Twin Cities Campus

Human Physiology B.A.

Integrative Biology and Physiology

College of Liberal Arts

- Program Type: Baccalaureate
- Requirements for this program are current for Fall 2022
- Required credits to graduate with this degree: 120
- Required credits within the major: 55 to 74
- Degree: Bachelor of Arts

The human physiology major concentrates on understanding the functions of the human body from individual cells to organ systems. The program is based upon principles from chemistry, physics, mathematics, and biological sciences.

This major is particularly appropriate for students who intend to enter medical school or graduate study in any of a variety of biological, health, or biomedical sciences. The required courses form a strong core in biomedical science. Many of the required courses are identical to those required for admission to medical school. Students may tailor the overall degree program to specific needs and may choose additional science courses in preparation for medical school, other health sciences professional schools, or graduate school. Students may also take advantage of the freedom to pursue a more diverse undergraduate experience in CLA. Others may benefit from an opportunity to pursue a double major.

For the latest information, visit the human physiology major website: https://www.physiology.umn.edu/degrees-and-programs/undergraduate-program.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Admission Requirements

For information about University of Minnesota admission requirements, visit the Office of Admissions website.

General Requirements

All students are required to complete general University and college requirements including writing and liberal education courses. For more information about University-wide requirements, see the liberal education requirements.Required courses for the major or minor in which a student receives a D grade (with or without plus or minus) do not count toward the major or minor (including transfer courses).

Program Requirements

Students are required to take 4 semester(s) of any second language.

All CLA BA degrees require 18 upper division (3xxx-level or higher) credits outside the major designator. These credits must be taken in designators different from the major designator and cannot include courses that are cross-listed with the major designator. The major designator for the human physiology BA is PHSL.

A given course may only count towards one major requirement.

At least 11 upper division credits in the major must be taken at the University of Minnesota Twin Cities campus.

All incoming CLA freshmen must complete the First-Year Experience course sequence.

All students must complete a capstone in at least one CLA major. The requirements for double majors completing the capstone in a different CLA major will be clearly stated. Students must also complete all major requirements in both majors to allow the additional capstone to be waived. Student completing an addition degree must complete the capstone in each degree area.

Foundation Courses

Take 11 - 13 course(s) totaling 32 - 41 credit(s) from the following:

Quantitative Sequence

Take exactly 1 course(s) totaling exactly 4 credit(s) from the following:

- MATH 1271 - Calculus I [MATH] (4.0 cr)

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•MATH 1571H - Honors Calculus I [MATH] (4.0 cr)
Take exactly 1 course(s) totaling 3 - 4 credit(s) from the following:
•MATH 1272 - Calculus II (4.0 cr)
•MATH 1572H - Honors Calculus II (4.0 cr)
•Take 0 - 1 course(s) from the following:
•ANSC 3011 - Statistics for Animal Science (4.0 cr)
•BIOL 3272 - Applied Biostatistics (4.0 cr)
•BIOL 5272 - Applied Biostatistics (4.0 cr)
•CSCI 1113 - Introduction to C/C++ Programming for Scientists and Engineers (4.0 cr)
•CSCI 1133 - Introduction to Computing and Programming Concepts (4.0 cr)
•CSCI 3003 - Introduction to Computing in Biology (3.0 cr)
•EPSY 3264 - Basic and Applied Statistics [MATH] (3.0 cr)
•PSY 3801 - Introduction to Psychological Measurement and Data Analysis [MATH] (4.0 cr)
•SOC 3811 - Social Statistics [MATH] (4.0 cr)
•STAT 3011 - Introduction to Statistical Analysis [MATH] (4.0 cr)

•Chemistry Sequence
Chemistry
Take exactly 7 course(s) totaling exactly 18 credit(s) from the following:
•CHEM 1061 - Chemical Principles I [PHYS] (3.0 cr)
•CHEM 1065 - Chemical Principles I Laboratory [PHYS] (1.0 cr)
•CHEM 1062 - Chemical Principles II [PHYS] (3.0 cr)
•CHEM 1066 - Chemical Principles II Laboratory [PHYS] (1.0 cr)
•CHEM 2301 - Organic Chemistry I (3.0 cr)
•CHEM 2302 - Organic Chemistry II (3.0 cr)
•CHEM 2311 - Organic Lab (4.0 cr)
or **Chemistry for the Life Sciences**
Take exactly 6 course(s) totaling exactly 13 credit(s) from the following:
•CHEM 1081 - Chemistry for the Life Sciences I [PHYS] (3.0 cr)
•CHEM 1065 - Chemical Principles I Laboratory [PHYS] (1.0 cr)
•CHEM 1082 - Chemistry for the Life Sciences II (3.0 cr)
•CHEM 1086 - Chemistry for the Life Sciences II Laboratory (1.0 cr)
•CHEM 2081 - Chemistry for the Life Sciences III (3.0 cr)
•CHEM 2085 - Chemistry for the Life Sciences III Laboratory (2.0 cr)
or **Honors Chemistry**
Take exactly 7 course(s) totaling exactly 19 credit(s) from the following:
•CHEM 1071H - Honors Chemistry I [PHYS] (3.0 cr)
•CHEM 1075H - Honors Chemistry I Laboratory [PHYS] (1.0 cr)
•CHEM 1072H - Honors Chemistry II [PHYS] (3.0 cr)
•CHEM 1076H - Honors Chemistry II Laboratory [PHYS] (1.0 cr)
•CHEM 2331H - Honors Elementary Organic Chemistry I (3.0 cr)
•CHEM 2312H - Honors Organic Lab (5.0 cr)
•CHEM 2332H - Honors Elementary Organic Chemistry II (3.0 cr)

•Physics Sequence
Take exactly 1 course(s) totaling exactly 4 credit(s) from the following:
•PHYS 1221 - Introductory Physics for Life Science Majors I [PHYS] (4.0 cr)
•PHYS 1301W - Introductory Physics for Science and Engineering I [PHYS, WI] (4.0 cr)
•PHYS 1401V - Honors Physics I [PHYS, WI] (4.0 cr)
Take exactly 1 course(s) totaling exactly 4 credit(s) from the following:
•PHYS 1222 - Introductory Physics for Life Science Majors II [PHYS] (4.0 cr)
•PHYS 1302W - Introductory Physics for Science and Engineering II [PHYS, WI] (4.0 cr)
•PHYS 1402V - Honors Physics II [PHYS, WI] (4.0 cr)

•General Biology
General Biology (Preferred)
Take exactly 1 course(s) totaling exactly 4 credit(s) from the following:
•BIOL 1009 - General Biology [BIOL] (4.0 cr)
•BIOL 1009H - Honors: General Biology [BIOL] (4.0 cr)
or **Foundations of Biology**
Take exactly 2 course(s) totaling exactly 6 credit(s) from the following:
•BIOL 1951 - Foundations of Biology Lecture I for Biological Sciences Majors [BIOL] (4.0 cr)
or BIOL 1951H - Foundations of Biology Lecture I for Biological Sciences Majors [BIOL] (4.0 cr)
•BIOL 1961 - Foundations of Biology Lab I for Biological Sciences Majors [BIOL] (2.0 cr)

Core Courses
Take exactly 6 course(s) totaling 16 - 22 credit(s) from the following:
Physiology
Take exactly 2 course(s) totaling exactly 6 credit(s) from the following:

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•PHSL 3061 - Principles of Physiology (4.0 cr)
•PHSL 3701 - Physiology Laboratory (2.0 cr)

•Advanced Physiology Elective

Take exactly 1 course(s) totaling 1 - 6 credit(s) from the following:
•PHSL 3095 - Problems in Physiology (1.0 - 5.0 cr)
•PHSL 4021 - Advanced Physiology and Bioengineering: Bionic Human (3.0 cr)
•PHSL 4031 - Physiological Discussions: Contemporary Topics (2.0 cr)
•PHSL 4094 - Directed Research in Human Physiology (1.0 - 5.0 cr)
•PHSL 4242 - Professional Skills Development for Biomedical Scientists (2.0 cr)
•PHSL 4900 - Advanced Physiology Teaching Laboratory (1.0 - 6.0 cr)
•PHSL 5061 - Principles of Physiology for Biomedical Engineering (4.0 cr)
•PHSL 5096 - Integrative Biology and Physiology Research Advances (1.0 cr)
•PHSL 5115 - Clinical Physiology I (3.0 cr)
•PHSL 5116 - Clinical Physiology II (3.0 cr)
•PHSL 5197 - Stress Physiology (1.0 - 3.0 cr)
•PHSL 5211 - Physiology of Inflammation in Disease (3.0 cr)
•PHSL 5221 - Systems and Computational Physiology (3.0 cr)
•PHSL 5510 - Advanced Cardiac Physiology and Anatomy (2.0 - 3.0 cr)
•PHSL 5525 - Anatomy and Physiology of the Pelvis and Urinary System (1.0 - 2.0 cr)
•PHSL 4702 - Cell Physiology (3.0 cr)
or PHSL 5702 - Cell Physiology (4.0 cr)
•PHSL 5444 - Muscle (3.0 cr)
or BIOC 5444 - Muscle (3.0 cr)

•Biochemistry

Take exactly 1 course(s) totaling 3 - 4 credit(s) from the following:
•BIOC 3021 - Biochemistry (3.0 cr)
•BIOC 4331 - Biochemistry I: Structure, Catalysis, and Metabolism in Biological Systems (4.0 cr)

•Genetics

Take exactly 1 course(s) totaling exactly 3 credit(s) from the following:
•GCD 3022 - Genetics (3.0 cr)
•BIOL 4003 - Genetics (3.0 cr)

•Cell Biology

Take exactly 1 course(s) totaling exactly 3 credit(s) from the following:
•GCD 3033 - Principles of Cell Biology (3.0 cr)
•PHSL 4702 - Cell Physiology (3.0 cr)
•BIOL 4004 - Cell Biology (3.0 cr)
or GCD 4005W - Cell Biology-Writing Intensive [WI] (4.0 cr)

Electives

Take exactly 3 course(s) totaling 6 or more credit(s) from the following:
•ANAT 3601 - Principles of Human Anatomy (3.0 cr)
•ANAT 3602 - Principles of Human Anatomy Laboratory (2.0 cr)
•ANAT 3608H - Principles of Human Anatomy Laboratory for Honors Students (3.0 cr)
•ANAT 3611 - Principles of Human Anatomy (3.0 cr)
•ANAT 3612 - Principles of Human Anatomy Laboratory (2.0 cr)
•ANAT 4900 - Directed Studies in Anatomy (1.0 - 6.0 cr)
•BIOC 4025W - Laboratory in Biochemistry [WI] (2.0 cr)
•BIOC 4225 - Laboratory in NMR Techniques (1.0 cr)
•BIOC 4325 - Laboratory in Mass Spectrometry (1.0 cr)
•BIOC 4331 - Biochemistry I: Structure, Catalysis, and Metabolism in Biological Systems (4.0 cr)
•BIOC 4332 - Biochemistry II: Molecular Mechanisms of Signal Transduction and Gene Expression (4.0 cr)
•BIOC 4351 - Protein Engineering (3.0 cr)
•BIOC 4521 - Introduction to Physical Biochemistry (3.0 cr)
•BIOC 4793W - Directed Studies: Writing Intensive [WI] (1.0 - 7.0 cr)
•BIOC 4794W - Directed Research: Writing Intensive [WI] (3.0 - 5.0 cr)
•BIOC 4960 - Special Topics in Biochemistry (3.0 cr)
•BIOC 4993 - Directed Studies (1.0 - 7.0 cr)
•BIOC 4994 - Directed Research (1.0 - 7.0 cr)
•BIOL 4993 - Directed Studies (1.0 - 7.0 cr)
•BIOL 4994 - Directed Research (1.0 - 7.0 cr)
•CHEM 4001 - Chemistry of Biomass and Biomass Conversion to Fuels and Products [ENV] (4.0 cr)
•CHEM 4011 - Mechanisms of Chemical Reactions (3.0 cr)
•CHEM 4021 - Computational Chemistry (3.0 cr)
•CHEM 4066 *{Inactive}*(3.0 cr)
•CHEM 4094W - Directed Research [WI] (1.0 - 5.0 cr)
•CHEM 4101 - Modern Instrumental Methods of Chemical Analysis (3.0 cr)

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- CHEM 4111W - Modern Instrumental Methods of Chemical Analysis Lab [WI] (2.0 cr)
- CHEM 4201 - Materials Chemistry (3.0 cr)
- CHEM 4221 - Introduction to Polymer Chemistry (3.0 cr)
- CHEM 4301 - Applied Surface and Colloid Science (3.0 cr)
- CHEM 4311W - Advanced Organic Chemistry Lab [WI] (4.0 cr)
- CHEM 4321 - Organic Synthesis (3.0 cr)
- CHEM 4322 - Advanced Organic Chemistry (3.0 cr)
- CHEM 4352 - Physical Organic Chemistry (3.0 cr)
- CHEM 4361 - Interpretation of Organic Spectra (3.0 cr)
- CHEM 4411 - Introduction to Chemical Biology (3.0 cr)
- CHEM 4412 - Chemical Biology of Enzymes (3.0 cr)
- CHEM 4423W - Foundations of Chemical Biology Laboratory [WI] (2.0 cr)
- CHEM 4501 - Introduction to Thermodynamics, Kinetics, and Statistical Mechanics (3.0 cr)
- CHEM 4502 - Introduction to Quantum Mechanics and Spectroscopy (3.0 cr)
- CHEM 4511W - Advanced Physical Chemistry Lab [WI] (3.0 cr)
- CHEM 4601 - Green Chemistry [ENV] (3.0 cr)
- CHEM 4701 - Inorganic Chemistry (3.0 cr)
- CHEM 4711W - Advanced Inorganic Chemistry Lab [WI] (3.0 cr)
- CHEM 4715 - Physical Inorganic Chemistry (3.0 cr)
- CHEM 4725 - Organometallic Chemistry (3.0 cr)
- CHEM 4735 - Bioinorganic Chemistry (3.0 cr)
- CHEM 4745 - Advanced Inorganic Chemistry (3.0 cr)
- CSCI 3003 - Introduction to Computing in Biology (3.0 cr)
- CSCI 3041 - Introduction to Discrete Structures and Algorithms (4.0 cr)
- CSCI 3061 - Introduction to Computer Systems (4.0 cr)
- CSCI 3081W - Program Design and Development [WI] (4.0 cr)
- CSCI 3921W - Social, Legal, and Ethical Issues in Computing [CIV, WI] (3.0 cr)
- CSCI 3970 - Industrial Student Co-op Assignment (2.0 cr)
- CSCI 4011 - Formal Languages and Automata Theory (4.0 cr)
- CSCI 4041 - Algorithms and Data Structures (4.0 cr)
- CSCI 4061 - Introduction to Operating Systems (4.0 cr)
- CSCI 4131 - Internet Programming (3.0 cr)
- CSCI 4211 - Introduction to Computer Networks (3.0 cr)
- CSCI 4271W - Development of Secure Software Systems [WI] (4.0 cr)
- CSCI 4511W - Introduction to Artificial Intelligence [WI] (4.0 cr)
- CSCI 4611 - Programming Interactive Computer Graphics and Games (3.0 cr)
- CSCI 4707 - Practice of Database Systems (3.0 cr)
- CSCI 4970W - Advanced Project Laboratory [WI] (3.0 cr)
- GCC 3016 - Science and Society: Working Together to Avoid the Antibiotic Resistance Apocalypse [TS] (3.0 cr)
- GCD 4025 - Cell Biology, Development & Regeneration Laboratory (3.0 cr)
- GCD 4034 - Molecular Genetics and Genomics (3.0 cr)
- GCD 4111 - Histology: Cell and Tissue Organization (4.0 cr)
- GCD 4161 - Developmental Biology (3.0 cr)
- GCD 5036 - Molecular Cell Biology (3.0 cr)
- MATH 2142 - Elementary Linear Algebra (4.0 cr)
- MATH 2241 - Mathematical Modeling of Biological Systems (3.0 cr)
- MATH 2472 - UM Talented Youth Mathematics Program--Calculus III, First Semester [MATH] (2.0 cr)
- MATH 2474 - Advanced Topics for Secondary Students (3.0 cr)
- PHSL 3095 - Problems in Physiology (1.0 - 5.0 cr)
- PHSL 4021 - Advanced Physiology and Bioengineering: Bionic Human (3.0 cr)
- PHSL 4031 - Physiological Discussions: Contemporary Topics (2.0 cr)
- PHSL 4094 - Directed Research in Human Physiology (1.0 - 5.0 cr)
- PHSL 4242 - Professional Skills Development for Biomedical Scientists (2.0 cr)
- PHSL 4900 - Advanced Physiology Teaching Laboratory (1.0 - 6.0 cr)
- PHSL 5061 - Principles of Physiology for Biomedical Engineering (4.0 cr)
- PHSL 5096 - Integrative Biology and Physiology Research Advances (1.0 cr)
- PHSL 5115 - Clinical Physiology I (3.0 cr)
- PHSL 5116 - Clinical Physiology II (3.0 cr)
- PHSL 5197 - Stress Physiology (1.0 - 3.0 cr)
- PHSL 5211 - Physiology of Inflammation in Disease (3.0 cr)
- PHSL 5221 - Systems and Computational Physiology (3.0 cr)
- PHSL 5444 - Muscle (3.0 cr)
- PHSL 5510 - Advanced Cardiac Physiology and Anatomy (2.0 - 3.0 cr)
- PSY 3011 - Introduction to Learning and Behavior (3.0 cr)
- PSY 3031 - Introduction to Sensation and Perception (3.0 cr)
- PSY 3061 - Introduction to Biological Psychology (3.0 cr)

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•PSY 3604 - Introduction to Psychopathology (3.0 cr)
•PSY 5036W - Computational Vision [WI] (3.0 cr)
•PSY 5038W - Introduction to Neural Networks [WI] (3.0 cr)
•PSY 5137 - Introduction to Behavioral Genetics (3.0 cr)
•STAT 3011 - Introduction to Statistical Analysis [MATH] (4.0 cr)
•STAT 3022 - Data Analysis (4.0 cr)
•STAT 5021 - Statistical Analysis (4.0 cr)
•BIOC 4125 - Laboratory in Molecular Biology and Biotechnology (3.0 cr)
•CHEM 4214 - Polymers (3.0 cr)
or CHEN 4214 - Polymers (3.0 cr)
or MATS 4214 - Polymers (3.0 cr)
•CHEM 4223W - Polymer Laboratory [WI] (2.0 cr)
or CHEN 4223W - Polymer Laboratory [WI] (2.0 cr)
or MATS 4223W - Polymer Laboratory [WI] (2.0 cr)
•CSCI 4203 - Computer Architecture (4.0 cr)
or EE 4363 - Computer Architecture and Machine Organization (4.0 cr)
•CSCI 4921 - History of Computing [TS, HIS] (3.0 cr)
or HSCI 4321 - History of Computing [TS, HIS] (3.0 cr)
•GCC 3007 - Toward Conquest of Disease [ENV] (3.0 cr)
or GCC 5007 - Toward Conquest of Disease [ENV] (3.0 cr)
•GCC 3014 - The Future of Work and Life in the 21st Century [TS] (3.0 cr)
or GCC 5014 - The Future of Work and Life in the 21st Century [TS] (3.0 cr)
•MATH 2243 - Linear Algebra and Differential Equations (4.0 cr)
or MATH 2373 - CSE Linear Algebra and Differential Equations (4.0 cr)
or MATH 2471 - UM Talented Youth Mathematics Program--Calculus II, Second Semester [MATH] (2.0 cr)
•MATH 2263 - Multivariable Calculus (4.0 cr)
or MATH 2374 - CSE Multivariable Calculus and Vector Analysis (4.0 cr)
or MATH 2573H - Honors Calculus III (4.0 cr)
or MATH 2473 - UM Talented Youth Mathematics Program--Calculus III, Second Semester [MATH] (2.0 cr)
or MATH 2574H - Honors Calculus IV (4.0 cr)
•MICB 3301 - Biology of Microorganisms (5.0 cr)
or VBS 2032 - General Microbiology With Laboratory (5.0 cr)
•MICB 4131 - Immunology (3.0 cr)
or VPM 4131 - Immunology (3.0 cr)
•PHSL 4702 - Cell Physiology (3.0 cr)
or PHSL 5702 - Cell Physiology (4.0 cr)
•PHSL 5525 - Anatomy and Physiology of the Pelvis and Urinary System (1.0 - 2.0 cr)
or ANAT 5525 - Anatomy and Physiology of the Pelvis and Urinary System (1.0 - 2.0 cr)
•PSY 5031W - Perception [WI] (3.0 cr)
or NSC 5031W - Perception [WI] (3.0 cr)
•**Intercultural Competency Electives**
These classes provide a cultural perspective on healthcare and/or society and can be taken to fulfill the electives requirement for the major. No more than one 1xxx-level course may count as an elective.
Take 0 or more course(s) from the following:
•ANTH 3003 - Cultural Anthropology (3.0 cr)
•ANTH 3306W - Medical Anthropology [GP, WI] (3.0 cr)
•ANTH 4075 - Cultural Histories of Healing [SOCS, GP] (3.0 cr)
•CSCL 3351W - The Body and the Politics of Representation [HIS, WI] (3.0 cr)
•ECON 3101 - Intermediate Microeconomics (4.0 cr)
•ECON 5890 *{Inactive}*(3.0 cr)
•GEOG 3381W - Population in an Interacting World [SOCS, GP, WI] (3.0 cr)
•GEOG 3411W - Geography of Health and Health Care [WI] (3.0 cr)
•GLOS 3143 - Place, Community, Culture [CIV] (3.0 cr)
•GLOS 3602 - Other Worlds: Globalization and Culture (3.0 cr)
•GWSS 3003 - Gender and Global Politics [SOCS, GP] (3.0 cr)
•GWSS 3203W - Blood, Bodies and Science [TS, SOCS, WI] (3.0 cr)
•POL 3464 - The Politics of Economic Inequality [DSJ] (3.0 cr)
•PSY 3301 - Introduction to Cultural Psychology (3.0 cr)
•SOC 4246 - Sociology of Health and Illness (3.0 cr)
•AAS 3211W - Race & Racism in the U.S. [DSJ, WI] (3.0 cr)
or SOC 3211W - Race and Racism in the US [DSJ, WI] (3.0 cr)
•AAS 3251W - Sociological Perspectives on Race, Class, and Gender [SOCS, DSJ, WI] (3.0 cr)
or SOC 3251W - Sociological Perspectives on Race, Class, and Gender [SOCS, DSJ, WI] (3.0 cr)
•AAS 4231 - Color of Public Policy: African Americans, American Indians, Asian Americans & Chicanos in the U.S. (3.0 cr)
or AFRO 4231 - Color of Public Policy: African Americans, American Indians, Asian Americans & Chicanos in the U.S. (3.0 cr)
or AMIN 4231 - Color of Public Policy: African Americans, American Indians, Asian Americans, & Chicanos in the U.S. (3.0 cr)

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or CHIC 4231 - Color of Public Policy: African Americans, American Indians, Asian Americans & Chicanos in the U.S. (3.0 cr)
•ANTH 3023 *{Inactive}*[GP, SOCS] (3.0 cr)
or GLOS 3961 *{Inactive}*[GP, SOCS] (3.0 cr)
•CSCL 3350W - Sexuality and Culture [DSJ, WI] (3.0 cr)
or GLBT 3456W - Sexuality and Culture [DSJ, WI] (3.0 cr)
•GEOG 3331 - Geography of the World Economy [SOCS, GP] (3.0 cr)
or GLOS 3231 - Geography of the World Economy [SOCS, GP] (3.0 cr)
•GLOS 3305 - Science for Sale: Environment, Capital, and Medicine (3.0 cr)
•GLOS 3613W - Stuffed and Starved: The Politics of Eating [SOCS, GP, WI] (3.0 cr)
or GLOS 3613V *{Inactive}*[SOCS, GP, WI] (3.0 cr)
or SOC 3613W - Stuffed and Starved: The Politics of Eating [SOCS, GP, WI] (3.0 cr)
or SOC 3613V *{Inactive}*[SOCS, GP, WI] (3.0 cr)
•GLOS 3681 - Gender and the Family in the Islamic World (3.0 cr)
or GWSS 3681 - Gender and the Family in the Islamic World (3.0 cr)
or RELS 3716 - Gender and the Family in the Islamic World (3.0 cr)
or SOC 3681 - Gender and the Family in the Islamic World (3.0 cr)
•GLOS 4221 - Globalize This! Understanding Globalization Through Sociology [GP] (3.0 cr)
or SOC 4321 - Globalize This! Understanding Globalization through Sociology [GP] (3.0 cr)
•**1xxx-level**
Take no more than 1 course(s) totaling at most 4 credit(s) from the following:
•GEOG 1301W - Our Globalizing World [SOCS, GP, WI] (3.0 cr)
•AMIN 1002 - Indigenous Peoples in Global Perspective [GP] (3.0 cr)
or POL 1019 - Indigenous Peoples in Global Perspective [GP] (3.0 cr)
•ANTH 1003W - Understanding Cultures [SOCS, GP, WI] (4.0 cr)
or ANTH 1003V - Understanding Cultures: Honors [SOCS, GP, WI] (4.0 cr)
•GLOS 1015W - Globalization: Issues and Challenges [GP, WI] (4.0 cr)
or HIST 1015W - Globalization: Issues and Challenges [GP, WI] (4.0 cr)

Capstone
Students who double major within CLA and choose to complete the capstone requirement in their other major are still required to take the human physiology BA capstone.
Take 1 - 2 course(s) totaling 1 - 5 credit(s) from the following:
•PHSL 3062W - Research Paper for Physiology Majors [WI] (1.0 cr)
•**Honors students**
Cum Laude and Magna Cum Laude candidates must register for a minimum of 3 credits. Summa Cum Laude candidates must register for a minimum of 4 credits.
•PHSL 4094 - Directed Research in Human Physiology (1.0 - 5.0 cr)

Upper Division Writing Intensive within the major
Students are required to take one upper division writing intensive course within the major. If that requirement has not been satisfied within the core major requirements, students must choose one course from the following list. Some of these courses may also fulfill other major requirements.
Take 0 - 1 course(s) from the following:
•PHSL 3062W - Research Paper for Physiology Majors [WI] (1.0 cr)

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