Information and Policies
This course will explore recent advances and current challenges in the fields of health and disease. Critical assessment of journal articles and introduction to modern experimental techniques will feature prominently. This will be a largely discussion based course with interspersed lectures and student presentations. Topics will be chosen based on the requests of the students, but can include cancer, endocrine and developmental disorders, aging and modern pharmacology. This course would be of interest to graduate students in any life science.

Lecture time: Thursdays, 2pm-3:20pm except for University-designated holidays.

Lecture location: Burrill Hall 501

Your final grade will be in letter grade (with plus/minus). It will be determined by your mean performance as weighted below:

- Written assignment (30%)
  - A relevant topic will be selected by the student and approved by the instructor. In the format of a written report, the student will critically evaluate the recent literature on the selected topic proposing future directions and experiments. The written assignment will be due at the beginning of class on the first day of oral presentations. This date will be assigned within the first two weeks of class.

- Oral presentation (30%)
  - Each student will present a mini-lecture based on their written assignment, educating the class on their chosen topic.

- Class participation (40%)
  - Group discussion is an essential element of the course.

Total scoring above 90% or in the top third of the class guarantees an A, scoring above 80% or in the top two thirds of the class guarantees a B.

Instructors

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Office Phone</th>
<th>Office Address</th>
<th>Email Address</th>
<th>Office Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Erik Nelson*</td>
<td>244-5477</td>
<td>523A Burrill Hall</td>
<td><a href="mailto:enels@illinois.edu">enels@illinois.edu</a></td>
<td>1-3 Wednesday</td>
</tr>
<tr>
<td>Dr. Nien-Pei Tsai</td>
<td>244-5620</td>
<td>423A Burrill Hall</td>
<td><a href="mailto:nptsai@illinois.edu">nptsai@illinois.edu</a></td>
<td>1-3 Wednesday</td>
</tr>
</tbody>
</table>

* = course coordinator
# Lecture Sequence

The topics outlined below are subject to change, depending on the interests of the students.

<table>
<thead>
<tr>
<th>Date</th>
<th>Subject</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 17</td>
<td>Introduction to Scientific Literature</td>
<td>Tsai (80 min)</td>
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<tr>
<td></td>
<td>Questionable Ethics</td>
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<tr>
<td>January 24</td>
<td>Trinucleotide Repeats</td>
<td>Tsai (80 min)</td>
</tr>
<tr>
<td>January 31</td>
<td>Alzheimer’s</td>
<td>Tsai (80 min)</td>
</tr>
<tr>
<td>February 7</td>
<td>Schizophrenia</td>
<td>Tsai (80 min)</td>
</tr>
<tr>
<td>February 14</td>
<td>Viral Infection and Cellular Host Response</td>
<td>Tsai (80 min)</td>
</tr>
<tr>
<td>February 21</td>
<td>Data Reproducibility</td>
<td>Nelson (80 min)</td>
</tr>
<tr>
<td>February 28</td>
<td>Cell Fate and Aging</td>
<td>Tsai (80 min)</td>
</tr>
<tr>
<td></td>
<td>Introduction to pharmacology</td>
<td></td>
</tr>
<tr>
<td>March 7</td>
<td>The Problem of Antibiotic Resistance</td>
<td>Nelson (80 min)</td>
</tr>
<tr>
<td></td>
<td>Introduction to cancer and the tumor microenvironment</td>
<td></td>
</tr>
<tr>
<td>March 14</td>
<td>Tumor Microenvironment – Linking Inflammation to Recurrence</td>
<td>Nelson (80 min)</td>
</tr>
<tr>
<td>March 21</td>
<td>SPRING BREAK</td>
<td>Nelson (80 min)</td>
</tr>
<tr>
<td>March 28</td>
<td>Immune Therapy and Antibiotics?</td>
<td></td>
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<tr>
<td>April 4</td>
<td>Drug Development</td>
<td>Nelson (80 min)</td>
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<td></td>
<td>Old school on steroids</td>
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<tr>
<td>April 11, 18 and 25</td>
<td>Student Led Presentations</td>
<td>Nelson/Tsai (80 min each)</td>
</tr>
<tr>
<td></td>
<td>Students will present a mini-lecture critically evaluating a topic of their choice, and approved by instructor.</td>
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</tbody>
</table>