CE 4720 and CE 5720

Street Design

Course Schedule

Home

Logistics

Lectures

WebEx Link for Lectures

5:00 to 7:30 pm, Thursday

Instructor: Norman Garrick

norman.garrick@gmail.com

On-line Office Hours: W 4 to 5 pm (or by appointment)

NWG WebEx Link for Office Hours

Teaching Assistant: Ge Shi

ge.shi@uconn.edu

On-line Office Hours: F 3 to 4 pm

GS WebEx Link for Office Hours

The Art of Street Design

Streets are the foundation upon which we build cities, towns and villages.

The design of the streets determines whether or not we have a walkable community or if we must drive to meet our daily needs.

Street design also affects traffic safety, the economic vitality of businesses, the livability and attractiveness of our shopping districts as well as our residential neighborhoods and the environmental footprint of our transportation system.

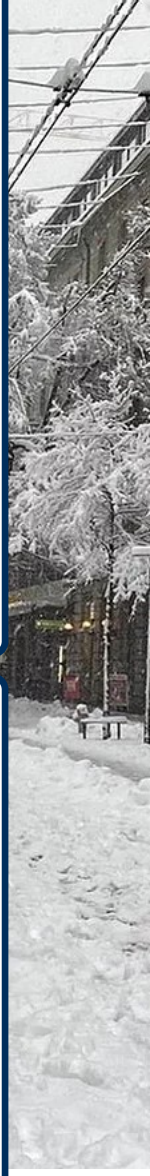
Course Foundation

Over the last decade attitudes towards the design of streets in the US have undergone a dramatic shift. Places all over the country have radically revised their approach, focusing less on vehicle movement and more on the economic and social functioning of their streets. Attempts to develop more inclusive design come in many guises, under such names as traffic calming, complete streets, road diets, and shared space.

In this class we will look at the theory underlying these state-of-the-art practices and develop a holistic approach for design streets that are safer, more effi cient and that support community vibrancy and vitality.

In addition to looking at the design of individual streets we will also focus on the art and science of designing street networks. American designers have a proud history of designing street networks that created the template for the building of great cities. But these days the skills needed to design street networks are no longer part of the typical repertoire of engineers and planners in America. Fortunately, with the advent of the New Urbanist movement and its interest in building complete communities, the importance of street networks is once again being recognized.

One goal of in this class is to help resurrect this American tradition of excellent in street network design and to pair it with the tools and knowledge needed to design functional, safe and beautiful streets.



Learning Objects

1. Learn and understand the impact of street design on society
2. Learn about the impact of design on speed and the importance of speed to safety and the function of streets
3. Learn and understand the different types of thoroughfares and the importance of the classification system
4. Learn how streets are designed to accomodate various types of users including pedestrians and bicyclists
5. Learn the foundation of street network design
6. Learn to apply the elements of street design through a semester long conceptual project

Assignments

Design Project

The final report for the group should be no more that 12 typewritten pages (double spaced), inclusive of figures and tables.

Exams

There will be two (2) exams.
The exams will be based on class lectures

Term Paper (CE 5720 only)

Students in the graduate section will be required to write a term paper of no more that 12 typewritten pages (double spaced) in a subject of their own chosing related to street design.

Grade Assessment

	CE 4720	CE 5720
HW	10 %	10 %
Conceptual Project	20 %	15 %
Term Paper	NA	25 %
Mid-term Exam	35 %	25 %
Final Exam	35 %	25 %
Total	100 %	100 %

Software and Technological Requirements

The software/technical requirements for this course include:

- HuskyCT/Blackboard (HuskyCT/ Blackboard Accessibility Statement, HuskyCT/ Blackboard Privacy Policy)
- Adobe Acrobat Reader (Adobe Reader Accessibility Statement, Adobe Reader Privacy Policy)
- Google Apps (Google Apps Accessibility, Google for Education Privacy Policy)
- Microsoft Offi ce (free to UConn students through uconn.onthehub.com) (Microsoft Accessibility Statement, Microsoft Privacy Statement)
- Dedicated access to high-speed internet with a minimum speed of 1.5 Mbps (4 Mbps or higher is recommended).
- Webcam

Student Code of Conduct

Covid-19 Reminder

Face covering is required at all times in public settings at UConn

You are responsible for acting in accordance with the University of Connecticut's Student Code Review and become familiar with these expectations. In particular, make sure you have read the section on Academic Integrity:

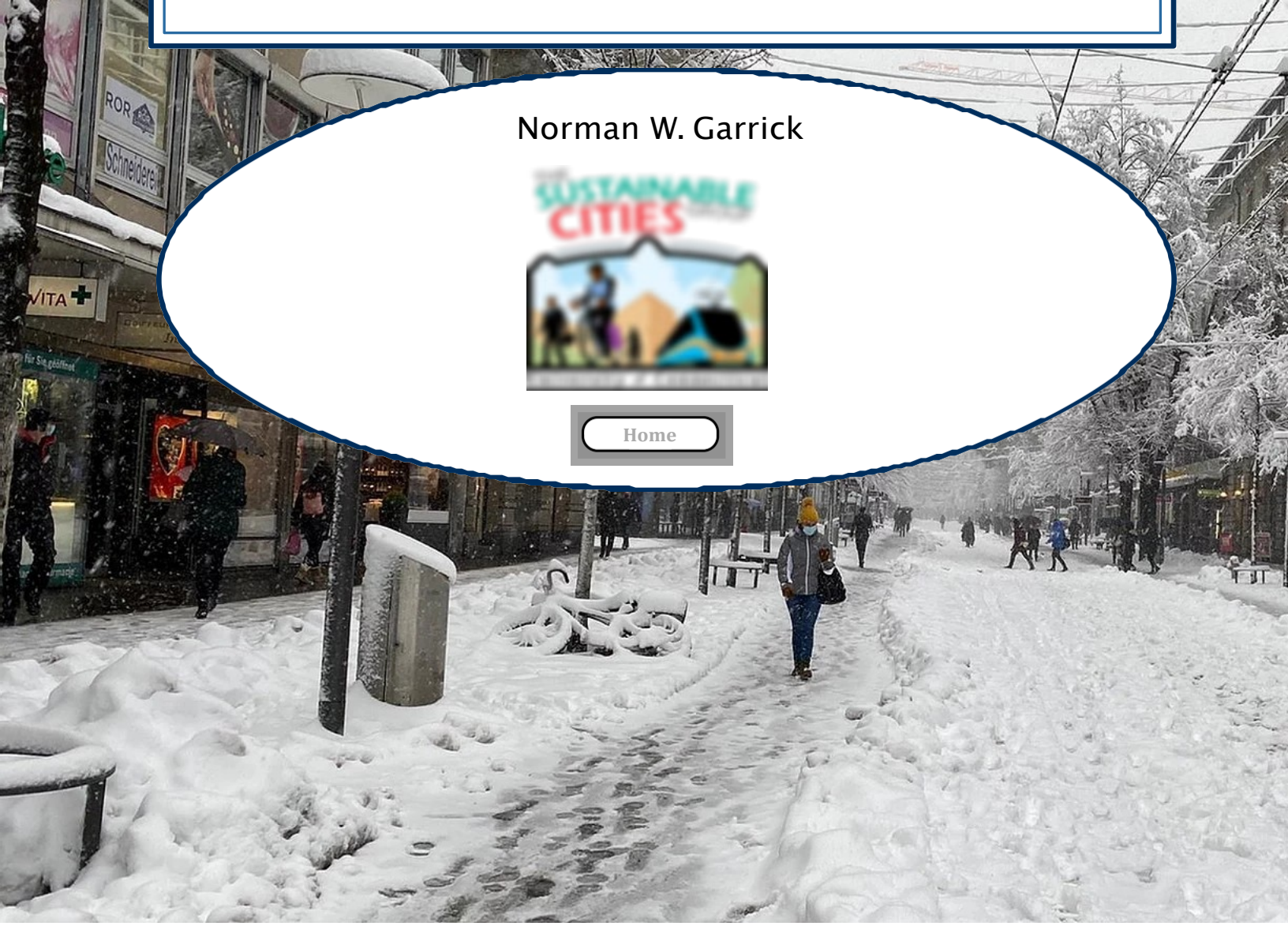
- Academic Integrity in Undergraduate Education and Research

Cheating and plagiarism are taken very seriously at the University of Connecticut. As a student, it is your responsibility to avoid plagiarism. If you need more information about the subject of plagiarism, use the following resources:

- Plagiarism: How to Recognize it and How to Avoid It
- Instructional Module about Plagiarism

- University of Connecticut Libraries' Student Instruction (includes

research, citing and writing resources)



Norman W. Garrick

Home

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Street Design

Home

Class Logistics

Class 1– Thursday, January 21

1.1 Evolution of Street Design in America — Class Notes

1.2 Observing Streets — Class Notes

Homework 1 — HW

Class 2- Thursday, January 28

2.1 Context versus System Time Design — Class Notes

2.2 Speed in Design — Class Notes

Homework 2 — HW

Draft Study Guide for Exam 1 — Draft Study Guide

Class 3- Thursday, February 4

3.1 Target Speed and Design Speed — Class Notes

3.2 Classification of Streets and Highways — Class Notes

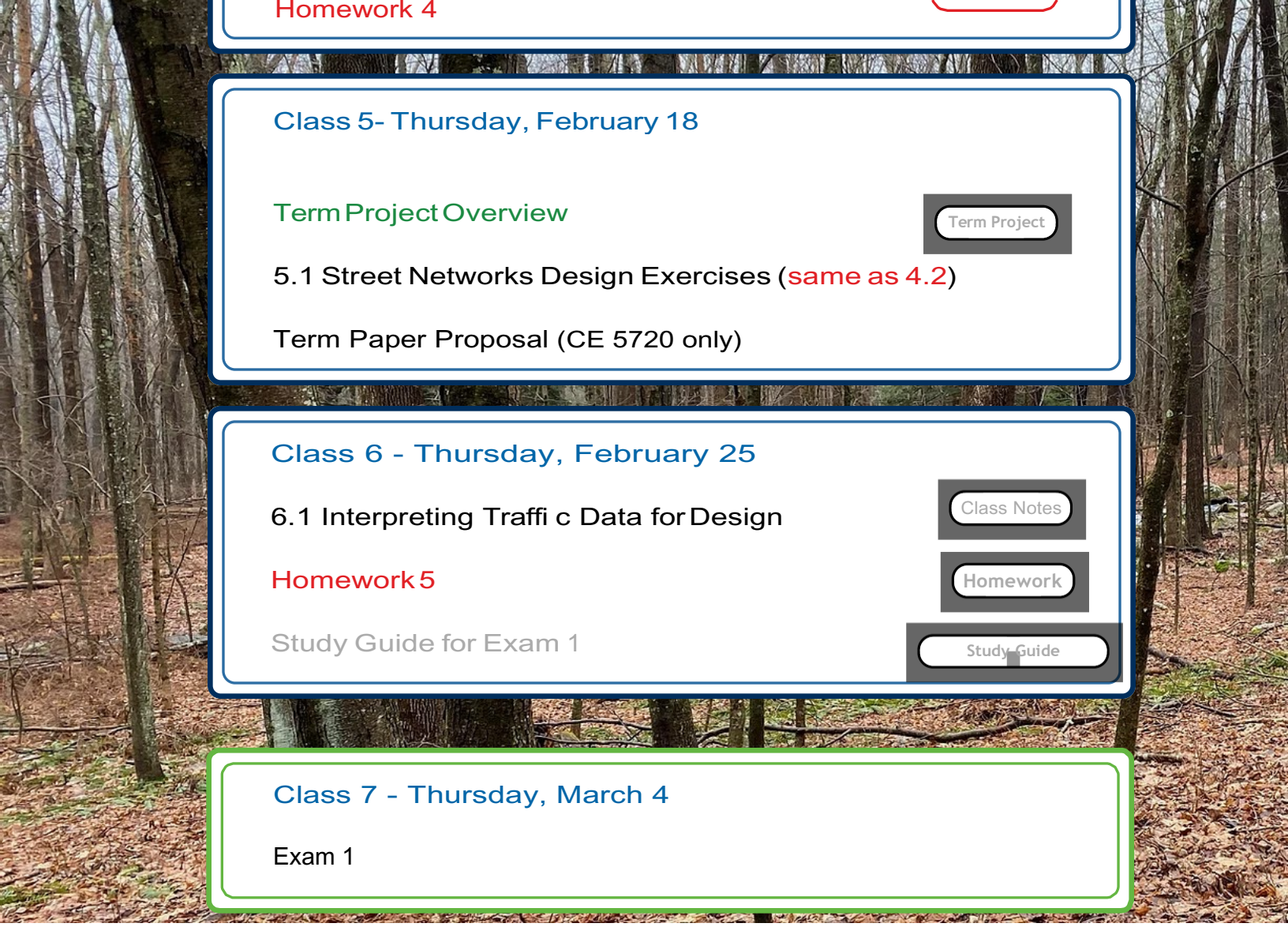
Homework 3 — HW

Class 4- Thursday, February 11

4.1 Basics of Street Networks — Class Notes

4.2 The Design of Street Networks — Class Notes

HW



Homework 4

Class 5- Thursday, February 18

Term Project Overview

Term Project

5.1 Street Networks Design Exercises (same as 4.2)

Term Paper Proposal (CE 5720 only)

Class 6 - Thursday, February 25

6.1 Interpreting Traffi c Data for Design

Class Notes

Homework 5

Homework

Study Guide for Exam 1

Study Guide

Class 7 - Thursday, March 4

Exam 1

Class 8 - Thursday, March 11

Design Studio

Class 9 - Thursday, March 18

9.1 Elements of Urban Street Design

Class Notes

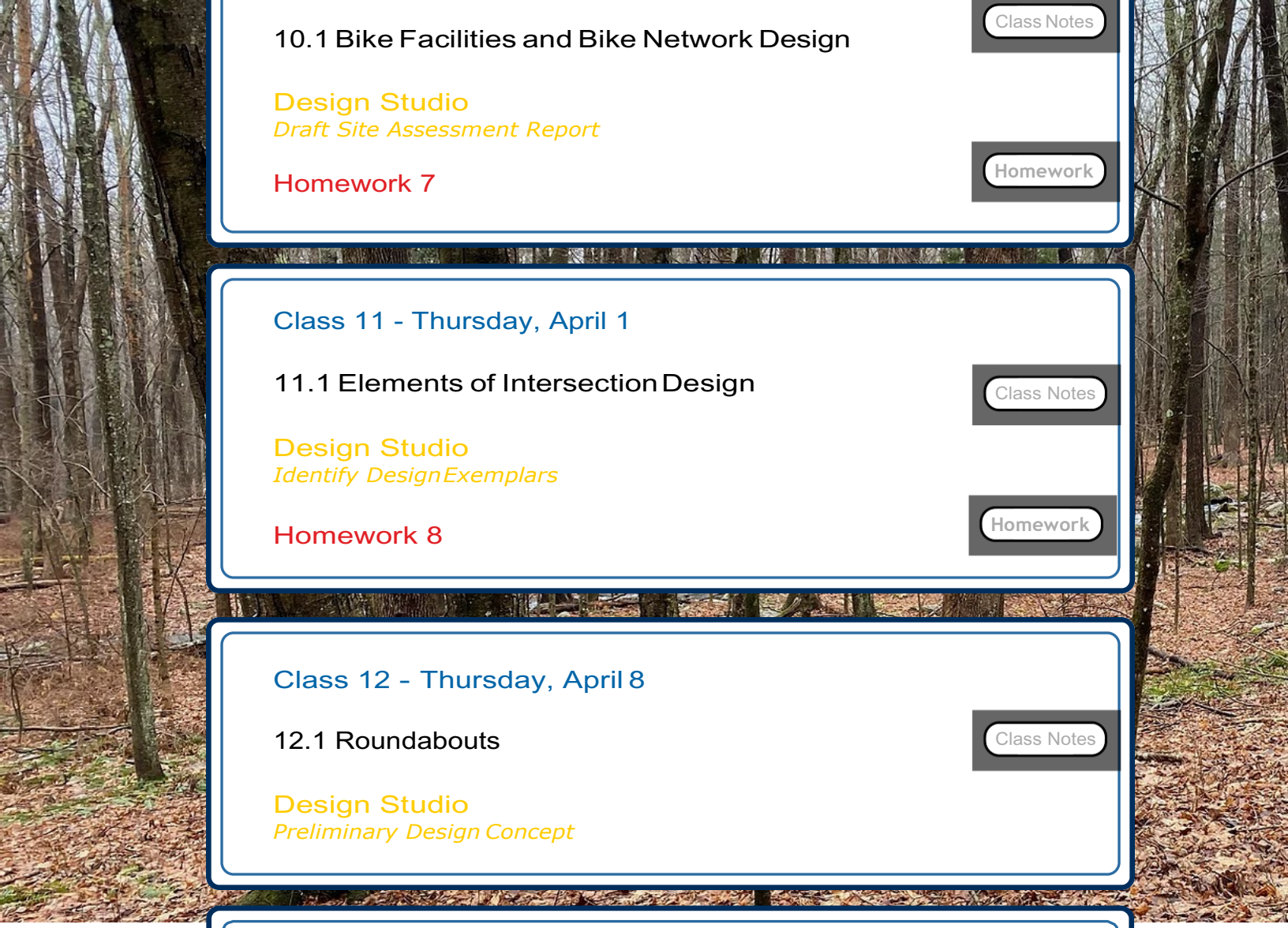
Design Studio

Homework 6

Homework

Draft Study Guide for Finals

Class 10 - Thursday, March 25



10.1 Bike Facilities and Bike Network Design

Class Notes

Design Studio
Draft Site Assessment Report

Homework 7

Homework

Class 11 - Thursday, April 1

11.1 Elements of Intersection Design

Class Notes

Design Studio
Identify Design Exemplars

Homework 8

Homework

Class 12 - Thursday, April 8

12.1 Roundabouts

Class Notes

Design Studio
Preliminary Design Concept

No Class - Thursday, April 15

Spring Break

Class 13 - Thursday, April 22

Design Studio
Project Presentations

Final Exam - Thursday, May 6

Study Guide

Norman W. Garrick

THE SUSTAINABLE CITIES GROUP