

NR 5884 TS: Landscape Systems & Strategies
Offered: Fall, Spring, Summer I (12-week) in odd years

INSTRUCTOR: Daniel Marcucci, Ph.D., marcucci@vt.edu

REQUIRED TEXT: *Sustainable Landscape Planning: The Reconnection Agenda*
Selman (2012), Routledge (ISBN: 978-1-84971-263-7)

COURSE DESCRIPTION:

Landscapes are frames on the physical world where coupled human and natural phenomena create systems ranging from highly altered, such as urban centers or agricultural regions, to predominately natural, such as wild or resource lands. This course examines the cumulative effects on individual landscapes of global trends such as increasing population, expanding cities, improving living standards, accelerating climate change, shifting agriculture, and moving coastlines combined with local pressures. A 21st century perspective is deployed to analyze how these keystone processes will create new challenges for ecosystem services, productivity, sustainability, resilience, and adaptability on landscapes. Integrates the demands of conservation, development, and governance for both the intermediate- and long-term into a single proposition.

SCHEDULE:

The Reconnection Agenda

1. The Landscape Concept: Landscape Connections/Disconnections
2. Functions & Services
3. Change & Resilience
4. Physical Connections
5. Social Connections
6. Future Landscape

Design with Nature

7. Biodiversity
8. Landscape Patterns & Processes
9. Water on the Landscape

Envisioning 2100

10. The Land Ethic
11. The Climate Imperative
12. Cities in the Wilderness
13. Food, Fibers, and Fuel
14. Sustainable Landscapes