Physiology Major – 2012-2013

The physiology major concentrates on understanding the functions of the human body from individual cells to organ systems. The program is based upon principles from a variety of physical and biological sciences.

**Major Requirements:**

Chem 1061 and 1062     General Chemistry 1 & 2
Chem 1065 and 1066     General Chemistry Lab 1 & 2
Chem 2301, 2302, and 2311     Organic Chemistry 1 & 2 with lab
Math 1271 and 1272     Calculus 1 & 2
Phys 1201W and 1202W or 1301W and 1302W     Physics 1 & 2
BioC  3021 or 4331     Biochemistry
Biol  4003     Genetics
Biol  4004 or GCD 3033     Cell Biology
Phsl  3061     Principles of Physiology
Phsl  3062W     Research Paper for Physiology Majors
Phsl  3701     Physiology Lab

One or more course(s) from the following: Phsl 3095, 4021, 4031, 4095H, 4900, 5115, 5116, 5444, 5510, 5525, 5700 (See course titles below) (Courses taken to fulfill this requirement cannot also count as an elective)

**Electives:** Complete 3 courses, totaling a minimum of 6 credits chosen from list below:

Anat  3601/3611   Principles of Human Anatomy
3602/3612/3608H   Principles of Human Anatomy Laboratory
4900   Directed Studies in Anatomy
BioC  any 4xxx level course
Biol  4993 or 4994   Directed Study or Directed Research
Chem  any 4xxx level course
CSci  any 3xxx or 4xxx level course
Math  any 2xxx level course
GCD  4025   Cell Biology Laboratory
4034   Molecular Genetics
4111   Histology
4161   Developmental Biology
5036   Molecular Cell Biology
MicB  3301   Biology of Microorganisms
4131   Immunology
Phsl  3095   Problems in Physiology
4021   Advanced Physiology and Bioengineering: Bionic Human
4031   Physiological Discussions: Contemporary Topics
4095H   Honors Problems in Physiology
4700   Cell Physiology
4900   Advanced Physiology Teaching Laboratory
5115   Clinical Physiology I
5116   Clinical Physiology II
5444   Muscle
5510   Advanced Cardiac Physiology and Anatomy
5525/Anat 5525   Anatomy and Physiology of the Pelvis and Urinary System
5700   Cell Physiology
Psy  3011   Intro. to Learning & Behavior
3031   Intro. to Sensation & Perception
3061   Intro. to Biological Psychology
5012   Psychology of Conditioning & Learning
5031W   Perception
5036W   Computational Vision
5037   Psychology of Hearing
5038W   Intro. to Neural Networks
How to declare the physiology major:

Contact the Director of Undergraduate Studies in Physiology, Professor Vincent Barnett
Department of Integrative Biology and Physiology 6-125 Jackson
barne014@umn.edu; Phone: 612.624.8135

Physiology Advising Office Hours are Tuesdays and Wednesdays from 1:00 to 2:40

There will be five 20 minute appointments, starting at 1 pm and running until 2:40 pm. Students are encouraged to call or email in advance to sign up for a meeting and will be given a confirmed time for their meeting. Times are: 1:00, 1:20, 1:40, 2:00 and 2:20, and slots will be held for 5 minutes if a student is not in the office when their appointment is scheduled to begin. Missed appointments will need to be rescheduled and can be assigned to other students if they are available.

Walk-ins can sign up for open slots, but if the schedule for the day is full they must either sign up for a different advising day or request a non-office hour appointment. Non-office hour appointment requests can be made in writing, by phone or by e-mail and will be held as my schedule permits. If I can take an extra appointment after 2:40 pm on an advising day, I will let our office staff know before office hours begin, so that they can schedule the additional time slot for a walk-in student.

For more information about the physiology major, visit the physiology department website at http://physiology.med.umn.edu/undergrad/

Possible Areas of Employment

- Science—biological scientists, lab assistants
- Health Care—physicians, pharmacists, nurses, health technicians
- Business—marketing, human resources, sales, consulting
- Education—teaching, research, administration

Career Services

CLA Career Services located in 411 Science Teaching and Student Services (STSS), supports CLA students making career decisions. The office’s Resource Library in 411 STSS is open from 8:00am-4:30pm Monday-Friday, and no appointment is necessary. Resources include information about graduate schools and employment. Workshops are offered that cover resume writing, job and internship searches, interviewing, and other subjects. A current schedule is available online at www.clacareer.umn.edu.

Web Sites of Interest:

University of Minnesota Department of Physiology  http://physiology.med.umn.edu/
American Physiological Society  http://www.the-aps.org/
American Journal of Physiology  http://ajpcon.physiology.org/
University of Minnesota Health Careers Center  http://www.healthcareers.umn.edu/