SENV 3420
Understanding Place: Lake Champlain

Manifesting solutions to environmental challenges requires a deep understanding of "place," by which we mean a sense of the history, culture, economy, and ecology of a location. Facing environmental challenges cannot be divorced from understanding either the people or the ecological realities of the location where the challenge is situated or from where the solution is to emerge. This is true everywhere, but it is best understood by focusing on a single place.

In the School of the Environment, this place is Lake Champlain, a large (440 square mile) freshwater lake that borders Vermont, New York, and Quebec. Like virtually all lakes in the world, it is confronted by a range of pressing environmental challenges such as declining water quality from land-use practices in the watershed, invasive species, and sustainable management of recreational fisheries. As such, it provides a lens with which to explore the ways in which the integration of many different disciplines—ranging across the natural sciences, social sciences, and humanities—can lead to a better understanding of the solutions to multiple environmental challenges.

This course will explore Lake Champlain through history, biology, literature, geology, and political science, to understand how it came to be in the condition it is today and how to improve conditions for both its own waters and the human communities associated with it. This course will use the R/V David Folger (the College’s research vessel), GIS technology, and interviews with numerous people involved in the management of the lake in both the United States and Canada.

Instructors
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Course structure
We will organize our time around three levels of inquiry, each involving reading, discussion, and field work. The first level is to experience how a full understanding a place like Lake Champlain requires an awareness of the narratives of the place. Ecological narratives and cultural narratives combine to describe how a place came to be what it is today as well as to describe the context for moving forward into the future with the policy and cultural transformations necessary to promote environmental sustainability and resiliency. Thus, we will begin our study of “place” as an engagement with the stories of the place.

The second level of inquiry will involve cultural and ecological engagement with the question, “What do we mean when we say that Lake Champlain is polluted?” This seemingly simple question requires an exploration of many related cultural constructs, such as what is a pollutant, what do we mean by the terms “clean” and “healthy,” and how have those meanings changed over time. We will explore the cultural origins of our evolving relationship with different elements that enter into the lake (such as nitrogen, phosphorus, and mercury), how labor practices and settlement patterns interact with topography and hydrology, and scenarios for environmental policies to address public concerns about the future of the lake.
The third level of inquiry will be to abstract the general lessons about understanding place in order to allow students to apply their exploration of Lake Champlain to any other location, thus transforming Lake Champlain into a case study that promotes in students a deeper and more integrated understanding of the environmental stories – past, present, and future – of any place.

**Readings**

Our readings will come from numerous articles, reports, book chapters, and one textbook:

*Lake Champlain: A natural history* (Mike Winslow)

Readings other than the ones from the textbook will be made available as pdfs on the class Moodle site or through links to on-line sources.

**Assessment**

Assessment in this course will be of your engagement, short assignments, and writing.

Engagement—Each of you will be asked to perform a self-assessment of your engagement in all aspects of this class. These assessments will be combined with those that the instructors perform on each student in the class. (35%)

Short assignments—Following activities or field trips, we will ask you to report out on the activity in any one of a number of different ways, including writing a short response paper reflecting on your experiences and relating them back to the assigned readings and the topics and themes of the course, recording an interview, and reflecting on the ecological story told from data collected in the field. (30%)

Writing (final paper)—Using the tools and lenses acquired in this course, we will ask you to write a paper of approximately 10 pages reflecting on an understanding of the narratives that characterize a place of your own choosing. A more complete description of the format and style for this final paper will be handed out separately during the first week of class. However, given the short time that we all will have together this semester and the challenges involved in exploring the diverse narratives of a place, we strongly recommend that the place you choose for this paper be one that you are already familiar with. (35%). Due by dinnertime on Tuesday, July 29th (Week 6).

**Grading**

Grades will be assigned on a straight percentage basis: 90-100% is an A, 80-89% is a B, 70-79% is a C, 60-69% is a D, and <60% is an F, with + and - grades assigned to high and low scores within those ranges.

**Calendar**

**Week 1**

Mon June 23, Hillcrest: discussion of first set of articles, and framing the perspective of the course
Wed June 25, R/V Folger (water sampling)

**READINGS:**

Tim Creswell, “Defining Place,” from *Place: A Short Introduction*  
Yifu Tuan, “Space and Place: Humanistic Perspective”  
Keith H. Basso, “Wisdom Sits in Places: Notes on a Western Apache Landscape,” from *Senses of Place*  
Rebecca Solnit, “On the Inexhaustibility of a City,” from *Infinite City*  
*Lake Champlain: A natural history*, chapters 1 and 2
Week 2

Mon June 30, R/V Folger (sediment sampling)
Wed July 2, Mt. Independence field trip

READINGS:
   Glenn Harris and Seth Wilson, “Water Pollution in the Adirondack Mountains: Scientific Research and Government Response, 1890-1930

Week 3

Mon July 7, McCardell Bicentennial Hall (sample and data analysis)
Thu July 10, Lake Champlain Maritime Museum field trip

READINGS:
   Jody A. Roberts and Nancy Langston, “Toxic Bodies/Toxic Environments: An Interdisciplinary Forum”
   Joseph Bruchac, selections from The Wind Eagle

Week 4

Mon July 14, R/V Folger (biological indicators)
Thu July 17, Interview local stakeholders about their stories

READINGS:
   Lake Champlain: A natural history, chapters 4 and 5

Week 5

Mon July 21, Hillcrest 200 (discussion about crafting narratives of place)
Wed July 23, R/V Folger (archeology)

READINGS:
   Lake Champlain: A natural history, chapter 6
   Peter M. Slowe, “The Geography of Borderlands: the Case of the Quebec-US Borderlands”
   Arthur B. Cohn, “A Perspective on the Future of Underwater Archaeology”

Week 6

Mon July 28, Hillcrest 200 (In-class work and consultation on final paper)
Thu July 31, Snake Mountain