# Physics, B.A. Two-Year Plan

#### First Year Fall Semester (15 Units)

- PHYS 314 Introduction to Physics III Units: 4
- Upper Division Physics Elective (e.g. PHYS 325 Introduction To Mathematical Physics) Units: 3
- Area of Concentration (Consult Advisor) Units: 3
- Upper Division GE Area C: Arts & Humanities Units: 3
- University Elective Units: 2

#### First Year Spring Semester (15 Units)

- PHYS 340 Light and Optics Units: 3
- PHYS 381 Computer Applications for Scientists Units: 2
- Upper Division Physics Elective Units: 3
- Area of Concentration (Consult Advisor) Units: 3
- University Elective (e.g. PHYS 494 Physics Seminar) Units: 1
- University Elective Units: 3

### **Second Year Fall Semester (15 Units)**

- Upper Division Physics Elective Units: 3
- Area of Concentration (Consult Advisor) Units: 3
- Upper Division GE Area D: Social Sciences Units: 3
- University Elective Units: 3
- University Elective Units: 3

## **Second Year Spring Semester (15 Units)**

- PHYS Capstone (ASTR 492, ASTR497, PHYS 492, PHYS 493, or PHYS 497)
  Units: 2
- PHYS 491 Capstone Preparatory Seminar Units: 1
- Upper Division Physics Elective Units: 3
- Area of Concentration (Consult Advisor) Units: 3
- University Elective Units: 3
- University Elective Units: 3

## **Plan Assumptions**

This two-year plan assumes students have completed:

- Math sequence of Calculus I-III, equivalent to SSU courses:
  - o MATH 161 Differential and Integral Calculus I GE Area B4 Units: 4
  - o MATH 211 Differential and Integral Calculus II Units: 4
  - o MATH 261 Multivariable Calculus Units: 4
- Physics sequence of Calculus-based Physics, equivalent to SSU courses:
  - o PHYS 114 Introduction to Physics I GE Area B1 Units: 4
  - PHYS 116 Introductory Laboratory Experience Units: 1
  - o PHYS 214 Introduction to Physics II Units: 4
  - o PHYS 216 Introductory Laboratory Units: 1
- Lower Division GE Pattern meeting\*:
  - o Lower Division GE Area A1: Oral Communication Units: 3
  - Lower Division GE Area A2: Written Communication Units: 3
  - o Lower Division GE Area A3: Critical Thinking Units: 3
  - o Lower Division GE Area B1: from Physics above
  - o Lower Division GE Area B2 Units: 3
  - o Lower Division GE Area B3: from Physics above
  - o Lower Division GE Area B4: from Calculus above
  - o GE Area C1: Arts Units: 3
  - o GE Area C2: Humanities Units: 3
  - o GE Area C1: Arts or GE Area C2: Humanities Units: 3
  - o GE Area D: Social Sciences Units: 3
  - GE Area D: Social Sciences Units: 3
  - o GE Area E: Lifelong Learning and Self Development Units: 3
  - o GE Area F: Ethnic Studies Units: 3
  - \* Any of these that are unmet may be completed as the University Electives identified in the two-year plan above