

University of Arkansas College of Arts and Sciences
UNIVERSITY CORE REQUIREMENTS

MINIMUM CREDIT HOURS REQUIRED TO GRADUATE = 120
 CORE + MAJOR + GENERAL ELECTIVES

College of Arts & Sciences Advising Center | CORD 132 | (479)575-4801 | fulbrightadvising.uark.edu | fcacfy@uark.edu

MATHEMATICS (1 course – 3-4 hours)

- MATH 1203 College Algebra
- MATH 1313 Quantitative Reasoning
- MATH 1514 Calculus with Algebra & Trigonometry I
- Any higher-level Math course with MATH 1203 as a pre-requisite. (including STAT 2303)

Note: Based on placement scores. Please see mathplacement.uark.edu for placement score and exam information.

NATURAL SCIENCES (2 courses w/matching labs – 8 hours)

- ANTH 1013/1011L Intro to Biological Anthropology
- ASTR 2003/2001L Survey of the Universe
- BIOL 1524 Biological Principles
- BIOL 1543/1541L Principles of Biology
- BIOL 1584 Biology for Majors
- BIOL 1603/1601L Principles of Zoology
- BIOL 1613/1611L Plant Biology
- BIOL 2213/2211L Human Physiology
- BIOL 2443/2441L Human Anatomy
- CHEM 1053/1051L Chemistry in the Modern World
- CHEM 1073/1071L Fundamentals of Chemistry
- CHEM 1103/1101L University Chemistry I
- CHEM 1123/1121L University Chemistry II
- CHEM 1203/1201L Chemistry for Majors I
- CHEM 1223/1221L Chemistry for Majors II
- ENSC/BIOL 1003/1001L Environmental Science
- ENTO 1023/1021L Insects, Science, & Society
- GEOS 1113/1111L Physical Geology
- GEOS 1133/1131L Earth Science
- PHYS 1023/1021L Physics & Human Affairs
- PHYS 1034 Physics for Elementary Ed Majors
- PHYS 1044 Physics for Architects I
- PHYS 1054 Physics for Architects II
- PHYS 2013/2011L College Physics I
- PHYS 2033/2031L College Physics II
- PHYS 2054 University Physics I
- PHYS 2074 University Physics II

Note: Students may receive credit for some requirements via AP, IB, CLEP, Concurrent, or Transfer work. Please check with your advisor for more information.

**** Note:** Some courses may appear as options in multiple areas of the University Core. You can only count each course 1 time in the University Core and will need unique courses in each of the content areas below.

FINE ARTS (1 course – 3 hours)

- ARCH 1003 Architecture Lecture
- ARHS 1003 Art Lecture
- COMM 1003 Film Lecture
- DANC 1003 Movement and Dance **
- ENGL 2023 Creative Writing I **
- HUMN 2114H* Honors Birth of Modern Culture 1600-1900
- LARC 1003 The American Landscape
- MLIT 1003 Experiencing Music
- MLIT 1013 Music and Society
- MLIT 1333 Popular Music
- THTR 1003 Theatre Appreciation **
- THTR 1013 Musical Theatre Appreciation **
- THTR 1883 Acting I for Theatre Majors

SOCIAL SCIENCES (3 courses from at least 2 fields – 9 hours)

- AGECE 1103 Principles of Agriculture Microeconomics
- AGECE 2103 Principles of Agriculture Macroeconomics
- ANTH 1023 Intro to Cultural Anthropology
- COMM 1023 Communication in a Diverse World
- ECON 2013 Principles of Macroeconomics
- ECON 2023 Principles of Microeconomics
- ECON 2143 Basic Economics: Theory and Practice
- EDST 2003 Introduction to Educational Studies
- GEOS 1123 Human Geography
- GEOS 2003 World Regional Geography
- HDFS 1403 Life Span Development
- HDFS 2413 Family Relations
- HDFS 2603 Rural Families & Communities
- HIST 1113 Institutions and Ideas of World Civilizations I **
- HIST 1123 Institutions and Ideas of World Civilizations II **
- HIST 2003 History of the American People to 1877 **
- HIST 2013 History of the American People 1877 to Present **
- HIST 2093 Animals in World History
- HUMN 1114H* Honors Roots of Culture to 500 C.E.
- HUMN 2114H* Honors Birth of Modern Culture, 1600-1900
- INST/PLSC 2813 Intro. to Int'l Relations & Global Studies
- PLSC 2003 American National Government **
- PLSC 2013 Intro to Comparative Politics
- PLSC 2203 State and Local Government
- PSYC 2003 General Psychology
- RESM 2853 Leisure and Society
- SOCI 2013 General Sociology
- SOCI 2033 Social Problems
- STEM 2003 The Art of STEM Communication

 UNIV 1001 University Perspectives

(Or equivalent course from another University of Arkansas college)

ENGLISH COMPOSITION (2 courses – 6 hours)

- ENGL 1013 Composition I
- ENGL 1023 Composition II or ENGL 1033 Technical Comp II

U.S. HISTORY & GOVERNMENT (1 course – 3 hours)

- HIST 2003 History of the American People to 1877 **
- HIST 2013 History of the American People 1877 to Present **
- PLSC 2003 American National Government **

HUMANITIES (1 course – 3 hours)

- AAST 2023 The African American Experience
- ANTH 1033 Introduction to Archaeology
- ARCH 1013 Diversity and Design
- CLST 1003 Intro to Classical Studies: Greece
- CLST 1013 Intro to Classical Studies: Rome
- COMM 1233 Media, Community, and Citizenship
- DANCE 1003 Movement and Dance *
- ENGL 1213 Intro to Literature
- ENGL 2023 Creative Writing I **
- GNST 2003 Intro to Gender Studies
- HIST 1113 Institutions and Ideas of World Civilizations I **
- HIST 1123 Institutions and Ideas of World Civilizations II **
- HIST 2003 History of the American People to 1877 **
- HIST 2013 History of the American People 1877 to Present **
- HUMN 1124H* Honors Eq. of Cultures, 500-1600
- HUMN 2213 Introduction to World Religions
- LALS 2013 Latin American Studies
- MRST 2013 Intro to Medieval & Renaissance Studies
- MUSY 2003 Music in World Cultures
- PHIL 2003 Intro to Philosophy
- PHIL 2103 Intro to Ethics
- PHIL 2203 Logic
- PHIL 2303 Human Nature and the Meaning of Life
- PHIL 3103 Ethics and the Professions
- THTR 1003 Theatre Appreciation**
- THTR 1013 Musical Theatre Appreciation**
- WLIT 1113 World Literature I
- WLIT 1123 World Literature II
- World Language at the Intermediate I (2003) level

* Honors students only.

Please visit catalog.uark.edu for an extensive list of graduation and prerequisite requirements.



Catalog year: 2022

Fulbright College Advising Center

CORD 132

479.575.4801

fulbrightadvising.uark.edu

FULBRIGHT COLLEGE OF ARTS AND SCIENCES

MAJOR REQUIREMENTS for a BACHELOR OF SCIENCE in PHYSICS

MINIMUM DEGREE CREDIT HOURS REQUIRED TO GRADUATE = 120 (CORE + MAJOR + GENERAL ELECTIVES)

Department of Physics

226 PHYS

479-575-2506

physics.uark.edu

ADDITIONAL SCIENCES (2 courses – 8 hours)

- CHEM 1103/1101L University Chemistry I
- CHEM 1123/1121L University Chemistry II
- CSCE 2004 Programming Foundations I
- CSCE 2014 Programming Foundations II
- BIOL 1543/1541L Principles of Biology/Lab
- BIOL 1584 Biology for Majors
- GEOS 1113/1111L Physical Geology/Lab
- GEOS 1133/1131L Earth Science/Lab
- OR** an approved eight hours of laboratory-based courses from the department

MATHEMATICS (5 courses – 19 hours)

- MATH 2554 Calculus I
- MATH 2564 Calculus II
- MATH 2574 Calculus III
- MATH 2584 Elementary Differential Equations
- MATH 3083 Linear Algebra

Note: CSCE 3513, CSCE 4423, GEOS 4223 or MEEG 2703 can be substituted for MATH 3083 with the advisor's approval.

Assessment of Student Learning: In accordance with state, University, and college requirements, all students must have learning assessed before graduation. Students majoring in physics will be assessed in the course PHYS 4991, which must be taken in the year prior to graduation.

PHYSICS CORE (7 courses – 23 hours)

- PHYS 2054 University Physics I
- PHYS 2074 University Physics II
- PHYS 2094 University Physics III
- PHYS 3453 Electromagnetic Theory I
- PHYS 3613 Modern Physics
- PHYS 4073 Intro to Quantum Mechanics
- PHYS 4991 Physics Senior Seminar

Note: Majors must propose participation in a research experience project no later than the end of their junior year of study. A written report of the results must be submitted during PHYS 4991 Senior Seminar.

PHYSICS CONCENTRATIONS (hours vary)

Physics B.S. majors must complete all the requirements for one of seven available concentration areas. All concentrations consist of 16 credit hours with the exception of the Geophysics concentration, which requires 24.

- ASTRONOMY (16 hours minimum)
- BIOPHYSICS (16 hours minimum)
- COMPUTATIONAL (16 hours minimum)
- ELECTRONICS (16 hours minimum)
- GEOPHYSICS (24 hours minimum)
- OPTICS (16 hours minimum)
- PROFESSIONAL (16 hours minimum)

PHYSICS WRITING REQUIREMENT

- Satisfied by a senior thesis (PHYS 498V), an honors thesis, or a paper submitted as a part of PHYS 4991 or any physics or astronomy course numbered 3000 or higher. Students electing the last route must obtain approval of the instructor during the first three weeks of the semester.

Degree Breakdown:

University Core + Major Requirements + General Electives = **120** total hours

University Core: (Typically 35 hours) These options are listed on the first page of this work sheet

Major Requirements: (Up to 47 hours) These are the courses specifically required by the department to complete a degree and are listed above.

General Electives: (Varies by major) These courses make up the difference to reach 120 total hours beyond University Core and Major Requirements. These courses must be 1000 level or higher (in some cases, 3000 level or higher), courses not already required, and courses you do not have previous credit for. These courses are great to use for other majors and minors.

Fulbright Writing Requirement: Each Fulbright graduate must complete a writing requirement to graduate. Each academic department may meet this requirement in a different way, so make sure you work with your advisor for specifics.

Online courses: Students in on-campus degree programs are allowed to take online sections reserved for on-campus students. However, only 35% of a student's courses taken at the University of Arkansas may be online. See catalog for official policy.

GPA: Every student must have at least a 2.00 **cumulative** grade point average to be eligible to graduate from the University of Arkansas.

24, 30, and 40 Hour Rules:

Also known as residency requirements, these hours can come from major/minors. In some cases, courses may overlap in each of the hour rules below.

24-Hour Rule:

Students must complete at least 24 hours of 3000+ level classes in the Fulbright College.

30-Hour Rule:

Students must complete at least 30 hours of 3000+ level classes at the University of Arkansas. This can include courses taken for the 24-hour rule.

40-Hour Rule:

Students must complete at least 40 hours of 3000+ level classes in total, including transfer courses. Courses that are 2000 level and have a pre-requisite may also count for this rule. This can include courses taken for the 24-hour and 30-hour rules.