

## **Physics, BA**

|                         | FALL                            |          |           |             |       | SPRING                  |   |          |            |       |       |
|-------------------------|---------------------------------|----------|-----------|-------------|-------|-------------------------|---|----------|------------|-------|-------|
| Course                  | Course Title                    | USP      | Credit    | Min         | Grade | Course                  | Course Title                                    | USP      | Credit     | Min   | Grade |
| Number                  |                                 |          |           | Grade<br>RR | RSHM  | Number<br>AN YEAR       |   |          |            | Grade |       |
| MATH 2200               | Calculus I                      | Q        | 4         | C           |       | MATH 2205               | Calculus II                                     | Q        | 4          | С     |       |
| Prerequisite:           | C in Math 1405 or 1450, MPE 5,  |          | 27, Math, | or SAT 640  | )     | Prerequisite:           | C in Math 2200                                  | •        |            |       |       |
| PHYS 1210               | Engineering Physics I           |          | 4         | D           |       | PHYS 1220               | Engineering Physics II                          |          | 4          | D     |       |
| Prerequisite:           | C in MATH 2200 -Concurrent in M | 1ATH 220 | 5         |             |       | Prerequisite:           | C in MATH 2205 -Concurrent in M                 | IATH 221 | 9          |       |       |
|                         | USP: Communications I           | C1       | 3         | C           |       |                         | <b>USP:</b> Communications II                   | C2       | 3          | C     |       |
|                         |                                 |          |           |             |       | Prerequisite:           | C in C1   |          |            |       |       |
|                         | USP: Physical/Nat. World        | PN       | 4         | D           |       |                         | USP: Physical/Nat. World                        | PN       | 4          | D     |       |
| Prerequisite:           | Varies                          |          |           |             |       | Prerequisite:           | Varies  |          |            |       |       |
|                         | Total                           |          | 15        | COD         | HOM   |                         | Total   |          | 15         |       |       |
| MATH 2210               | C 1 1 III                       |          |           |             | HOMO  | DRE YEA                 |   |          | 2          |       |       |
| MATH 2210               | Calculus III<br>C in MATH 2205  |          | 4         | D           |       | MATH 2310               | <b>Applied Diff. Equations I</b> C in MATH 2205 |          | 3          | D     |       |
| Prerequisite: PHYS 3000 | Methods of Physics              |          | 4         | D           |       | Prerequisite: PHYS 2320 | Physics IV: Modern Physics                      |          | 3          | С     |       |
| Prerequisite:           | PHYS 1220                       |          | 4         | D           |       | Prerequisite:           | PHYS 1220                                       |          | J          | C     |       |
| PHYS 2310               | Physics III: Waves & Optics     |          | 4         | D           |       | PHYS 4210               | Classical Mechanics I                           |          | 3          | D     |       |
| Prerequisite:           | PHYS 1220                       |          | 4         | D           |       | Prerequisite:           | PHYS 2310 and MATH 2210                         |          | 3          | D     |       |
| r rerequisite.          | USP Human Culture               | Н        | 3         | D           |       | rrerequisite.           | USP Human Culture                               | Н        | 3          | С     |       |
|                         | asi iraman cartare              | •••      | ,         |             |       |                         | asi maman cartare                               | ••       | 3          | ·     |       |
|                         |                                 |          |           |             |       |                         | USP US & WY Constitution                        | V        | 3          | С     |       |
|                         |                                 |          |           |             |       |                         |   |          |            |       |       |
|                         | Total                           |          | 15        |             |       |                         | Total   |          | 15         |       |       |
|                         |                                 |          |           | J           | UNIO  | RYEAR                   |   |          |            |       |       |
| PHYS 4310               | Quantum Mechanics               |          | 3         | D           |       | PHYS 3650               | Adv. Lab/Mod. Phys. & Ele                       | C3       | 4          | C     |       |
| Prerequisite:           | PHYS 4210                       |          |           |             |       | Prerequisite:           | C in C2, PHYS 2310 or PHYS 232                  | 0        |            |       |       |
| PHYS 4410               | Electricity and Magnetism 1     | I        | 3         | D           |       |                         | General Elective                                |          | 2          | D     |       |
| Prerequisite:           | PHYS 2310 and MATH 2210         |          |           |             |       |                         |   |          |            |       |       |
|                         | General Elective                |          | 3         | D           |       |                         | General Elective                                |          | 3          | D     |       |
|                         |                                 |          |           |             |       |                         | C IFI C   |          |            |       |       |
|                         | General Elective                |          | 3         | D           |       |                         | General Elective                                |          | 3          | D     |       |
|                         | General Elective                |          | 3         | D           |       |                         | General Elective                                |          | 3          | D     |       |
|                         | General Elective                |          | 3         | D           |       |                         | General Elective                                |          | 3          | D     |       |
|                         | Total                           |          | 15        |             |       |                         | Total   |          | 15         |       |       |
|                         | Total                           |          | 13        | S           | FNIOI | RYEAR                   | Total   |          | 19         |       |       |
| PHYS 4510               | Thermodyn. & Stat. Mechan       | nics     | 3         | D D         |       | PHYS                    | Upper Div Physics Elective                      |          | 3          | D     |       |
|                         | C in PHYS 4310                  |          | ,         | D           |       |                         | Varies  |          | 3          |       |       |
| Prerequisite:           | General Elective                |          | 3         | D           |       | Prerequisite:           | General Elective                                |          | 3          | D     |       |
|                         | General License                 |          | ,         | ט           |       | Prerequisite:           | Varies  |          | J          | ט     |       |
|                         | Upper Division General Ele      | ctive    | 3         | D           |       | rerequisite.            | Upper Division General Ele                      | ctive    | 3          | D     |       |
|                         | Tr General Ele                  |          | ,         | 5           |       | Prerequisite:           | rr seneral Ele                                  |          | ,          | ב     |       |
|                         | Upper Division General Ele      | ctive    | 3         | D           |       | Troreguisite.           | Upper Division General Ele                      | ctive    | 3          | D     |       |
|                         | 11                              | -        | -         | •           |       | Prerequisite:           | 11  | -        | -          | -     |       |
|                         | Upper Division General Ele      | ctive    | 3         | D           |       |                         | Upper Division General Ele                      | ctive    | 3          | D     |       |
|                         | 11                              | -        | -         | •           |       |                         | 11  | -        | -          | -     |       |
|                         | Total                           |          | 15        |             |       |                         | Total   |          | 15         |       |       |
|                         | - 0 441                         |          | -         |             |       |                         | - 0 441   |          | -          |       |       |
|                         |                                 |          |           |             |       |                         | <b>Total Program Credits:</b>                   |          | <u>120</u> |       |       |
|                         |                                 |          |           |             |       |                         |   |          |            |       |       |

## Fall only or spring only course

- •A minimum of 120 hours is required. A minimum of 42 hours must be upper division. 30 hours of upper division must be completed at UW. For PHYS 1210 the prerequisite of MATH 2200 is waived and concurrent enrollment is approved for Physics Majors.
- For PHYS 1220, the prerequisite of MATH 2205 is waived and concurrent enrollment is approved for Physics Majors.
- CHEM 1020 is recommended for a PN course. If 3-credit PN courses are selected, additional General Electives hours will be required.
- Degree candidates must meet the academic requirements of the university, and must have a minimum GPA of 2.0
- Students may not take a course for S/U credit to satisfy any requirement, unless the course is offered for S/U credit only.

2023-2024 Catalog Year