**Parasite Ecology** 11:217:302 (4 credits)

*Syllabus*

**Professor:**
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**TA:**
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**Lecture:**
Tues/Fri, second period (10:55-12:15pm) in Rm 123 Bartlett Hall.

**Textbook:**
There is no specific textbook. Any parasitology textbook, any sources on the internet or in regular libraries can be used for supplemental information. *Advanced students might be interested in “Evolutionary Ecology of Parasites” second edition by Robert Poulin 2007. Princeton University Press.*

**Grading policy:**
- Mid term exam 30%
- Final exam (inclusive) 50%
- Pop quizzes and attendance 20%

**Lab section:**
- Quizzes/attendance 20%
- In class assignments 40%
- Lab Practical 40%
(If you fail the lab, you fail the course)

**N.B.** There will be **NO makeups** for missed quizzes or roll calls; a doctor’s note or funeral notice is required for excused absences.

**Tentative Lecture Schedule:**

- **Sept 2**  Lecture 1  Introduction.
- **Sept 5**  Lecture 2  Basic ideas in parasitology.
- **Sept 9**  Lecture 3  Tapeworm biology and natural selection
- **Sept 12**  Lecture 4  Monogeneans/Acanthocephalans/ Protozoa/ Trematodes/ Nematodes
- **Sept 16**  Lecture 5  Origins of parasitism
- **Sept 19**  Lecture 6  Evolution of direct life cycles.
- **Sept 23**  Lecture 7  Evolution of complex life cycles.
- **Sept 26**  Lecture 8  Protozoa
Sept 30  Lecture 9  Trematodes  
Oct 3  Lecture 10  Nematodes

Oct 7  Lecture 11  Host specificity.
Oct 10  Lecture 12  Intrahost habitat specificity.
Oct 14  Lecture 13  Parasite migration behaviors.  
**Oct 17**  **Mid term Exam**

Oct 21  Lecture 14  Parasite fitness profiles.
Oct 28  Lecture 16  Parasite manipulation of host behavior.
Oct 31  Lecture 17  Co-evolutionary processes

Nov 4  Lecture 18  Parasites as individuals
Nov 7  Lecture 19  Parasite aggregation in hosts
Nov 11  Lecture 20  Parasite population dynamics.
Nov 14  Lecture 21  Parasite communities.

Nov 18  Lecture 22  Species richness
Nov 21  Lecture 23  The evolution of virulence

Nov 26 wed  Lecture 24  The evolution of sex – Red Queen hypothesis. [Friday classes]
Nov 30  *Thanksgiving Recess*

Dec 2  Lecture 25  Parasites and Food webs
Dec 5  Lecture 26  Parasite and ecosystems
Dec 9  Lecture 27  Parasite and ecosystems
Dec 12 review

**Dec 15.  Final Exam Friday 12:00-3:00 PM same classroom, responsible for all material in course (50% of final grade)**