## Physics/Math Double Major (B.S.) Sample Course Planner

Fall 2013

## FRESHMAN

| Fall            |  |                | Spring |               |   |                |  |  |  |
|-----------------|--|----------------|--------|---------------|---|----------------|--|--|--|
| <u>Course</u>   | <u>Title</u>                               | <u>Credits</u> |        | <u>Course</u> | <u>Title</u>                            | <b>Credits</b> |  |  |  |
| PHYS 171        | Introductory Projects in Physics           | 1              |        | PHYS 251      | University Physics I                    | 4              |  |  |  |
| <b>UNIV 189</b> | Skills for Academic Success                | 1              |        | PHYS 251L     | University Physics I Lab                | 1              |  |  |  |
| MATH 165        | Calculus I                                 | 4              |        | PHYS 251R     | University Physics I Recitation         | 1              |  |  |  |
| CHEM 150        | Principles of Chemistry I                  | 3              |        | MATH 166      | Calculus II                             | 4              |  |  |  |
| CHEM 160        | Principles of Chemistry I Lab              | 1              |        | CHEM 151      | Principles of Chemistry II              | 3              |  |  |  |
| ENGL 110*       | College Composition I                      | 3              |        | CHEM 161      | Principles of Chemistry II Lab          | 1              |  |  |  |
| ENGL 120**      | * College Composition II                   | 3              |        | COMM 110      | Fundamentals of Public Speaking         | 3              |  |  |  |
|                 | Wellness Elective                          | 2              |        | Total         |   | 17             |  |  |  |
| Total           |  | 18             |        |               |   |                |  |  |  |
| *Credit auto    | omatically granted if you earn a "C" in    | ENGL 120.      |        |               |   |                |  |  |  |
| **Can enro      | II in ENGL 120 if ACT English score ≥ 18   |                |        |               |   |                |  |  |  |
| SOPHOMORE       |  |                |        |               |   |                |  |  |  |
|                 | Fall                                       |                |        |               | Spring                                  |                |  |  |  |
| <u>Course</u>   | <u>Title</u>                               | <u>Credits</u> |        | <u>Course</u> | <u>Title</u>                            | <u>Credits</u> |  |  |  |
| PHYS 252        | University Physics II                      | 4              |        | PHYS 350      | Modern Physics I                        | 3              |  |  |  |
| PHYS 252L       | University Physics II Lab                  | 1              |        | MATH 266      | Intro to Differential Equations         | 3              |  |  |  |
| PHYS 252R       | University Physics II Recitation           | 1              |        | MATH 429      | Linear Algebra                          | 3              |  |  |  |
| MATH 265        | Calculus III                               | 4              |        | CSCI 160      | Computer Science I                      | 4              |  |  |  |
| MATH 270        | Intro to Abstract Math                     | 3              |        |               | Humanities/Fine Arts Elective           | 3              |  |  |  |
|                 | Humanities/Fine Arts Elective <sup>a</sup> | 3              |        |               | Social/Behavioral Science Elective      | 3              |  |  |  |
| Total           |  | 16             |        | Total         |   | 19             |  |  |  |
|                 |  |                |        |               |   |                |  |  |  |
| JUNIOR          |  |                |        |               |   |                |  |  |  |
|                 | Fall (Odd Years)                           | <b>a</b> 100   |        |               | Spring (Even Years)                     | <b>6</b> II.   |  |  |  |
| <u>Course</u>   | <u>Title</u>                               | <u>Credits</u> |        | <u>Course</u> | <u>Title</u>                            | <u>Credits</u> |  |  |  |
| PHYS 360        | Modern Physics II                          | 3              |        | PHYS 370      | Intro to Computational Physics          | 3              |  |  |  |
| PHYS 455        | Classical Mechanics                        | 3              |        | PHYS 486      | Quantum Mechanics II                    | 3              |  |  |  |
| PHYS 485        | Quantum Mechanics I                        | 3              |        | ENGL 324      | Writing in the Sciences                 | 3              |  |  |  |
| MATH 420        | Abstract Algebra I                         | 3              |        | MATH 421/451  | Abstract Algebra II or Real Analysis II | 3              |  |  |  |
| MATH 450        | Real Analysis I                            | 3              |        |               | Social/Behavioral Science Elective      | 3              |  |  |  |
| Total           |  | 15             |        | Total         |   | 15             |  |  |  |

## Physics/Math Double Major (B.S.) Sample Course Planner

Fall 2013

## **SENIOR**

|               | Fall (Even Years)                          |                |                 | Spring (Odd Years)                              |                |  |  |
|---------------|--|----------------|-----------------|---|----------------|--|--|
| <u>Course</u> | <u>Title</u>                               | <u>Credits</u> | <u>Course</u>   | <u>Title</u>                                    | <u>Credits</u> |  |  |
| PHYS 361      | Electromagnetic Theory                     | 3              | PHYS 489        | Physics Projects                                | 3              |  |  |
| PHYS 462      | Heat & Thermodynamics                      | 3              | PHYS 463        | Statistical Mechanics (Elective)                | 3              |  |  |
| PHYS          | Physics Elective                           | 3              | PHYS            | Physics Elective                                | 3              |  |  |
| MATH 4XX      | Math Elective                              | 3              | MATH 4XX        | Math Elective                                   | 3              |  |  |
|               | Humanities/Fine Arts Elective <sup>b</sup> | 3              | MATH 491        | Seminar   | 2              |  |  |
| Total         |  | 15             |                 | Social/Behavioral Science Elective <sup>b</sup> | 3              |  |  |
|               |  |                | Total           |   | 17             |  |  |
|               |  | Course Planne  | er Credit Total | 132   |                |  |  |
|               |  |                | Minimum Cre     | Minimum Credits Required for Graduation         |                |  |  |

<sup>&</sup>lt;sup>a</sup>Of the Humanities/Fine Arts and Social/Behavioral Science electives, 3 credits must be classified as Cultural Diversity, and 3 credits must be classified as Global Perspectives.

<sup>&</sup>lt;sup>b</sup>The College of Science & Mathematics requires an additional 6 credits in Humanities/Fine Arts or Social/Behavioral Sciences for the B.S. degree.