

The University of Western Ontario  
London Canada

Applied Math 9511b  
**Special Topics in Applied Math: Theoretical Population Genetics**  
Winter 2017

LECTURES:

Mon/Wed/Fri 9:30–10:30am, MC204

TEXTBOOK

*Theoretical Evolutionary Genetics*, J. Felsenstein, 2016 (free online textbook).

EVALUATION

30% – Assignments  
20% – Short in-class quizzes  
20% – Lecture assignment  
30% – Final exam

This course will provide an overview of mathematical population genetics, which is the study of genes and gene frequencies, and how they change in a population over time. We will cover both discrete- and continuous-time models, using both deterministic and stochastic approaches. The plan is to cover sections of Felsenstein chapters I, II, II, VI, VII and X. There will be assignments on each chapter, plus short in-class quizzes to help with retention of the material. Each student will give a lecture to the class on some of the later material in the course, demonstrating a clear grasp of the material and good pedagogical practice. A final exam will be held in April.

CONTACT INFORMATION

**Instructor** Lindi Wahl  
**Office Hours:** Tuesdays 11am-12pm  
Middlesex College, Room 267

WEBSITE: see OWL for all course material and announcements.