke: Difficult many canopies of trees - but interesting space. Interesting termination in view.

Deep in deep would make building geometry & massing extra and very dynamic. Must be 1 or 2 stories high to be in scale.

Heinestrasse: A delightful, old fashioned relationship of spaces - much more fluid than most Duisburg roads.
Mapping

The Visible City (site analysis)

Description:
When starting a site analysis, a map of a city will help thinking and provide a base for a drawing. Analytical drawings can begin with tracing over a base map and isolate particular aspect of the city’s organization. Separating these informations like power lines, vegetation, or property lines etc, allow the city to be read as a series of layers.

Exercise 2.1: You are assigned to an area or a street in Halifax. You are to create and compare different visible elements of the site by producing a series of trace paper drawings. Include a 100-words companion text to describe what you’ve learned from the exercise.

General process (more details are presented during class):
1. Create a base map of an area or a street (figure-ground map).
2. Identify visible elements on two different parts of the area or street.
3. Using tonal/texture drawing methods from previous weeks and produce multiple layers of visible elements by tracing over a base map (e.g. vegetation, power line post etc.)

Goal:
To use a number of analytical drawings, shown together, to better understand the composition of a site.

What you need:
• Trace paper
• Wood graphite pencils (4H - 8B)
• Sketchbook

Readings:
• Sanborn Maps - https://www.loc.gov/collections/sanborn-maps/articles-and-essays/sanborn-samplers/

References:
• LaGro J. A., Site Analysis: Informing Context-Sensitive and Sustainable Site Planning and Design, Wiley; 3rd edition

Sanborn Fire Insurance Map from Boston, Suffolk County, Massachusetts - https://www.loc.gov/collections/sanborn-maps/?fa=subject%3Aboston
Mapping

Lorraine Farrelly, *Drawing for Urban Design*, 75
Mapping students' work (Arch 2000, 2016) serial view through the city
Traditional maps display our perceived reality of the world on a two dimensional plane at a particular time. Creating a narrative describing the “passage of time” of a place, requires multiple maps (representing with a consistent method) and a time duration.

Exercise 2.2: You are asked to research the history of a street and/or an area in Halifax. You are to create and compare the changes of the street by producing a series of trace paper drawings. Include a 100-words companion text to describe what you’ve learned from the exercise.

General process (more details are presented during class):
1. Research the history and development of an area.
2. Create a sequence of chronological maps which show the development/change of an area.
3. Using different tonal/texture drawing methods to emphasize the changes in the given area.
4. Each map/drawing requires a consistent size to make a clear and concise comparison.

Goal:
Using a range of analytical plan drawings shown together to better understand the history of a site.

What you need:
- Trace paper
- Wood graphite pencils (4H - 8B)
- Sketchbook

Readings:
Edward R. Tufte, Envisioning Information, pg.97-111
Mapping

Norman Crowe, Building Cities, Toward a civil and sustainable environment, pg 106-107
Peter Cook, *The City, Seen as a Garden of Ideas*, pg 60
The use of historic maps

PITZHANGER MANOR, EALING, LONDON

This series of drawings, based on three hundred years of historic maps, show the site from 1746 to 2009 and illustrate the changes over the centuries to the landscape design, including Sir John Soane's addition of trees to the grounds in 1801, the removal of the lake in 1865, and the addition of a war memorial in 1934.

Faber-Castell TGI 0.25 technical pen and HB pencil on A3 tracing paper: 45 minutes each.
Old maps provide a wealth of information for the initial research of a new site. It is often a good exercise to trace over them in the process of making a new drawing; this promotes thought as to why changes were made in the past, and whether or not those alterations were improvements. A new set of drawings, in the same style, both equalizes the graphics and emphasizes the design improvements.
Creating maps as both aesthetic objects and as empirical evidence can engage the mental faculties of the observer. Imagine graphically representing the city’s invisible force including noise levels, population density, building heights, cultural diversity, etc. How does a map represent it in an aesthetic and accurate way?

Exercise 2.2: You are assigned to two different areas in Halifax. You are to create and compare different invisible elements of the street by producing a series of trace paper drawings. Include a 100-words companion text to describe what you’ve learned from the exercise.

General process (more details are presented during class):
1. Identify several common invisible elements of two different parts of an area or street (e.g. population density, noise level, and/or lighting). The purpose of two is for comparison.
2. Use a plan drawing as a base, lay trace paper on top, and draw several invisible graphic elements. Using tonal/texture drawing methods learned from previous weeks to complete the exercise.

Goal:
Using a range of analytical drawings to reveal a multidimensional view of an area.

What you need:
- Trace paper
- Wood graphite pencils (4H - 8B)
- A computer for accessing GOOGLE MAP
- Sketchbook

Readings:
2. Natalia Skoczylas, Deliberate map(ping), the role of citizen cartography, in On Site Review no. 31 pg. 40-43.
Nadia Amoroso, *The Exposed City: Mapping the Urban Invisibles*, pg 120
Many types of information about an area of a city can be graphically represented - noise levels, transportation patterns, air quality, cultural diversity, political ridings, population density, vegetations, etc. If this area could be defined by these characteristics, what form would it take? How could it be mapped?

Exercise 2.4: You are to create a layered map of all three aspects of an area in Halifax: visible, hidden, and invisible. Include a 200-words companion text to describe what you’ve learned.

General process (more details are presented during class):
1. Create a base map of an area or a street.
2. Identify visible, hidden, and invisible elements you like to represent
3. Choose an appropriate method of representation.
4. Compose your elements on paper
5. Follow the composition and use tonal/texture/line drawing to produce multiple layers of your chosen elements on paper.

Goal:
Balancing between the informative measures of visualization and the aesthetic side of creating a map, students are to experiment with different representation methods in creating a multidimensional map (elements, space, and time).

What you need:
- Multiple sheets of drawing paper (11x17)
- Wood graphite pencils (4H - 8B)
- Trace paper
- Sketchbook

Readings:
No reading.
Mapping

Competition University, Vienna
4, 1974 Traffic system
(RE)MAPPING BORDER CONDITIONS

Mappings and analyses of the tri-national border conditions across multiple scales reveal strategies for urban development within the Metrobasel region.

TOP: Overlays of various timelines reveal the changing and fixed characteristics of national identities.

MIDDLE: Analysis of the built and unbuilt formations within Metrobasel and their relationship to existing borders.

BOTTOM: Analysis of Basel, existing connections and points of interest.
Photographs - a time machine

Description:
A re-photographic survey is an attempt by a researcher to understand changes in the landscape and structures by making a contemporary photograph at the same place as a historical one and comparing the two images. The passage of time in these photographic pairs is often a reflection of human impact on the site. Re-photographic method has become a popular way for researchers, and communities throughout history to better understand change to the landscape over time.

Exercise 3.1: You are to create a series of photographs to show the “passage of time” of a location. Include a 100-words companion text to describe what you’ve learned from this exercise.

General process (more details are presented during class):
1. Research archival resources to find the best example of useful historical images that will make the “re-photographing survey” most beneficial.
2. Visit the location which has been chosen, you will photograph the area according to the historical photographic composition.
3. Relate your images with a site plan.
4. Print your images and present in class.

Goal:
The goal of this assignment is to observe and study historic photographs to expand your knowledge of photographic composition. Furthermore, you will be introduced to basic digital photographic editing skills.

What you need:
• Digital Camera
• A computer
• Multiple sheets of drawing paper (11x17)
• Wood graphite pencils (4H - 8B)
• Sketchbook

References:

Readings:
Paris Changing.

Revisiting Eugene Atget's Paris.
Photographs by Christopher Rauschenberg and Eugene Atget. Text by Clark Worzwick, Alison Nordstrom and Rosamond Bernier.

photos by: Christophar Rauschenberg
photos by: Lauren McConnon (Visual thinking - 2011)
The Approach
Conveying ideas with images

Description:
Composition plays the most important role in how photographers express an idea. A good grasp of identifying a clear subject and background is the key to convey that message clearly. The concept of reducing/eliminating subjects and elements from the camera frame by the movement of the body is a photographer’s first act in expressing a point of view.

Exercise 3.2: Create narrative by using a series of photographs to describe “a walking experience”. Include a 100 words companion text.

General process (more details are presented during class):
1. Choose a walking path within Halifax with a significant amount of monument types or recognizable objects along the way (path across a field may not be appropriate).
2. Walk the path and take notes and sketch the significant objects in your sketchbook, e.g. a door, a lamp post, a wall, or a statue etc....
3. Study the notes/sketches, revisit the area at different times and capture the objects with your camera.
4. Beware of how to take the photographs so all images can link together to describe a narrative.
5. Layout/Compose your photographs on a page.
6. Present your work in class.

Goal:
The goal of this assignment is to make you aware of your decisions in photographic composition. It can guide or manipulate the observers’ view and serve the photographer’s intention.

What you need:
- Digital Camera
- A computer with photo editing software
- Multiple sheets of drawing paper (11x17)
- Wood graphite pencils (4H - 8B)
- Sketchbook
- access to a printer

References:

Readings:
path & texture, Yuan Yuan Li (Visual Thinking 2011)
A Narrative Structure

Description:
The city streets we inhabit consist of different layers of architectural details: signage, statues, gates, the texture of a particular wall, etc...Each street tells a story. Photographs are good at showing evidence of existing conditions. The act of photography is not only a practice of recording images but also a sociological one. By recording a series of photographs at a particular area, observers can understand, in part, what are the visual contents of the area. The challenge lies in the rigor of the process.

Exercise 3.3: Create a series of photographs to show the “character” of a street. Include a 100-words companion text to describe what you’ve learned from the exercise.

General process (more details are presented during class):
1. Choose a street in downtown Halifax.
2. Walk the street several times and observe without a camera.
3. Take notes and do sketches on subjects that reflect the condition and character of the street. For now concentrate on objects not people.
4. Study the notes/sketches, revisit the area and capture with your camera.
5. Layout/Compose your photographs on a page.
6. Present your work in class.

Goal:
The goal of this assignment is to encourage you to be clear and use consistent photographic composition techniques to heighten the understanding of your study area.

What you need:
- Digital Camera
- A computer
- Multiple sheets of drawing paper (11x17)
- Wood graphite pencils (4H - 8B)
- Sketchbook
- access to a printer

Readings:
1. Ken Garland, Look up, pg. 60. In “City Levels, Ireson, Ally; Barley, Nick”.
2. Two Cities, Chen Zhen pg. 64. In “City Levels, Ireson, Ally; Barley, Nick.”

References:
Photography

Street in Paris, Ken Kam

Street in Paris, Ken Kam
Photography

students’ work (Arch 2000, 2013)