

B1 TERM OUTLINE

Information common to all B1 courses

Dalhousie University
School of Architecture

Fall 2023

Term Coordinators

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Design Studio Instructors

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Ancient Settlements, Buildings & Landscapes

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Building Technology

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Professional Practice

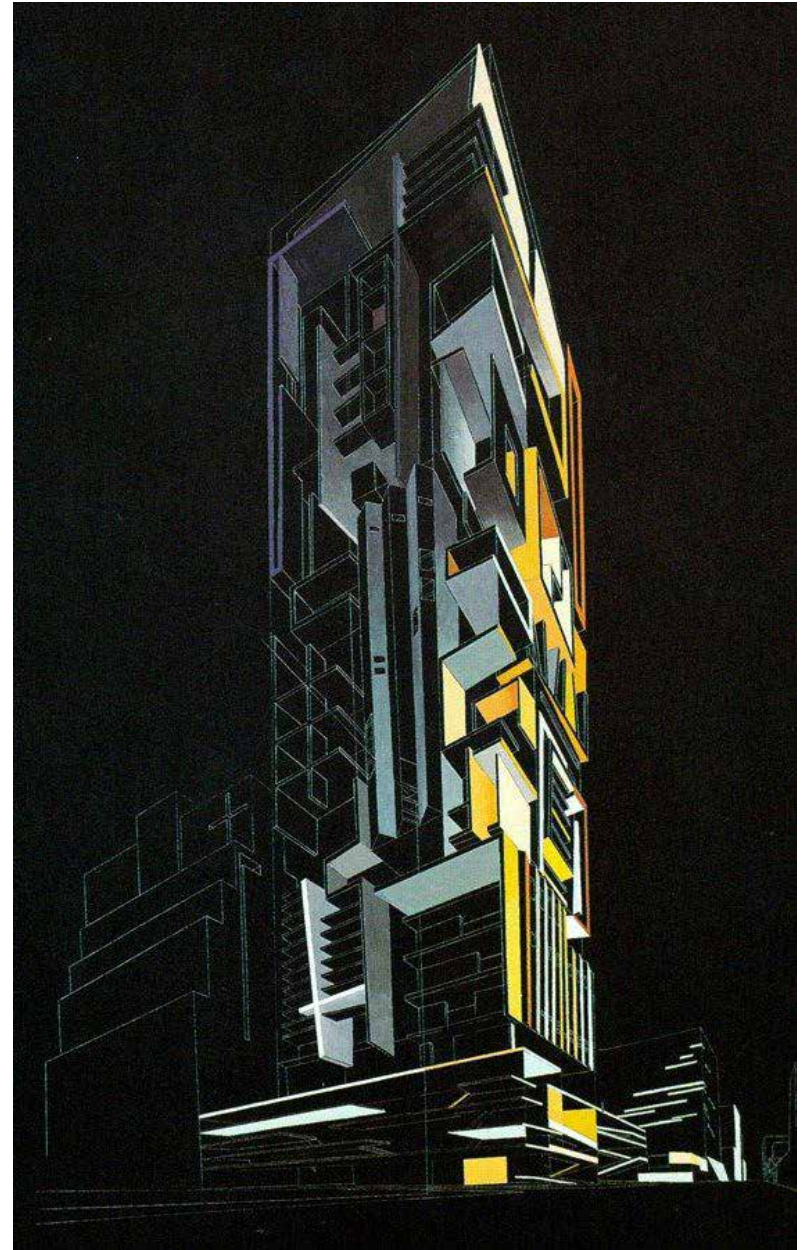
Hadrian Laing

Representation

Daniel Dickson

Zaha Hadid 42nd Street Hotel Competition Midtown East, L&L Holdings, Unbuilt Design Entry | 1994

"While Hadid resisted designing skyscrapers for quite some time due to their lack of flexibility and complexity, she submitted her first tower design, seeking to avoid "extrusion, repetition and hermetic curtain walling." Instead she conceptualized a vertical pile of interlocking blocks with variegated planes and interstitial spaces in: <https://www.6sqft.com/in-memoriam-zaha-hadids-projects-in-new-york-city/>



B1

Architectural design • History • Building technology • Representation • Professional practice



St Paul's Cathedral, London, late 17th century. Cross-section showing the brick cone between the inner and outer domes.

Your first term in Architecture has been designed to offer you a comprehensive and immersive experience of architectural design, advanced through an integrated suite of courses: design studio, building technology, representation, and architectural history. In the design studio, you will learn architectural design skills and put them to practice. In the building technology course, you will learn to make your designs work with gravity, building materials, sunlight, and rainwater. In the representation course, you will learn to visualize and communicate your design ideas. Architectural history and case studies in design studio will help you to learn from 2,500 years of accumulated knowledge about human settlement, while professional practice will introduce you to an architecture career today.

ARCH 3001 Design

CREDIT HOURS: 6

This studio course introduces principles of architectural design, focusing on elementary building types of room and pavilion. Through case studies and original design work, students develop skills in problem definition, building organization and geometry, structural and material development and spacial visualization. Additional topics include the social and symbolic functions of architecture and design as a response to site.

FORMAT: Lecture, Studio

ARCH 3106 Ancient Settlements, Buildings, and Landscapes

CREDIT HOURS: 3

This course explores the origin and evolution of human settlement patterns from prehistory to the early modern era. With a comparative analysis of global cultures, it considers geographic, ecological, social, and economic factors that are common or unique. Topics include land use, habitation, defensive structures, monumental complexes, commercial districts, infrastructure, and communication networks.

FORMAT: Lecture, Seminar, Tutorial

ARCH 3207 Building Technology

CREDIT HOURS: 3

Through hands-on and observational exercises, this course develops tacit understanding of materials, their properties, and applications. Readings introduce terminology, theory, and sizing. Primary topics are: the exclusion and inclusion of water; structural behaviours providing bracing, bearing, and span; and the rudiments of natural light and heat.

FORMAT: Lecture, Lab

ARCH 3301 Professional Practice

CREDIT HOURS: 1

This course introduces the role and place of the architect in society, with an emphasis on the development of the profession through history. It also studies representation methods employed by architects and their implications for design.

FORMAT: Lecture, Seminar

ARCH 3501 Representation

CREDIT HOURS: 3

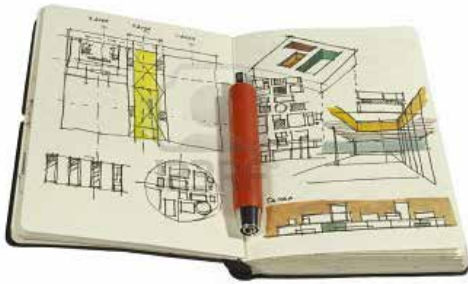
This course studies fundamental concepts, techniques, and applications of architectural representation. Class work involves freehand drawing, orthographic drawing, model making, and photography. Drafting and modeling equipment are required.

FORMAT: Lecture, Studio

		monday		tuesday		wednesday	thursday		friday
		rep	tech	hist	design	tutorial	tech	hist	design
elements of architecture	Week 1 Sept 11-15	Intro to B1 Rep Sketch	Intro to B1 Tech	Intro to History of Ancient Settlements, Buildings, Landscapes	Intro to B1 Design 1: Elements of Architecture	Skills workshops Weeks 1-3 Wed & Fri mornings 8:30 am - 1:30 pm See detailed schedule on Brightspace	Module 1: Materials & Methods	L1: Pre-history Workshop 1	Studio
	Week 2 Sept 18-22	Projection	Lab 1 Folding	L2: First Cities - Mesopotamia & Egypt	Studio		Lec 2: Mat'l's & methods	S1: Collective Ritual in Early Cities Workshop 2	Studio
	Week 3 Sept 25-29	Diagram Scale 1-2	Lab 2 Bending & weaving	L3: On the Trail of Alexander the Great	Studio		Lab 1 Due Site visit tbc	S2: Imperial State, Federated League Glossary exhibit	Studio
	Week 4 Oct 2-6	Truth and Reconciliation (no class)		L4: Two Empires - China & Rome	Studio		Lab 2 Due Lec 3: Mat'l's & methods	S3: Imperial Infrastructures Quiz 1	Studio
	Week 5 Oct 9-13	Thanksgiving Day (no class)		L5: Spread of Buddhism	B1 / M5 charette		L4: Mat'l's & methods	S4: Religious diffusion & trade – India to China Workshop 3	Studio
case study pavilion	Week 6 Oct 16-20	Display Scale 3, Forum	Lab 3 Casting	L6: Architecture of Sub-Saharan Africa	Project 1 Round Robin Review 2: Pavilion - Case Study	practice The Architect	Module 2: Bldg Systems Integration L5: Structures	S5: Religious diffusion & trade – Africa	Portfolio Review 1
	Week 7 Oct 23-27	Model	Lab 4 Stacking & cantilever	L7: Chinese & Japanese Palaces & Gardens	Studio	Case Studies I	Lab 3 Due Lec 6: Structures	S6: Exhibiting Culture: Abstraction & Allegory in Asia Poster outline due	Studio
	Week 8 Oct 30-Nov 3	Illustration	Lab 5 Bridging	L8: Pre-Columbian Americas	Studio	Case Studies II	Lab 4 Due Glossary Feedback 1 Intro to Material Palette 1	S7: Ritual Cities in the Americas Quiz 2	Studio
	Week 9 Nov 6-10	Collage Materiality 3	Material Palette 1 workshop	L9: Byzantium & Islam	Project 2 Presentation Material Palette 1 Due	The Making of Architecture	Lab 5 Due Lec 7: Light	S8: Cultural rivalries in the Mediterranean sphere Workshop 4	3: Pavilion Counterpoint
	Week 10 Nov 13-17	Fall Study Break (No classes)							
pavilion counterpoint	Week 11 Nov 20-24	Photograph	Lab 6 Light	L10: Medieval Europe	Studio	Tutorial on Manifesto	Lec 8: Light	S9: Feudal estates, mercantile cities, pilgrimage sites	Studio
	Week 12 Nov 27-Dec 1	Text	Site visit tbc	L11: Renaissance Florence / Inca civilization Posters due	Studio	Tutorial on Manifesto	Lab 6 Due Lec 9: Material Lifecycle	Poster Exhibition BEDS Design Statement Workshop	1 Progress Pin-up
	Week 13 Dec 4-8	Document Composition 1-3	Material Palette 2 workshop	Quiz 3	Studio	Manifesto Pin-up Ex Rm	Material Palette 2 Feedback Glossary 2 Due	SLEQs for all B1 courses	Studio
	Week 14 Dec 11-15	Project 3 Design Review / B1 Tech Review (Material Palette 2 Due) Mon Dec 11 and Tue Dec 12 @ 9am Pin-up Sunday Dec 10 @ 5pm			Portfolio Due Tue Dec 12 @ 5pm	Portfolio Review 2 Wed Dec 13 and Thu Dec 14 (schedule tba)			

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Sketchbook and process portfolio



All architects develop and communicate their ideas through drawing. Whether you already enjoy drawing or you are new to visual thinking, two very important tools for your development as a designer are the sketchbook and the portfolio.

Sketchbook

The sketchbook is a small and portable diary. Make it your permanent companion. Take it home to work out your design ideas, or make notes on what you want to work on tomorrow.

It is a way

- To develop your capacity for observation, and sensitivity to plastic and aesthetic values.
- To immediately record your thoughts, observations and reflections about architecture, whether you are experiencing it directly or learning about something on-line.
- To develop your drawing skills. Everyone learns to draw by drawing and drawing.
- To explore design ideas in a sketch format. Sketching is a fast tool to test a design idea over and over again, and improving it each time. This is a path to finding a solution
- It's also useful to take notes on the results of your desk crits and reviews.

Take the time to make at least a free observational drawing each day. Draw human figures, space and objects. Practice your drafting abilities, by developing your sense of scale, dimension, proportion, perspective, light, materiality, etc.

The sketchbook is also a personal item.

You do not need to share it with us.

However you may choose to scan / photocopy some of its pages and include them in your process portfolio.

Process Portfolio

The **process portfolio** is a record of your work each week, and will be essential for your “desk crits” with your studio instructor. Please be ready with your portfolio pages at the beginning of each studio afternoon, so you are ready to discuss your work with your instructor. It becomes a chronological record of your ideas, but it doesn't have to include everything you do, but it should include the major things you are working on, progress that you feel is going in a direction you are pleased with, and maybe even some ideas you have explored that you're not completely sure about but want feedback on. You might think about the portfolio as having three purposes — as a record of:

- **Your inspirations and influences.** Design ideas come from a variety of sources — what do you find useful or inspiring as you develop your designs? Designs by other architects, artists or engineers? Geometries or rhythms found in nature? Analytical studies of a context or a condition? Including inspirations will help you recognize what you value and acknowledge your influences. These sorts of studies should find their way into your process portfolio. Be sure to clearly credit the person who holds copyright (the author or creator of the image or text)!

- **A record of your process and progress.** As you develop a project, you will make many studies and sketches to explore your ideas, test them out, and visualize them in different ways. For example, what does a building look like from a distance, or what do you see when looking from the inside out? How will it meet the ground or landscape, how does one material meet another, what is the play of light on surfaces? What is the structure that holds it up; what shape should the roof take? These kinds of studies should find their way into your process portfolio. You may also paste pages from your sketchbook directly into the process portfolio!

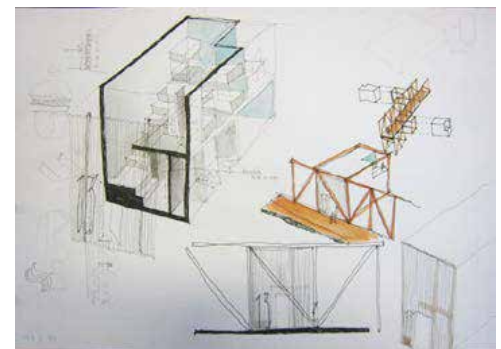
The process portfolio will help you to understand the relations between sketching and the design process. Drawing is the graphic expression of an intentionality rooted in the external reality and in the heritage of design and architecture.

Please note, when you include group work in your portfolio, be sure to clearly identify the author/creator of all work that is not your own, and for joint efforts, what your contributions were, and what was done by others. This includes sketches by studio instructors!! This is a core principle of academic integrity.

- **Edit for clarity and reflect on what you value.** Each week, consider what you will incorporate into your process portfolio. This regular period of editing, curating, and evaluation will help you to develop the habit of thoughtful exploration and reflection in your daily work. It can be useful to add headings, captions, or comments about the work directly on the portfolio backing sheets. The process portfolio is a tool that will help you to find paths and the method to develop your project. A good portfolio is one that tells a story about your path in architecture.

The format used for your B1 Term is an 18" x 24" portfolio. This large format encourages you to assemble a wide range of work on a single page, helping you to make connections and linkages between different drawings and images, to edit them, and show how architectural ideas evolve. When you meet with your instructor each week, use the process portfolio to show them what you have been working on. Organize the process portfolio chronologically, placing the most recent work in the back. Fold large sheets so they open up easily.

The process portfolio will be reviewed at midterm and the end of term and its contents and format will constitute 10% of your final mark in B1 Design. For more information on this topic please go to the School's guidelines for B1-B2 process portfolios where it shows different videos: <http://tinyurl.com/beds-years-3-4>.



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Assignments and workshops



Assignments

Architecture integrates many ways of thinking from many fields, so from time to time we'll ask you to work on the same subject in several courses (most often Design, Technology, and Representation) and we'll ask you to present the work at the same time, at the B1 pinups. Because our field is so broad, you can expect informal feedback from all of your profs on any of your work, but formal evaluation and grading of an assignment happens within the course that sets it.

Group assignments

Group work requires team-building skills such as sharing responsibilities equitably, active listening, adaptability and demonstrating a willingness to engage in a collaborative effort. In an effective team, the members agree on a shared goal and each member has a clearly defined role. Professionalism, respect and inclusion are essential aspects in all your interactions in the School, and are particularly important when collaborating with classmates. Some self-reflection is needed throughout the process; to identify what is working and what is not working. Be aware of the ways your team can be more effective or efficient and find a way to share them with your group.

Workshops

The B1 Workshops are fundamental to give you an opportunity to learn skills, that introduce you to the basics of architecture tools. The Workshops also convey the awareness of safety, when dealing with tools that are new to students or request specific learning skills. To obtain access to fabrication shops and make best use of our digital printing equipment, entering BEDS students are required to take Workshops in the first term: Wood Shop, Print Shop, Drafting, Wet Lab, Computer Labs, Photography and Writing. Most of these are scheduled on Wednesday mornings during the first months of the term; however, a few are delivered through the various B1 courses. The tutorial groups will be the same as your orientation groups.

University policies and resources

All courses are governed by the academic rules and regulations set forth in the University Calendar and the Senate. See the School's "Academic Regulations" page (<http://tinyurl.com/dal-arch-regulations>) for links to university policies and resources:

- Academic integrity
- Accessibility
- Code of student conduct
- Dalhousie University Library
- Diversity and inclusion; culture of respect
- Fair dealing guidelines (copyright)
- Recognition of Mi'kmaq territory
- Services available to students, including writing support
- Student declaration of absence
- Work safety



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Required equipment and materials

Each student will need basic drawing equipment for the first year of architectural studies. Year 3 BEDS develops manual design skills such as sketching, drafting, and model-making. These will continue to be the foundation of design thinking throughout your studies, however by the third term you will increasingly use digital design tools.

The two kits below are available from DeSerres, 1546 Barrington Street, north of Spring Garden Road (www.deserres.ca/), starting in August. Two options will be available: Kit 35A and Kit 35B. At the start of the fall term, DASA (our student association) will sell some used parallel rules and vinyl board covers for a reduced price, so you could buy Kit 35B first and decide on Kit 35A later.

DeSerres - Kit 35A - approx. \$300

Parallel rule 36"

Vinyl board cover 36" x 48"

DeSerres - Kit 35B - approx. \$260

Mars adjustable triangle

Trace roll 18" x 20 yds VG, white

6 graphite sketch pencils (2H - 6B)

Drafting (dusting) brush, small

3M Scotch masking tape 12mm x 55m

Mars Technico lead holder 780 (mechanical pencil for 2 mm leads)

Nobel 2mm leads in three hardnesses (2H, H, HB), each in a package of 4 leads

Mars 502 lead pointer (sharpener for 2 mm lead holder)

White vinyl eraser

Erasing shield

Imperial scale (1/8" = 1', 1/4" = 1', etc.)

Metric scale (1:50, 1:100, etc.)

Noris pencil sharpener

Clear push pins 11mm 100 pc

Stainless steel math set (set square, protractor, 12" rule)

Nobel cutting mat 12" x 18"

Marsgraphic kneadable eraser

DeSerres precision knife for #11 blades, ergo handle

DeSerres precision #11 blades, box of 10

Metric circle template

Kraft paper pad 18" x 24"

storage envelope for equipment

Other items

- Aleene's all-purpose tacky glue
- Fold-down binder clips, 1" wide

