Bio4241 - Advanced Genetics - Winter 2016

Course Syllabus

Instructor:

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Course webpage:

http://www.mun.ca/biology/scarr/Bio4241.html

Part I: Presentation & Analysis of Classic Genetics Experiments:

In groups of four, present a classic experiment in genetics, using the **methods & experimental data** from original scientific paper.

One 60 mins @ + 10~15 mins @ for discussion & questions.

I will demonstrate the approach with a lecture on **Luria & Delbruck (1943)** in the first lecture

1. Consult ***original*** paper (provided as **PDF**).
   Include **historical background** & **scientific significance**.
2. Consult discussion in **Bio2250** textbook as necessary
3. Prepare a **web-based lecture** [**HTML, PowerPoint**, or **Prezi**] *à la* Biol2250
   Methods, Data (*Figures & Tables*), Results & Conclusions from original.
   Emphasize ***logic*** of experiment;
   Provide a ***critical review*** of the experiment.
4. Present the paper as a **scientific experiment** on *its own terms*
   Provide necessary ***technical*** & ***mathematical*** background

Part II: Presentations of modern papers & book chapters: TBA

10% of the mark will be deducted if the web materials are not available 24 hours before presentation, 10A Mon & 10A Wed.

Grading Scheme:

40% **Class presentations**

15% on Part I
25% on Part II

20% **Class participation**

Group *n+1* will lead discussion on **Group *n*** presentation

16% **Midterm** (Essay-type: 2 @ 8%)

24% **Final** (Essay-type: 3 @ 8%)

Midterm & Final exams are **essays** from the presentations, assigned as part of the presentations.

For the **midterm** exam, I will select *three* of these questions at random: you will write 2 page essays on any *two* of these of your choice.

For the **final**, you will write *three* essays from among *four* possibilities.

The essays will be prepared ahead of time, and that the quality of the presentation will reflect this.
