Recommended Coursework Strategy for B.S. Biology, Concentration in Physiology: 4 – year plan

MEET WITH YOUR PHYSIOLOGY MAJOR ADVISOR EVERY SEMESTER!

Students who are “Undeclared with an Interest in Biology – BS” should be taking COURSES IN THE MAJOR in YEAR 1.

This is a sample four-year plan for students who arrive at SFSU with all of the appropriate prerequisites. In this plan, students will take 8-10 units of coursework for their major every semester. The order of some courses can be changed, but some cannot (due to prerequisites) – check the SFSU Bulletin or with an advisor to be sure. You should fill out the remainder of the schedule with GE courses as needed.

This sample course plan is based on the current SFSU Bulletin (2014-2015), requiring 38-39 units of lower division course work and 29-33 units of upper division courses for 67-72 total units. The course plan is not a substitute for consulting with a Physiology Advisor to develop your final course plan.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester 1</td>
<td></td>
<td>Semester 2</td>
<td></td>
</tr>
<tr>
<td>Math 226 (Calc I)</td>
<td>4</td>
<td>Biol 230 (Intro Biol &amp; Lab)</td>
<td>5</td>
</tr>
<tr>
<td>Chem 115 (Gen Chem I &amp; Lab)</td>
<td>5</td>
<td>Phys 111/112 (Phys I/Lab)</td>
<td>4</td>
</tr>
<tr>
<td>Semester 3</td>
<td></td>
<td>Semester 4</td>
<td></td>
</tr>
<tr>
<td>Biol 240 (Intro Biol &amp; Lab)</td>
<td>5</td>
<td>Chem 215/216 (Gen Chem II &amp; Lab)</td>
<td>5</td>
</tr>
<tr>
<td>Chem 130 (Gen Org Chem)</td>
<td>3</td>
<td>Math 124 (Elem Stats) or Math 227 (Calc II) or Biol 458 (Biometry)</td>
<td>3 – 4</td>
</tr>
<tr>
<td>Semester 5</td>
<td></td>
<td>Semester 6</td>
<td></td>
</tr>
<tr>
<td>Biol 350 (Cell Biol)</td>
<td>3</td>
<td>Biol 355 (Genetics)</td>
<td>3</td>
</tr>
<tr>
<td>Phys 121/122 (Phys II/Lab)</td>
<td>4</td>
<td>Chem 340 (Biochem I) or Chem 349 (Gen Biochem)</td>
<td>3</td>
</tr>
<tr>
<td>Semester 7</td>
<td></td>
<td>Semester 8</td>
<td></td>
</tr>
<tr>
<td>Physiology Core courses</td>
<td>3 – 6</td>
<td>Physiology Core courses</td>
<td>3 – 6</td>
</tr>
<tr>
<td>Physiology lab</td>
<td>3</td>
<td>Physiology Elective(s)</td>
<td>3 – 7</td>
</tr>
<tr>
<td>Physiology Elective(s)</td>
<td>3 – 7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Students are required to complete the Upper Division Graduate Writing Assessment Requirement (GWAR) within the major. http://biology.sfsu.edu/content/gwar

1 Students unprepared to take Math 226 should consider taking one or more of the following: Algebra I (Math 60), Algebra II (Math 70), Pre-Calculus (Math 109). This scenario will require shifting some courses in the schedule.

2 Students who plan to apply to a health profession school (medical school, dental school, pharmacy school, etc.), should take two semesters of Organic Chemistry with lab (Chem 233/234 and Chem 335/336) instead of General Organic Chemistry (Chem 130). This scenario will require shifting some courses in the schedule.

3 Physiology core courses (9 units total) (one lecture must be Biol 612 or 630)
BIOL 525 Plant Physiology, BIOL 612 Human Physiology, BIOL 616 Cardiorespiratory Physiology, BIOL 617 Environmental Physiology, BIOL 618 Biology of Aging, BIOL 620 Endocrinology, BIOL 621 Reproductive Physiology, BIOL 622 Hormones and Behavior, BIOL 630 Animal Physiology, BIOL 640 Cellular Neurosciences, BIOL 642 Neural Systems Physiology

Updated 1/30/15
Recommended Coursework Strategy for B.S. Biology, Concentration in Physiology: 4 – year plan

MEET WITH YOUR PHYSIOLOGY MAJOR ADVISOR EVERY SEMESTER!

Upper division electives in Cell & Molecular Emphasis and Ecological, Anatomical, & Evolutionary Emphasis (10 – 11 units) → One upper division elective must contain a lab component

Cellular and Molecular Emphasis
BIOL 351 GW  Experiments in Cell and Molecular Biology - GWAR (4)
BIOL 357  Molecular Genetics
BIOL 382  Developmental Biology
BIOL 435  Immunology
BIOL 615  Molecular Pathophysiology
BIOL 652  Science Education Partners in Biology (4)
BIOL 699  Independent Study in Biology (1-3)
BIOL 623  Pharmacology (undergraduate students only)
BIOL 865  Advances in Physiology and Behavioral Biology (2)
CHEM 343  Biochemistry I Laboratory

Ecological, Anatomical, and Evolutionary Emphasis
BIOL 328  Human Anatomy (4)
BIOL 337  Evolution
BIOL 482  Ecology (4)
BIOL 504  Biology of Fungi (4)
BIOL 505  Comparative Anatomy of Vascular Plants (4)
BIOL 529 GW  Plant Ecology - GWAR (4)
BIOL 555  Marine Invertebrate Zoology (4)
BIOL 585  Marine Ecology
BIOL 586  Marine Ecology Laboratory (2)
BIOL 600  Animal Behavior
BIOL 614  Vertebrate Histology (4)
BIOL 652  Science Education Partners in Biology (4)
BIOL 699  Independent Study in Biology (1-3)
BIOL 865  Advances in Physiology and Behavioral Biology (2)