Course Agenda
Urban Design Studio II—Synthesis of Urban Form, Fall 2015

The UniverCity Design Challenge

The second of two studios in the Urban Design Program will build on the first Analytic Tools Studio and take the process one step further to actual design and implementation. This “synthesis” phase will focus on developing urban design in a comprehensive physical form that includes the appropriate elements of urban design set sensitively into its urban context. As with the first studio, the format of the Synthesis Studio will be highly interactive, favouring coaching and mentoring, over one way dialogue. The studio will use UniverCity as a central case study.

Many urban design plans focus solely on the physical development of a site. Often the surrounding uses are not considered in the urban design strategy. The economic and social consequences of this approach can be disastrous. Rather than fitting in and building on the character and needs of the surrounding community, this approach essentially designs in a vacuum. The other dimension that is largely ignored in the urban design process is the implementation phase of the project —how the project will get built and be managed over time.

This studio will use the SEE approach (Social, Economic, and Ecological) to urban design and implementation that is comprehensive by nature and attempts to fit the design into the “Place” and context that is already there. Elements that will be considered in the implementation strategy include organization, phasing, and funding strategies. This studio will try to balance the physical considerations of placemaking with the social and economic forces that also shape our future.

Purpose

- Take the next step in the studio sequence and complete an urban design plan for a site that reflects an intimate understanding of the “place” it is, and what it can or should become, through a transformation.
- Learn how to build an urban design team and translate urban design analysis into preliminary concepts and choices of urban forms and functions
- Refine the analysis and concepts into a recommended urban design alternative that addresses the elements of urban design in a clear and concise manner and reflects the understanding of the “place” and its future sensitive development.
- Examine the tools available to implement the programs, actions and building components of the proposed urban design plan.

Studio Program

- Day 1, Designing in Place and Context:
  Background and tours of UniverCity.
Day 2, Place Reading and Design:
Form-makers, design, and transformation strategies.

Day 3, The Comprehensive Urban Design Plan: Development of the plans that make up the overall urban design strategy, considering and representing economic, social, and physical dimensions of the plan and implementation; jury presentation and discussion; conclusions.

**Thursday**

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<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>9 am</td>
<td>Introductions and Interests</td>
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<tr>
<td>9:30 am</td>
<td>Studio Overview: Process and Outcomes (Michael von Hausen)</td>
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<td>9:45 am</td>
<td>Break and Walk to SFU Community Trust Office for an Overview</td>
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<td>Suite 150, 8960 University High Street</td>
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<td>10 am</td>
<td>SFU Community Trust Office for Overview (Dale Mikkelsen &amp; Jesse Galicz, Univercity)</td>
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<tr>
<td>10:30 am</td>
<td>Site Walk of existing development and studio site</td>
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<td>12:30 pm</td>
<td>Lunch</td>
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<td>1:30 pm</td>
<td>Team Vision, Task Assignment, Site analysis and Big Ideas</td>
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<td>5:30 pm</td>
<td>Adjournment</td>
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**Friday**

The Site – Design Day

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<th>Time</th>
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<tbody>
<tr>
<td>9 am</td>
<td>TEAM DETAILED URBAN DESIGN: Public Realm, Building Form/Character,</td>
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<td>Ecological Planning and Sustainable Design, Financial, Social Feasibility</td>
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<tr>
<td>12 pm</td>
<td>Lunch</td>
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<tr>
<td>1 pm</td>
<td>IMPLEMENTATION—Social, Economic and Ecological: Organization/Partnerships, Finance, and Phasing</td>
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<tr>
<td>5:15 pm</td>
<td>Group Debrief and Schedule</td>
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<td>5:30 pm</td>
<td>Adjournment</td>
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<tr>
<td>9 am</td>
<td>Team development of urban design illustrations and narrative for Preferred Plan and Implementation Strategy (SEE)</td>
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<td>12:30 pm</td>
<td>Working Lunch.</td>
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<tr>
<td>1 pm</td>
<td>Team Presentations to Jury (Michael von Hausen, Gordon Price, SFU City Program Director, Dale Mikkelsen Director, Development, UniverCity, Robert Renger, City of Burnaby)</td>
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<tr>
<td>5 pm</td>
<td>Lessons learned</td>
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<td>5:30 pm</td>
<td>Adjournment</td>
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Site Overview and Urban Design
Problem Statement

UniverCity

UniverCity on Burnaby Mountain is a unique mountaintop development neighbouring one of Canada’s premier educational institutions, Simon Fraser University. UniverCity is designed to be a compact, mixed-use and transit-oriented community founded on principles of environmental, economic, and social sustainability. Throughout each stage of design and development, planners worked to ensure the integration of residential, commercial, and academic uses in a manner that would benefit the University as well as bring both local and international acclaim to SFU and the City of Burnaby.

SFU had two primary goals in developing a residential community: to create a more complete community on the mountain, with a diverse range of housing choices, shops, services and amenities; and to establish an Endowment Fund to support teaching and research at SFU.

The SFU OCP envisions a dense, mixed-use community on approximately 65 hectares of land surrounding the campus. It allows for up to 4,536 residential units in two distinct neighbourhoods to the east and south of the SFU campus, each with its own elementary school and neighbourhood park. The OCP includes provisions for a commercial core, community facilities, and an extensive network of pedestrian paths and bike trails.

Currently entering the fourth and final phase of development, the East neighbourhood has been completely master planned and is well under construction with more than 1,500 units built to date (Figure 1). UniverCity is currently home to almost 3,500 residents and is currently anticipated to accommodate a population of roughly 10,000 when fully built out. As with many new developments in the Lower Mainland, UniverCity faces issues of housing affordability, environmental protection, transportation and economic development.
UniverCity East Highlands Masterplan

Figure 1
Study Area Overview

UniverCity's future South Neighbourhood, which has yet to be significantly planned or developed, is enclosed by Gaglardi Way on the West, South Campus Road on the North, and University Drive East on the South (Figure 2). The Study Area, which includes the lands east of Naheeno Park, is roughly 58.6 acres (23.7 ha) in size and consists of various natural features and infrastructure (Figure 3). Vegetation in the Study Area ranges from mature deciduous; to mixed deciduous and coniferous forest, as well as conifer dominated forests. A number of streams, varying from A to C class, also meander throughout the Study Area. The Study Area is also home to Discovery 1 and 2, which currently house the SFU-affiliated Fraser International College, which is a private high school.
Urban Design Problem Statement

The SFU Official Community Plan, based on a joint planning process by the City of Burnaby and SFU, was adopted by Burnaby Council in 1996, and was most recently amended in 2008. The Plan provides for up to 65 hectares (160 acres) of land adjacent to the SFU campus within the Ring Road to be developed for up to 4,536 residential units in two distinct neighbourhoods to the south and east of the campus, each with its own elementary school and neighbourhood park.

Development and planning for the more urban higher-density East Neighbourhood in accordance with the SFU Official Community Plan is well advanced.

The adopted Official Community Plan provides for up to 1487 residential units to be developed in the South Neighbourhood. 780 of these units are located within the Study Area east of Naheeno Park. The Plan also provides for a 2.8 ha school site with an adjacent 2.0 ha neighbourhood park to be located within the Study Area.

The Study Area also includes SFU’s existing Discovery 1 and Discovery 2 buildings, east of the South Neighbourhood, which should be integrated into the design.

Some of the most important sections of the adopted Official Community Plan constituting the existing development framework for the South Neighbourhood include the following (some keywords are provided in parentheses, but it is important to refer to the full text in the Plan itself):

2.4 Naheeno Park (boundaries based on watercourse setbacks)
2.3 Discovery Park
2.5.4 South Neighbourhood Statistics (up to 1487 units, 0.45 to 0.9 FAR, 4 storey height)
2.6 Schools (2.8 ha site to be provided)
2.7 Parks (2.0 ha site next to school site and 0.61 ha site west of Naheeno Park)
2.8 Community Facilities (childcare)
3.2 Watercourses (30m riparian setbacks from top of bank)
3.3 Trees Vegetation and Wildlife (tree retention, view studies, landscaping)
4.2 Road, Pedestrian and Bicycle Networks (see Fig 5 Circulation Concept)
4.5 Watercourse and Stormwater Management

It is recognized that studio teams may choose to suggest amendments to the adopted Plan. In such cases, the rationale for each proposed change should be provided.

The SFU Community Trust has indicated that it would be interested in significantly increasing the residential development potential of the South Neighbourhood, to more than double that provided for in the adopted Plan. It also wants to ensure that family-orientated housing and affordable housing will be included.

The Trust has also indicated that it would like the following additional uses to be developed in the South Neighbourhood and Discovery Park area:
• Research/office space – 120,000 square feet additional
• Live/work space – 200,000 square feet
• Appropriately scaled and sited retail space

All of the land uses to be developed in the Study Area should be seamlessly integrated with both the previously developed East Neighbourhood residential community and the SFU campus, taking into consideration UniverCity's current development guidelines, and when required improving upon them.

Resource Material

Environmental Resource Material

• Topographic survey
• Watercourse mapping and classification
• Survey of significant trees and other vegetation, and evaluation report

Policy and Development Context Resource Material

• SFU Official Community Plan
• Zoning Bylaw, and zoning map showing location of Naheeno Park (P3) and planned residential South Neighbourhood (P11)
• SFU Campus Master Plan including Discovery Park
• East Neighbourhood Plan including Phase 3 CD Zoning Plans (REZ #06-65)
• Map of utility corridors, statutory rights-of-way, easements, etc.
• Burnaby Mountain Conservation Area Trail Map
• Plans for the potential Burnaby Mountain Sport + Medical complex
Studio Team Outputs:

1. Regional and Local Context Analysis: Social, economic, and ecological.

2. Economic and Socio-Cultural Summary Analysis: Housing supply, demand, differentiation, and marketing/equity strategies.

3. Summary of Site Opportunities and Challenges: Development capacity and associated population capacity scenarios (options).

4. Land Use and Development Option: Recommended Land Use Concept Plan.

5. Recommended Urban Design Framework Plans including:
   a. Land Use: Housing diversity, appropriately sized commercial, institutional, and business retention/retrofit as per above program;
   b. Green Plan: Open space network/recreation/community assets, stormwater, waste, energy, and other sustainability features;
   c. Mobility Plan: Pedestrian, bicycle, transit, and other innovations;
   d. Housing Affordability Strategy: Percentage, location, and funding strategies;
   e. Building Form and Massing: View sensitivity, tree retention, form transitions, materials, colours, and green features;
   f. Statistical Summary: building uses, areas, densities, and population;