

Program Completion Plan (Eight Semester Plan)

Department: _____ Physics and Astronomy _____ **Degree:** _____ BS _____
Program/Major: _____ Physics _____
Track/Emphasis: _____ Biological Physics _____
Does this program require a minor? (Yes/No) _____ No _____

Important program information in the online *Undergraduate Bulletin*:

UCA Core Requirements: <http://uca.edu/ubulletin2013/general-policies-information/uca-core/>
Degree Requirements: <http://uca.edu/ubulletin2013/general-policies-information/degree-requirements/>
Program Description: <http://uca.edu/ubulletin2013/colleges-departments-programs/college-of-natural-sciences-and-mathematics/department-of-physics-and-astronomy/>
Course Descriptions: <http://uca.edu/ubulletin2013/courses/>

This degree program requires a total of **120** semester credit hours, including at least **40** upper-division credit hours.

Comparable courses in the Arkansas Course Transfer System (ACTS) are cross-referenced in the ACTS column of each semester block below; a [core link](http://uca.edu/go/ubulletin-ldcore/) (http://uca.edu/go/ubulletin-ldcore/) takes the user to the *Undergraduate Bulletin*'s UCA Core page, where UCA Core options and ACTS course numbers are listed in full; an [acts link](http://uca.edu/go/acts/) takes the user to the *Undergraduate Bulletin*'s ACTS page (http://uca.edu/go/acts) for additional information and a full UCA-ACTS crosswalk.

Year 1

Fall – Semester 1 (credit hours: 15)¹

| SUBJ | NUM | TITLE | SCH | ACTS |
|--------------|--------------|--|-----|--------------------------|
| PHYS | 1441 | University Physics 1 | 4 | PHYS2034 |
| MATH | 1496 | Calculus I | 4 | MATH2405 |
| BIOL | 1440 | Principles of Biology I | 4 | BIOL1014 |
| WRTG or HONC | 1310 or 1310 | Introduction to College Writing or Honors Core I | 3 | ENGL1013 |

Spring – Semester 2 (credit hours: 15)¹

| SUBJ | NUM | TITLE | SCH | ACTS |
|--------------|--------------|---|-----|--------------------------|
| PHYS | 1442 | University Physics 2 | 4 | PHYS2044 |
| MATH | 1497 | Calculus II | 4 | MATH2505 |
| BIOL | 1441 | Principles of Biology II | 4 | |
| WRTG or HONC | 1320 or 1320 | Academic Writing and Research or Honors Core II | 3 | ENGL1023 |

Year 2**Fall – Semester 3 (credit hours: 15)**

| SUBJ | NUM | TITLE | SCH | ACTS |
|------|------|---|-----|---------------------------|
| PHYS | 2443 | University Physics 3 | 4 | |
| MATH | 2471 | Calculus III | 4 | MATH2603 |
| CHEM | 1450 | College Chemistry I | 4 | CHEM1414 |
| | | Lower Division UCA Core Course ² | 3 | core link |

Spring – Semester 4 (credit hours: 16)

| SUBJ | NUM | TITLE | SCH | ACTS |
|------|-----------------|---|-----|---------------------------|
| CHEM | 1451 | College Chemistry II | 4 | CHEM1424 |
| MATH | 2311 or 4371 | Statistical Methods I or Introduction to Probability | 3 | MATH2103 |
| | | Lower Division UCA Core Course | 3 | core link |
| | | Lower Division UCA Core Course | 3 | core link |
| | | Lower Division UCA Core Course | 3 | core link |

Year 3**Fall – Semester 5 (credit hours: 15)**

| SUBJ | NUM | TITLE | SCH | ACTS |
|------|------|--------------------------------|-----|---------------------------|
| PHYS | 3110 | Junior Laboratory 1 | 1 | |
| CHEM | 2401 | Organic Chemistry I | 4 | |
| BIOL | 2490 | Genetics | 4 | |
| | | Lower Division UCA Core Course | 3 | core link |
| | | Lower Division UCA Core Course | 3 | core link |

Spring – Semester 6 (credit hours: 15)

| SUBJ | NUM | TITLE | SCH | ACTS |
|------|------|--------------------------------|-----|---------------------------|
| PHYS | 3120 | Junior Laboratory 2 | 1 | |
| PHYS | 3343 | Thermal Physics | 3 | |
| CHEM | 3411 | Organic Chemistry II | 4 | |
| | | Lower Division UCA Core Course | 3 | core link |
| | | Lower Division UCA Core Course | 3 | core link |
| | | General Elective Course | 1 | |

Year 4**Fall – Semester 7 (Credit hours: 15)**

| SUBJ | NUM | TITLE | SCH | ACTS |
|------|------|--------------------------------------|-----|------|
| PHYS | 41XX | Senior Capstone 1 | 1 | |
| BIOL | 3402 | Cell Biology | 4 | |
| | | General Elective Course ³ | 3 | |
| | | General Elective Course | 3 | |
| | | General Elective Course | 3 | |
| | | General Elective Course | 1 | |

Spring – Semester 8 (Credit hours: 14)

| SUBJ | NUM | TITLE | SCH | ACTS |
|------|------|-------------------------|-----|------|
| PHYS | 42XX | Senior Capstone 2 | 2 | |
| PHYS | 3345 | Optics | 3 | |
| BIOL | 4460 | Animal Physiology | 4 | |
| | | General Elective Course | 3 | |
| | | General Elective Course | 2 | |

SIGNED – DEPARTMENT CHAIR

DATE

SIGNED – COLLEGE DEAN

DATE

To be completed by the advisor when an Eight-Semester Plan is accepted by the student:

If applicable, has student selected a minor? Type “x” as appropriate. _____ No _____ Yes

If “yes,” specify: _____

Notes

¹ During the first year, a student must complete a UCA Core course designated as a First-Year Seminar (FYS) in Critical Inquiry, Diversity, or Responsible Living.

² See appropriate choices, alternatives, or substitutions under "UCA Core" in the *Undergraduate Bulletin*. The student will also need to complete major, minor, or general elective courses designated as fulfilling the upper-division and capstone requirements of the UCA Core.

³ General elective courses must be selected so that a minimum of 40 hours of credit is earned at the 3000 level of above.