### Course Schedule—Fall 2007

**Biophysics**

Note: Text highlighted in red indicates that a change has been made to the course listing. The red text indicates the current, updated information.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Instructor(s)</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>250.131</td>
<td>TOPICS IN BIOPHYSICS RESEARCH (1) Fleming, K.</td>
<td>Fleming</td>
<td>1</td>
<td>Limit 50 Freshmen and Sophomores</td>
<td>T 4-5:30pm</td>
</tr>
<tr>
<td>250.345</td>
<td>CELLULAR AND MOLECULAR PHYSIOLOGY (3) Cone</td>
<td>Fleming</td>
<td>3</td>
<td>Limit 60 Prereq: 020.305</td>
<td>MTW 11</td>
</tr>
<tr>
<td>250.351</td>
<td>REPRODUCTIVE PHYSIOLOGY (2) Zirkin/Cone</td>
<td>Fleming</td>
<td>2</td>
<td>Limit 120 Prereq: 020.305</td>
<td>W 4-5:45pm</td>
</tr>
<tr>
<td>250.391</td>
<td>INTRODUCTION TO UNIX/PYTHON &amp; PROTEINS AND NUCLEIC ACIDS (3) Woodson/Bowman/Rose</td>
<td>Woodson/Bowman/Rose</td>
<td>3</td>
<td>Limit 35 Prereq: 250.683</td>
<td>TTh 10:30-12</td>
</tr>
<tr>
<td>250.519</td>
<td>INDEPENDENT STUDY</td>
<td></td>
<td></td>
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<tr>
<td>250.521</td>
<td>RESEARCH PROBLEMS</td>
<td></td>
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<tr>
<td>250.531</td>
<td>LABORATORY IN BIOPHYSICS</td>
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<tr>
<td>250.601</td>
<td>BIOPHYSICS SEMINAR Cone</td>
<td>Cone</td>
<td></td>
<td>Perm. Req'd First &amp; Second year Biophysics Graduate students only</td>
<td>M 4</td>
</tr>
<tr>
<td>250.631</td>
<td>LABORATORY RESEARCH IN BIOPHYSICS</td>
<td>Staff</td>
<td></td>
<td>Limit 20 Biophysics research training.</td>
<td>TBA</td>
</tr>
<tr>
<td>250.640</td>
<td>SEMINAR IN MUCOSAL PROTECTION</td>
<td>Cone</td>
<td></td>
<td>Limit 10 Physiology, immunology and epidemiology of mucosal protection. Course added 6/29/07</td>
<td>Th 11-12:30</td>
</tr>
<tr>
<td>250.673</td>
<td>SEMI-ANNUAL THESIS Fleming, K.</td>
<td>Fleming</td>
<td></td>
<td>Biophysics Graduate students only</td>
<td>TBA</td>
</tr>
<tr>
<td>250.683</td>
<td>INTRODUCTION TO UNIX PYTHON</td>
<td>Rose</td>
<td></td>
<td>Two-week course, 9/11/07 – 9/20/07</td>
<td>TTh 10:30-12</td>
</tr>
<tr>
<td>250.685</td>
<td>PROTEINS AND NUCLEIC ACIDS</td>
<td>Woodson/Bowman/Rose</td>
<td></td>
<td>Limit 35 Prereq: 250.683</td>
<td>TTh 10:30-12</td>
</tr>
<tr>
<td>250.689</td>
<td>PHYSICAL CHEMISTRY OF BIOLOGICAL MACROMOLECULES</td>
<td>Garcia-Moreno</td>
<td></td>
<td>Limit 10 Basic computing for biological applications.</td>
<td>TTh 9-10:30</td>
</tr>
</tbody>
</table>

*Start date: 9/25/07*
Introduction to the principles of thermodynamics and kinetics as applied to the study of the relationship between structure, energy dynamics, and biological function of proteins and nucleic acids. Topics include classical, chemical, and statistical thermodynamics, kinetics, theory of ligand binding, and conformational equilibria.