The Department of Physiology offers training in mammalian, cellular and comparative physiology, pharmacology, and human anatomy. Students majoring in physiology are encouraged to gain research experience under faculty supervision. The undergraduate major provides general rather than specialized training in physiology. To become a professional physiologist usually requires the completion of an advanced degree in the field. An undergraduate major in physiology would provide an excellent foundation for those planning a career in teaching or research or a medical field such as medicine, dentistry, veterinary science, nursing or medical technology. Students considering a major in Physiology should discuss their program with the Program Director for Undergraduate Studies in Physiology. A grade of C or better is required in every Physiology course used to satisfy departmental requirements for a degree in Physiology. A student cannot repeat a course or its equivalent in which a grade of B or better was earned without the consent of the department.

**Bachelor of Science in Physiology Degree Requirements**

<table>
<thead>
<tr>
<th>Degree Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Core Curriculum Requirements</td>
<td>41</td>
</tr>
<tr>
<td>College of Science Requirements</td>
<td>6</td>
</tr>
<tr>
<td>Supportive Skills to include foreign language (two semesters at 200 level); or two from the following: ENGL 290 or ENGL 291 or ENGL 391 or ENGL 491; PLB 360 or MATH 282; CS 200, CS 201</td>
<td>2</td>
</tr>
<tr>
<td>Requirements for Major in Physiology</td>
<td>(11)+58</td>
</tr>
<tr>
<td>PHSL 310</td>
<td>5</td>
</tr>
<tr>
<td>PHSL 410A, PHSL 410B</td>
<td>8</td>
</tr>
<tr>
<td>Physiology electives - (11 hours at the 300 or 400-level)</td>
<td>(2)+9</td>
</tr>
<tr>
<td>BIOL 211</td>
<td>(3)+1</td>
</tr>
<tr>
<td>BIOL 304, BIOL 305, BIOL 306, BIOL 409 (any two..)</td>
<td>6</td>
</tr>
<tr>
<td>Degree Requirements</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>---------------------</td>
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</tr>
<tr>
<td>CHEM 200, CHEM 201, CHEM 210, CHEM 211, CHEM 340, CHEM 341, CHEM 342, CHEM 343, CHEM 350, CHEM 351</td>
<td>(3)+20</td>
</tr>
<tr>
<td>PHYS 203A, PHYS 203B; PHYS 253A, PHYS 253B</td>
<td>8</td>
</tr>
<tr>
<td>MATH 150 3</td>
<td>(3)+1</td>
</tr>
</tbody>
</table>

Electives 15

Total 120

1 Total of eleven hours of biology, chemistry, mathematics and physiology elective course work are accounted for in the 41-hour Core Curriculum requirement.

2 If two years of a foreign language are taken to complete this requirement, the total hours will be 16. The elective hours are reduced by 10 hours.

3 Prerequisite is MATH 111. The elective hours are reduced by 4 hours for students who place into a course lower than calculus.

**Physiology Minor**

A minor in physiology requires completion, with at least a C grade, of PHSL 410A, PHSL 410B (8 hours) and eight hours of 300 or 400-level courses offered by the department.

**Junior-Senior Honors Program**

Juniors who have shown outstanding ability in biology courses and related subjects in their freshman and sophomore years may apply for acceptance into the honors program. Honors students do independent study in the physiological sciences (PHSL 491) during their junior and senior years.

**Physiology Courses**

**Physiology Faculty**

**Arbogast, Lydia A.**, Professor, Ph.D., Indiana University, 1988.

**Bany, Brent**, Associate Professor, Ph.D., University of Western Ontario, 1997.

**Bartke, Andrzej**, Professor, Emeritus, Ph.D., University of Kansas, 1965.

**Browning, Ronald A.**, Professor, Emeritus, Ph.D., University of Illinois Medical Center, Chicago, 1971.

**Cai, Xiang**, Assistant Professor, Ph.D., Sun Yat-Sen University of Medical Sciences, China, 2000.

**Collard, Michael W.**, Associate Professor, Emeritus, Ph.D., Washington State University, 1987.

**Dunagan, Tommy T.**, Professor, Emeritus, Ph.D., Purdue University, 1960.

**Ellsworth, Buffy S.**, Assistant Professor, Ph.D., Colorado State University, 2002.

**Ferraro, James S.**, Associate Professor, Ph.D., The Chicago Medical School, 1984.

**Hales, Dale B.**, Professor and Chair, Ph.D., University of Colorado Health Sciences Center, 1983.

**Hales, Karen H.**, Assistant Professor, Ph. D., University of Colorado Health Sciences Center, 1985.

**Hayashi, Kanako**, Assistant Professor, Ph.D., Iwate University, Japan, 2002.

**Huggenvik, Jodi L.**, Associate Professor, Emerita, Ph.D., Washington State University, 1985.

**Jensik, Philip J.**, Assistant Professor, Ph.D., Southern Illinois University Carbondale, 2009.
Macklin, Lauren N., Instructor, M.S., Southern Illinois University Carbondale, 2011.
MacLean, James A., Assistant Professor, Ph.D., University of Missouri, 2000.
Murphy, Laura L., Professor, Emerita, Ph.D., Medical College of Georgia, 1983.
Narayan, Prema, Associate Professor, Ph.D., University of Minnesota, 1984.
Patrylo, Peter, Associate Professor, Ph.D., Rutgers University/UMDNJ-RWJMS, 1991.
Strader, April, Associate Professor Ph.D., University of Wisconsin, 2002.
Zheng, Zhengui (Patrick), Assistant Professor, Ph.D., Shanghai University of Traditional Chinese Medicine, 1997.

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