

Dalhousie University
School of Architecture
Fall 2024
ARCH 5220.03 Adaptive Reuse
3 credit hours

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meeting times & locations: Tuesday, 9:30AM - 12:30 PM, [online](#) with the exception of one site visit & one workshop. See the **course schedule** for the days when we meet online or on the site visit and workshop. The outline along with all course materials, recorded lectures and where you are expected to submit your assignments will be on the class TEAMS page - ARCH 5220.03 2024.

As mentioned above, lectures will be recorded and uploaded to the class TEAMS page.

You will be provided with links to the class TEAMS page, online lectures and the Outlook Adaptive Reuse Fall 2024 Group email list once you are registered for the course. Once set up, we can/will use the Outlook Adaptive Reuse Fall 2024 Group email list to communicate with each other through the term about class topics, etc..

I would like your consent to generate the class Outlook Adaptive Reuse Fall 2024 Group email list. If you are not comfortable with having your name or email address on the Group list, once registered for the course, please send me an email by August 28, 2024. If you are ok with having your name and email on the Group list, no further action needs to be taken.

office: n/a - **online instruction**

availability outside of class hours: by appointment. My preferred method of contact is email (austin.pasons@dal.ca).

If I need to contact you in an emergency: It will be through the Outlook Adaptive Reuse Fall 2024 Group email list.

Equity, Diversity and Inclusion

The Faculty of Architecture and Planning is committed to recognizing and addressing racism, sexism, and other forms of oppression within academia and the professions of architecture and planning. We, the faculty, are working to address issues of historic normalization of oppressive politics, segregation, and community disempowerment, which continues within our disciplines today.

University policies

This course is governed by the academic rules and regulations set forth in the University Calendar and the Senate. <https://academiccalendar.dal.ca/Catalog/ViewCatalog.aspx?pageid=viewcatalog>
See the School's "Academic Regulations" page (tinyurl.com/dal-arch-regulations) for links to university policies and resources:

- Academic Integrity
- Accessibility
- Student Code of Conduct
- Diversity and Inclusion – Culture of Respect

- Territorial Acknowledgement: Dalhousie University is located in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq. We are all Treaty people.¹
- Work Safety
- Fair Dealing policy
- Important Dates in the Academic Year (including add/drop dates)
http://www.dal.ca/academics/important_dates.html
- Dalhousie Grading Practices Policy
https://www.dal.ca/dept/university_secretariat/policies/academic/grading-practices-policy.html

learning and support resources

- General Academic Support – Advising
https://www.dal.ca/campus_life/academic-support/advising.html

additional academic support

Lecture notes and additional resources will be posted on the class Brightspace site.

Software support along with content support is available from AP. In addition, the links to the library and copyright office are below.

- Dalhousie Libraries <http://libraries.dal.ca>
- Copyright Office <https://libraries.dal.ca/services/copyright-office.html>

ARCH 5220.03 Adaptive Reuse

Calendar Description

Through examples and case studies, this course introduces the issues of authenticity, sustainability, and relevant principles of practice as they apply to the adaptive reuse of heritage buildings. Once introduced, these issues are put into practice via re-designing an authentic, sustainable heritage building.

Additional Calendar Description: ARCH 5220.03 Adaptive Reuse Fall 2024

I will be introducing a new content format. What can be described as a course within a course. In short, the course content is divided into two parts in an attempt to reduce the course complexity and still meet the class learning objectives given the course time constraints.

This term, the "first course" will focus on the technology transfer between existing and new buildings. As important as the bricks and mortar existence of an existing building is/can be to a community, the ideas contained by the building with regards to how it responds to the micro climate around it and its user demands and requirements can be argued to be more important. The objective of this first course is to provide you with an ability to complete this technology transfer and in the process, inform your design thinking. Saving and adaptively reusing these ideas is what is being addressed this term.

The "second course" will reduce the course complexity. Buildings, whether new or old, are a multi-*fill in the blank* - design problem. To impart the term's lessons, what is relevant is how to go about the transfer of information between old and new rather than the multi-factorial nature of the new build's design problem. What is being simplified is the number of technical requirements you are asked to consider/transfer recognizing there is still a cultural component to the problem.

Simplifying a problem's complexity always leads to questions given any simplification is based on a set of assumptions. In this case, these assumptions are based on the theoretical new build design problem you are asked to solve. This term, the proposed new build design is a flyfishing exhibition space extension - the "fly fishing fin" to the Maritime Museum of the Atlantic. And, drilling down even further, I will ask you to focus on the structural design of the space where the bamboo fly rods will be displayed within the flyfishing exhibition space.

¹ For more information about the purpose of territorial acknowledgements, or information about alternative territorial acknowledgements if your class is offered outside of Nova Scotia, please visit <https://native-land.ca/>.

To get you thinking about the problem, a concept design brief follows. The space will exhibit two themes - the fish and the technology used to fish. The exhibition space's floor area will be 10,000 square feet and expect the bamboo fly rod section to take up 1,500 - 2,500 square feet. You are being asked to draw concept drawings of the bamboo fly rod exhibition space plan and structure. You do not have to consider any technical issues associated with the mechanical system or envelope durability - this is the simplification.

You don't have to know how to fish or anything about fishing rods. Ideally, you would like to know something about bamboo fly rods along with where fly fishing with bamboo in Atlantic Canada happens. As I hope you will discover, you will see there are a number of parallels between building culture whether it is designing a new building or conserving an existing building and fly-fishing culture whether it is making or restoring a bamboo fly rod or fishing with one.

course competency & learning objectives

This course within a course has an inter related set of learning objectives:

- 1) an understanding of how to assess an existing building's comprehensive design in terms of its response to local climate and user requirements.
- 2) an understanding of how to take from the existing building both design details, and material choices relevant to a new build design brief.
- 3) an understanding of a design brief's cultural component
- 4) an ability to take the information from points 1) - 3) and incorporate them into a concept drawing

Course time commitment and format

You are expected to spend 108 hours working on the course where 20 hours has been allocated to online lectures, the site visit and workshop and 88 hours to homework. Attendance at these online lectures, the site visit and workshop are mandatory. Please note that the **actual lecture time will be two hours (9:30am - 11:30am) and the site visit and work shop will each take 3 hours**. This allocation of time is to give you the required time to complete the three assignments which has been "first - order" budgeted at assignment 1: 36 hrs, assignment 2: 36 hrs & assignment 3: 16 hrs)

course pre-requisites, co-requisites and/or other restrictions

There are no course pre-requisites, co-requisites and/or other restrictions.

course schedule

week & date		lecture	assignment introductions and assignment due dates
1	Tuesday September 10	breaking down silos	
2	<i>Tuesday</i> <i>September 17</i>	historic practices 1 building as a system	historic practices hand-out
3	Tuesday September 24	<i>site visit to the Killiam Library & Maritime Museum of the Atlantic</i>	
4	Tuesday October 1	historic practices 2 review & discussion	historic practices hand-in
5	Tuesday October 8	<u>a course within a course</u> <i>work shop: bamboo fly rods</i>	Bamboo fly rods hand-out
6	Tuesday October 15	<u>a course within a course</u> bamboo fly rods design	
7	Tuesday October 22	<u>a course within a course</u> bamboo fly rods restoration	
8	Tuesday October 29	<u>a course within a course</u> bamboo fly rods history, life cycle thinking and the principles of sustainability	Bamboo fly rod hand-in concept design hand-out
9	Tuesday November 5	concept design what do you want to accomplish	
10	study break		
11	Tuesday November 19	course wrap up discussion <i>SLEQ (Student Learning Evaluation Questionnaire) to be completed</i>	concept design hand-in

course assignments, assignment grades and you course grade

AP will grade the three course assignments which you are expected to complete individually. I recognize you will be consulting with your colleagues. So, please reference any collaboration in your work giving the appropriate credit. Plagiarized work found in a given assignment will result in a grade of 0% for that assignment.

Acknowledging the time involved to complete each assignment, the assignment grade weight breakdown is 30% for assignment 1, 30% for assignment 2 and 40% for assignment 3. Each assignment is due at beginning of class (9:30 AM) on the assigned due date with late work penalized according to the School of Architecture late work policy - see **Due Dates and Late Submissions** below. Please submit each assignment into the assignments' folder found in the TEAMS class site.

Your *assignment* grade will be in the A+ to F range according to how the work compares to the **grading rubric** (see below). You can also expect either oral or written comments about your work.

Your *course* grade is the sum of the three *assignment* grades. Your *course* grade will be in the A+ to B-, F range as per Dalhousie University's Graduate Grading criteria and the **grading rubric**.

due dates and late submissions

Deductions for late submissions encourage time management and maintain fairness among students.

	Due date	Is a late assignment accepted? (see the Note below)	If so, what is the deduction per weekday? *	Is there a final deadline for a late submission?	What happens after that?
assignment 1	October 1	no	n/a	n/a	n/a
assignment 2	October 29	no	n/a	n/a	n/a
assignment 3	November 19	no	n/a	n/a	n/a

* For example, if an assignment is evaluated at 75% before applying a 3%-per-weekday deduction, it would receive 72% for being 1-24 hours late; 69% for 25-48 hours late; etc.

Note:

The following University or School policies take precedence over course-specific policies:

- No late assignments are accepted after the last day of weekly classes (the Friday before review week).
- With a Student Declaration of Absence (maximum two per course), an assignment may be submitted up to three weekdays late without penalty. An SDA cannot be used for the final assignment. Please see the School's regulations about whether an SDA can be used to postpone an assignment's hand-in.:
- <https://www.dal.ca/faculty/architecture-planning/school-of-architecture/current-students/school-works/regulations.html#sda>
- With a medical note submitted to the School office, a course assignment (including a final assignment) may be submitted more than three weekdays late without penalty. The number of weekdays depends on how long you were unable to work, as indicated in the medical note. If more than one course is affected, you should consult with the Undergraduate/Graduate Coordinator to set a new schedule of due dates.
- A student with an accessibility plan that allows for deadline extensions does not need to submit an SDA.

If you need to complete a Student Declaration of Absence form, please out the form linked to this web address. <https://cdn.dal.ca/content/dam/dalhousie/pdf/campuslife/Health%20and%20wellness/FINAL%20Student%20Declaration%20of%20Absence%20Form.pdf> please submit it to me via email

the assignments

Note: The assignment descriptions will change over the summer. The number and intent of each assignment will not change, but text may be added to the assignment descriptors in the spirit of adding clarity.

Context: You are part of a design team tasked with designing the "flyfishing fin" to the Maritime Museum of the Atlantic. See the project concept brief above.

assignment 1: historic practices (40%)

Existing buildings are a source of ideas which you can be incorporated into a new building; think precedents. You may recall the Brazilian Modernists of the 1930s and their shade designs as an example. The trick is in how you assess the existing building; think building as a system.

This assignment asks you to create a diary of drawings and thoughts about what you observe when confronted with surveying an existing building.

The first set of drawing and linked thoughts are schematic drawing of the building's comprehensive design - how the 4 building systems integrate together at the 1:50 and 1:10 scales to meet expected user requirements of comfort, durability and space. The number of drawings is your call.

assignment 2: bamboo fly rods (40%)

The point of the course within a course is to give you some sense of the design and restoration requirements

of bamboo fly rods along with flyfishing culture and in particular the sub culture of the role bamboo fly rods has played in Atlantic Canada. You will also have been made aware that bamboo fly rods are an example of the circular economy principles of refurbishment and repair.

How can you take these ideas into your design thinking?

Draw out the life cycle of a bamboo rod. What you will note is the connection between stage A and stage D and along the way, the interconnected relationship between new build and restoration as a means to extend service life.

The assignment asks you to answer the following two questions

- 1) How has flyfishing culture been impacted by this interconnected relationship of the bamboo rod's life cycle and in particular, the connection between new builds and restoration?
- 2) How would you take what you have learned by answering this question into you new build thinking?

assignment 3: concept design (20%)

This assignment is deliberately designed to have a quick turn around. What I am interested in is you're approach at the idea stage of how you will incorporate both technical and cultural objectives into your design. This is a question of resolution. I am not looking for schematic drawings, but drawings which show me your ideas.

I am asking for one drawing at the concept design level. You can select any scale you like; it is what works. The concept drawing should include appropriate responses to site environmental and built environment conditions. The client has also asked you to include how the design team will express the importance bamboo fly rods have played in the history and culture of Atlantic Canadian fly fishing.

grading rubric

https://www.dal.ca/dept/university_secretariat/policies/academic/grading-practices-policy.html
<https://www.dal.ca/tinyurl.com/dal-grading>

Your course grade will be in the following range.

letter grade	percent
A+	90-100
A	85-89
A-	80-84
B+	77-79
B	73-76
B-	70-72
F	< 70

Please note that your assignment grade scale includes C & D grades (see below).

Course Grading Rubric

A+ (90 - 100%): excellent

The work is an *example of best practice*. There is considerable evidence of original thinking; outstanding grasp of subject matter; and evidence of extensive knowledge base. It can be included in a publication others can use to teach or study from.

A (85-89%): excellent (competent)

The work is an *industry ready document but not an example of best practice*. It would not be used in a publication others would use to study or teach from because it is derivative - imitative of the work found in other publications.

A- (80-84%): excellent (conditionally competent)

The work is an *industry ready document with minor revisions*. One or more aspects of the work is either missing or not developed.

B+ (77-79%): good (understand)

The term's work shows evidence of a grasp of subject matter; some evidence of critical capacity and analytical ability; reasonable understanding of relevant issues; evidence of familiarity with the subject. The work is not industry ready. It shows a *weakness* in one or more areas. The work can be completed with minor supervision.

B (73-76%): good (aware)

The term's work shows evidence of a grasp of subject matter; some evidence of critical capacity and analytical ability; reasonable understanding of relevant issues; evidence of familiarity with the subject. The work is not industry ready. It has *substantial weaknesses* in multiple areas. The work requires direct supervision to complete.

B-(70-72%): good (conditionally aware)

The term's work shows evidence of a grasp of subject matter; some evidence of critical capacity and analytical ability; reasonable understanding of relevant issues; evidence of familiarity with the subject. The work is passable graduate work. It shows a *minimal understanding* having considerable weakness and/or errors in one or more areas. The work requires direct supervision with explicit directions to complete.

F: fail – The term's work does not meet the requirements of the course's deliverables and/or is absent.

Note the terms in the () are AP's terms to distinguish + through - work and are intended to complement but not replace the University's terminology.

As mentioned above, your assignments will be graded on an A, B, C, D & F scale. The **A+ - B-, F Course Grading Rubric** applies to your assignments as well as the **C & D Course Grading Rubric** below:

C+ (65-69%), C (60-64%), C- (55-59%)

Satisfactory: Evidence of some understanding of the subject matter; ability to develop solutions to simple problems.

D (50-54%)

Marginal Pass: Evidence of minimal familiarity with the subject matter; minimal analytical and critical skill.

Note: For the whole course, a final assignment grade below B- will be recorded as an F

course resources

note: to be developed

bamboo fly rods

Kirkfield, Stuart. 1986. The Fine bamboo Fly Rod: A Master's Secrets of Restoration and Repair. Harrisburg, Pennsylvania, Stackpole Books

Phillips, Don. 2000. The Technology of Fly Rods: An In-Depth Look at the Design of the Modern Fly Rod, its History and its Role in Flyfishing. Portland, Oregon: Frank Amato Publications, Inc.

building life cycle

Royal Institution of Chartered Surveyor (RICS). 2023. Whole life carbon assessment for the built environment. London: RICS

circular economy

Arup. 2016. The Circular Economy in the Built Environment. London: Arup (arup.com)

concept design

Brown, 1985. G.Z. Sun, Wind and Light: architectural design strategies

existing building survey

ICOMOS. 1990. Guide to Recording Historic Buildings. London: Butterworth Architecture.

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July 2, 2024