

**Physics B.S. Recommended Curriculum General Course Sequence Short 4-Year Version**  
**9/2/09**

**Freshman Year Fall Semester**

| <u>Course</u>                  | <u>Credit Hours</u> |
|--------------------------------|---------------------|
| PHYS 1310 College Physics I    | 4                   |
| MATH 2200 Calculus I (QB)      | 4                   |
| Writing 1 (WA)                 | 3                   |
| Foreign Language               | 4                   |
| Physical Activity & Health (P) | <u>1</u>            |
|                                | 16                  |

**Freshman Year Spring Semester**

| <u>Course</u>   | <u>Credit Hours</u> |
|---|---------------------|
| PHYS 1320 College Physics II                            | 4                   |
| MATH 2205 Calculus II                                   | 4                   |
| Foreign Language  | 4                   |
| Intellectual Community (I) and Information Literacy (L) | 1                   |
| CHEM 1020 General Chemistry                             | <u>4</u>            |
|   | 17                  |

**Sophomore Year Fall Semester**

| <u>Course</u>                         | <u>Credit Hours</u> |
|---------------------------------------|---------------------|
| PHYS 2310 College Physics III         | 4                   |
| MATH 2210 Calculus III                | 4                   |
| *COSC 1010 or 1030 Computer Science I | 4                   |
| Oral Communication (C)                | <u>3</u>            |
|                                       | 15                  |

**Sophomore Year Spring Semester**

| <u>Course</u>                       | <u>Credit Hours</u> |
|-------------------------------------|---------------------|
| PHYS 2320 College Physics IV        | 3                   |
| PHYS 3650 Physics/Electronics Lab   | 4                   |
| PHYS 4210 Classical Mechanics I     | 3                   |
| MATH 2250 Elementary Linear Algebra | <u>3</u>            |
|                                     | 13                  |

### Junior Year Fall Semester

| <u>Course</u>   | <u>Credit Hours</u> |
|---|---------------------|
| PHYS 4310 Quantum Mechanics I                               | 3                   |
| PHYS 4410 Electricity and Magnetism I                       | 3                   |
| MATH 2310 Applied Differential Equations                    | 3                   |
| MATH 4230 Introduction to Complex Analysis (Upper Division) | 3                   |
| Writing 2 (WB)  | <u>3</u>            |
|   | 15                  |

### Junior Year Spring Semester

| <u>Course</u>  | <u>Credit Hours</u> |
|--|---------------------|
| *PHYS 4350 Atomic and Molecular Physics (Quantum Mech. II)                 | 3                   |
| PHYS 4420 Electricity and Magnetism II                                     | 3                   |
| MATH 4440 Partial Differential Equations I (Upper Division)                | 3                   |
| Cultural Context (C, CH, CS, CA), U.S. Diversity (D), Global Awareness (G) | 3                   |
| U.S. & Wyoming Constitutions (V)   | <u>3</u>            |
|  | 15                  |

### Senior Year Fall Semester

| <u>Course</u>  | <u>Credit Hours</u> |
|--|---------------------|
| PHYS 4510 Thermodynamics and Statistical Mechanics                         | 3                   |
| Cultural Context (C, CH, CS, CA), U.S. Diversity (D), Global Awareness (G) | 3                   |
| Upper Division (3000 level or higher, not in math or physics dept.)        | 3                   |
| Cultural Context (C, CH, CS, CA), U.S. Diversity (D), Global Awareness (G) | <u>3</u>            |
|  | 12                  |

### Senior Year Spring Semester

| <u>Course</u>  | <u>Credit Hours</u> |
|--|---------------------|
| upper division elective  | 3                   |
| PHYS 4970 (Indep. Research) (replaces Optics/Electronics Lab II) | 3                   |
| PHYS 4840 Mathematical and Computational Physics II              | 3                   |
| Non-Western (NW)   | <u>3</u>            |
|  | 12                  |

Total Credit Hours  
115

\* - Suggested Courses

\*\* - Sequence Is Designed To Allow the General Student To Take the Physics GRE Exam Reasonably Successfully in the First Semester of the Senior Year.