BIOLOGY 5337 – ADVANCED LIMNOLOGY
Lecture TR 12:30-13:45, BSB D.105

Instructor
Stephen Powers, Ph.D. Office hours: by appointment

Schedule

Module 1

Week 1 Overview (Aug 26)
Readings: Pollard et al. 2018

Week 2 Overview, Water is Weird (Sep 2, 4)
Readings: Kalff Ch.1,2,3
Exercises in Data

Week 3 Lake Form, Dams (Sep 9, 11)
Readings: Hayes et al. 2017, Kalff Ch.6,7
Exercises in Data

Week 4 Methods, Life in Lakes (Sep 16, 18)
Readings: NLA field manual, Phillips et al. 2008
Exercises in Data

Week 5 Light Heat Mixing (Sep 23, 25)
Readings: Kalff Ch.10, 11
Sharing and peer review of Initial Mini Report proposal

Week 6 Methods (Sep 30, Oct 2)
Readings: NLA lab manual
Mini Report proposal due Fri Oct 2

Week 7 No class
Problem Set #1 due Fri Oct 10 (to be distributed Oct 6)

Module 2

Week 8 pH and Inorganic Carbon, Productivity and Metabolism, Oxygen, Redox (Oct 14, 16)
Exercises in Data

Week 9 pH and Inorganic Carbon, Productivity and Metabolism, Oxygen, Redox (Oct 21, 23)
Exercises in Data

Week 10 Nitrogen and Phosphorus Cycles, Eutrophication, Ionic Composition, Micronutrients, Phytoplankton, Limits to Growth (Oct 28, 30)
Exercises in Data

Week 11 Nitrogen and Phosphorus Cycles, Eutrophication, Ionic Composition, Micronutrients, Phytoplankton, Limits to Growth (Nov 4, 6)
Exercises in Data

Week 12 Food Webs and Trophic Cascades, Organic Matter and the Benthos (Nov 11, 13)
Exercises in Data

Week 13 No class
Problem Set #2 due Fri Nov 21 (to be distributed Nov 17)

Thanksgiving (Nov 25, 27) No Class

Module 3

Week 14 Rivers and Streams, Biodiversity and Conservation, Limnology in a Changing World (Dec 2, 4)
Mini Report drafts, peer review

Week 15 (Dec 9)
Mini Report Presentations due

Week 16 No class
Mini Report due Tues Dec 16 (last day of "finals")
