Course Description:
In this block week studio, we will design a community greenhouse to accommodate year-round indoor programs such as early childhood development, seniors’ engagement, and an events venue. The students are asked to design a five thousand-square feet structure with spaceframe structure, design the joints to be digitally fabricated with translucent facades with the main objective of urban farming and providing food security, social interactions and community engagement. The design must incorporate a building envelope assembly that becomes an intersection of utility and beauty. Vacant sites in specific communities in ward 9, where the average family income is substantially below the City of Calgary median income, will be selected.

The instructor will share documentation on four (4) potential sites. The student(s) will design a greenhouse structure with a footprint of 5000 sqft that will be sensitive to its context and will relate and utilize the exteriors and interiors in creative ways. The design development shall remain at the schematic level but with sufficient graphical information to understand the design intent and how users will use the proposed spaces.

Course Hours: 1.5 units
Course Learning Outcomes:

Upon completion of this course, students will know and be able to:

1. Engage in the design process tailored for participatory community-based projects
2. Acquire theoretical background on improving marginalized communities’ quality of life through design.
3. Become familiar with building systems and building envelope assemblies related to a community greenhouse.
4. Demonstrate consideration of social justice and inclusion through design
5. Digital Fabrication: high-tech design solutions to provide low-tech sustainable building materials and systems

Learning Resources:

Each student will only be required to read and present One (1) paper from the list below. However, time permitting, the students are encouraged to read as many papers as possible. Each student will have Five (5) minutes to present their understanding of the subject and should utilize a PowerPoint presentation format to insert pictures and other illustrations. The presenter will then facilitate a class discussion on the topic for Ten (10) minutes. As a group, we will decide to adopt a quote from the paper discussed for our final project book.

The following articles are uploaded on D2L.


https://www.gccarra.ca/great-neighbourhoods-platform/

**Technology requirements (D2L etc.):**

*For example:* In order to successfully engage in their learning experiences at the University of Calgary, students taking online, remote and blended courses are required to have reliable access to the following technology:

- A computer with a supported operating system, as well as the latest security, and malware updates
- A current and updated web browser
- Webcam (built-in or external)
- Microphone and speaker (built-in or external), or headset with microphone
- Current antivirus and/or firewall software enabled
Broadband internet connection
Most current laptops will have a built-in webcam, speaker and microphone

**Workshop Safety Training Requirement**
If a course requires the use of the SAPL workshop, students must complete all online University of Calgary safety courses, the online Trajectory safety training course, as well as in-person workshop training and a grade of pass on the final evaluation project, to be granted access to the SAPL workshop. This training is offered once a year, around the start of the Fall term and has a completion deadline.

**Additional Classroom Conduct and Related Information**

**Guidelines for Zoom Sessions in Online Classes**
Students are expected to participate actively in all Zoom sessions and to turn on their webcam. Please join our class in a quiet space that will allow you to be fully present and engaged in the Zoom sessions. Students must behave in a professional manner during the session. Students, employees, and academic staff are also expected to demonstrate behaviour in class that promotes and maintains a positive and productive learning environment.

**Assessment Components:**

<table>
<thead>
<tr>
<th>Assessment Method</th>
<th>Description</th>
<th>Weight</th>
<th>Aligned Course Learning Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class participation</td>
<td></td>
<td>15%</td>
<td>2 &amp; 3</td>
</tr>
<tr>
<td>Reading List Presentation</td>
<td></td>
<td>10%</td>
<td>2 &amp; 4</td>
</tr>
<tr>
<td>Mid-Week Review Presentation</td>
<td></td>
<td>25%</td>
<td>1 &amp; 5</td>
</tr>
<tr>
<td>Final Project</td>
<td></td>
<td>40%</td>
<td>1 &amp; 5</td>
</tr>
<tr>
<td>Documentation</td>
<td></td>
<td>10%</td>
<td>1 &amp; 5</td>
</tr>
</tbody>
</table>

**Guidelines for Submitting Assignments:**

**Final Examinations:** No Final exam

**Expectations for Writing** ([https://www.ucalgary.ca/pubs/calendar/current/e-2.html](https://www.ucalgary.ca/pubs/calendar/current/e-2.html)):

**Late Assignments:**

**Criteria that must be met to pass:**
Students will achieve an overall grade, not every aspect needs to be passed in order to pass this course.
## Grading Scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Point Value</th>
<th>4-Point Range</th>
<th>Percent</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>4.00</td>
<td>4.00</td>
<td>95-100</td>
<td>Outstanding - evaluated by instructor</td>
</tr>
<tr>
<td>A</td>
<td>4.00</td>
<td>3.85-4.00</td>
<td>90-94.99</td>
<td>Excellent - superior performance showing comprehensive understanding of the subject matter</td>
</tr>
<tr>
<td>A-</td>
<td>3.70</td>
<td>3.50-3.84</td>
<td>85-89.99</td>
<td>Very good performance</td>
</tr>
<tr>
<td>B+</td>
<td>3.30</td>
<td>3.15-3.49</td>
<td>80-84.99</td>
<td>Good performance</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
<td>2.85-3.14</td>
<td>75-79.99</td>
<td>Satisfactory performance</td>
</tr>
<tr>
<td>B-</td>
<td>2.70</td>
<td>2.50-2.84</td>
<td>70-74.99</td>
<td>Minimum pass for students in the Faculty of Graduate Studies</td>
</tr>
<tr>
<td>C+</td>
<td>2.30</td>
<td>2.15-2.49</td>
<td>65-69.99</td>
<td>All final grades below B- are indicative of failure at the graduate level and cannot be counted toward Faculty of Graduate Studies course requirements.</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
<td>1.85-2.14</td>
<td>60-64.99</td>
<td></td>
</tr>
<tr>
<td>C-</td>
<td>1.70</td>
<td>1.50-1.84</td>
<td>55-59.99</td>
<td></td>
</tr>
<tr>
<td>D+</td>
<td>1.30</td>
<td>1.15-1.49</td>
<td>50-54.99</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>1.00</td>
<td>0.50-1.14</td>
<td>45-49.99</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
<td>0-0.49</td>
<td>0-44.99</td>
<td></td>
</tr>
</tbody>
</table>

A student who receives a "C+" or lower in any one course will be required to withdraw regardless of their grade point average (GPA) unless the program recommends otherwise. If the program permits the student to retake a failed course, the second grade will replace the initial grade in the calculation of the GPA, and both grades will appear on the transcript.

The School of Architecture, Planning and Landscape will not permit the Flexible Grade Option (CG Grade) for any course offered by the School.

https://www.ucalgary.ca/pubs/calendar/current/f-1-3.html

CACB Student Performance Criteria (for Architecture courses only)

Example: "The following CACB Student Performance Criteria will be covered in this course at a primary level:
A2. Design Skills
A3. Design Tools
A4. Program Analysis"
A5. Site Context and Design
A6. Urban Design
A8. Design Documentation
B1. Critical Thinking and Communication
B5. Ecological Systems
C2. Materials
C3. Structural Systems
C4. Envelope Systems

### Topic Areas & Detailed Class Schedule

<table>
<thead>
<tr>
<th>Course Schedule Date</th>
<th>Topic</th>
<th>Assignments/Due Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday Feb 12</td>
<td>Course outline, site selection, programming, why a design intervention? 5 papers presentations</td>
<td></td>
</tr>
<tr>
<td>Tuesday Feb 13</td>
<td>Finalize functional requirements, the design concept, and final design project deliverables. 5 papers presentations.</td>
<td></td>
</tr>
<tr>
<td>Wednesday Feb 14</td>
<td>Mid-week projects review: presentations and discussions (5 min. presentations + 5 min. feedback) 4 papers presentations</td>
<td></td>
</tr>
<tr>
<td>Thursday Feb 15</td>
<td>Final Projects checklist, design development</td>
<td></td>
</tr>
<tr>
<td>Friday Feb 16</td>
<td>Final Projects Presentations (5 min.), documentation and online publication. We may need to stay in class to finish through the afternoon.</td>
<td></td>
</tr>
</tbody>
</table>
Selected Sites

Site 1: Ogden 1819 66 AV SE   S-SPR Special Purpose - School, Park and Community Reserve

Site 2: Forrest Heights 608 47 ST SE   S-CS Special Purpose - Community Service
Site 3: Marlborough 636 MARLBOROUGH WY NE S-SPR Special Purpose - School, Park and Community Reserve

Site 4: Marlborough Park 6033 MADIGAN DR NE S-SPR Special Purpose - School, Park and Community Reserve
University of Calgary Policies and Supports

ACADEMIC ACCOMMODATION

It is the student’s responsibility to request academic accommodations according to the University policies and procedures listed below. The student accommodation policy can be found at: https://www.ucalgary.ca/legal-services/university-policies-procedures/student-accommodation-policy

Students needing an accommodation because of a disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities: https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Accommodation-for-Students-with-Disabilities-Procedure.pdf. Students needing an accommodation in relation to their coursework or to fulfil requirements for a graduate degree, based on a Protected Ground other than Disability, should communicate this need, preferably in writing, to their instructor (contact information on first page above).

SAS will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities, visit www.ucalgary.ca/access/.

ACADEMIC MISCONDUCT

Academic Misconduct refers to student behavior which compromises proper assessment of a student’s academic activities and includes: cheating; fabrication; falsification; plagiarism; unauthorized assistance; failure to comply with an instructor’s expectations regarding conduct required of students completing academic assessments in their courses; and failure to comply with exam regulations applied by the Registrar.

For information on the Student Academic Misconduct Policy and Procedure please visit: https://www.ucalgary.ca/legal-services/university-policies-procedures/student-academic-misconduct-policy

Additional information is available on the Academic Integrity Website at https://ucalgary.ca/student-services/student-success/learning/academic-integrity.

COPYRIGHT LEGISLATION:

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (https://www.ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-material-protected-copyright-policy) and requirements of the copyright act (https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html) to ensure they are aware of the consequences of unauthorised sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy (https://www.ucalgary.ca/pubs/calendar/current/k.html).
INSTRUCTOR INTELLECTUAL PROPERTY
Course materials created by instructors (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the instructor. These materials may NOT be reproduced, redistributed or copied without the explicit consent of the instructor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing.

FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY
Student information will be collected in accordance with typical (or usual) classroom practice. Students’ assignments will be accessible only by the authorized course faculty. Private information related to the individual student is treated with the utmost regard by the faculty at the University of Calgary.

SEXUAL AND GENDER-BASED VIOLENCE POLICY
The University recognizes that all members of the University Community should be able to learn, work, teach and live in an environment where they are free from harassment, discrimination, and violence. The University of Calgary’s sexual violence policy guides us in how we respond to incidents of sexual violence, including supports available to those who have experienced or witnessed sexual violence, or those who are alleged to have committed sexual violence. It provides clear response procedures and timelines, defines complex concepts, and addresses incidents that occur off-campus in certain circumstances. Please see the policy available at https://www.ucalgary.ca/legal-services/university-policies-procedures/sexual-and-gender-based-violence-policy.

UNIVERSITY STUDENT APPEALS OFFICE
If a student has a concern about a grade that they have received, they should refer to Section I of the Undergraduate Calendar (https://www.ucalgary.ca/pubs/calendar/current/i-3.html) which describes how to have a grade reappraised. In addition, the student should refer to the SAPL’s Procedure for reappraisal of grades.

OTHER IMPORTANT INFORMATION
Please visit the Registrar’s website at: https://www.ucalgary.ca/registrar/registration/course-outlines for additional important information on the following:

- Wellness and Mental Health Resources
- Student Success
- Student Ombuds Office
- Student Union (SU) Information
- Graduate Students’ Association (GSA) Information
- Emergency Evacuation/Assembly Points
- Safewalk