**THE UNIVERSITY OF PUGET SOUND**

2014-2015 CURRICULUM GUIDE

**BIOLOGY—PREMED**

DEGREE: BS

CONTACT PERSON: ALYCE DEMARIAS (BIOLOGY)/JOYCE TAMASHIRO (PREMED)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **A suggested four-year program:** |  |  |
|  | *Fall Semester Classes* |  |  | *Spring Semester Classes* |  |  |
|  |  |  |  |  |  |  |
|  | **Freshman** |  | **Units** |  | **Units** |  |
|  | SSI1 |  | 1 | SSI2 | 1 |  |
|  |  |  |  |  |  |  |
|  | BIOL 111/lab (NS core) |  | 1 | BIOL 112/lab | 1 |  |
|  |  |  |  |  |  |  |
|  | CHEM 110/lab1 or CHEM 115/lab |  | 1 | CHEM 120/lab1 or CHEM 230/lab2 | 1 |  |
|  | FL (if needed) or major |  | 1 | FL (if needed) or major | 1 |  |
|  |  |  |  |  |  |  |
|  | **Sophomore** |  | **Units** |  | **Units** |  |
|  | BIOL 211/lab or BIOL 212/lab2 |  | 1 | BIOL 212/lab or BIOL 211/lab | 1 |  |
|  | CHEM 250/lab |  | 1 | Science elective (CHEM 251/lab)3 | 1 |  |
|  | MATH 180 or 181 (MA core) |  | 1 | Elective (PSYC 101 recommended) | 1 |  |
|  |  |  |  |  |  |  |
|  | SL core (SOAN 101 recommended) |  | 1 | Approaches core | 1 |  |
|  |  |  |  |  |  |  |
|  | **Junior** |  | **Units** |  | **Units** |  |
|  | BIOL 311/lab2 or elective |  | 1 | BIOL 3925 | .5 |  |
|  | BIOL 3344 or elective |  | 1 | BIOL 3324 or elective | 1 |  |
|  | BIOL 3995 |  | .25 | Science elective (PHYS 112 or 122)3 | 1 |  |
|  | Science elective (PHYS 111 or 121)3 |  | 1 | Elective  | 1 |  |
|  | Approaches core |  | 1 | Elective | 1 |  |
|  |  |  |  |  |  |  |
|  | **Senior** |  | **Units** |  | **Units** |  |
|  | CN core6 |  | 1 | BIOL elective (312-489)7 | 1 |  |
|  | BIOL elective (312-496)7 |  | 1 | BIOL elective (312-489)7 | 1 |  |
|  | Elective (SOAN 360 recommended) |  | 1 | Elective | 1 |  |
|  |  |  |  |  |  |  |
|  | Elective |  | 1 | Elective | .5-1 |  |
|  |  |  |  |  |  |  |
| **NOTES:** |  |  | **Puget Sound requires a total of 32 units to graduate.** |  |  |
|  |  |  |  |  |

**Early on, preferably in the freshman year, consult with the health professions advisor. In the junior year, identify schools that you are likely to apply to and check their individual prerequisites.**

1. Chemistry should be taken in the first year. Students who have a strong Chemistry background could take CHEM 115 and students who have taken CHEM 115 should take CHEM 230.
2. For students completing CHEM 230 in the freshman year, BIOL 212 may be taken before BIOL 211. It is recommended that BIOL 212 be taken before BIOL 311.
3. CHEM 251, PHYS 111/112 or 121/122 should be the science electives chosen, because they are pre-med requirements and must be completed for the MCAT.

4) Take either BIOL 332 or BIOL 334 to fulfill the physiology requirements for the Biology major; the other course can be taken as an upper division Biology elective. May be taken junior or senior year.

1. BIOL 399 and 392 taken if a senior thesis (BIOL 491) is planned.
2. Of the three units of upper division coursework required outside the first major, the Connections course will count for one unless it is used to meet a major requirement.
3. Two of three numbered BIOL 312-489 (excluding BIOL 398 and 399). CHEM 460 may be used as an advanced Biology elective so long as it is not also used to satisfy a requirement for the minor in Chemistry

**THE UNIVERSITY OF PUGET SOUND**

COURSE CHECKLIST

**BIOLOGY: PREMED**

**CORE CURRICULUM** **MAJOR REQUIREMENTS**

|  |  |  |
| --- | --- | --- |
| UNIVERSITY CORE | CRS TERM | GRADE |
|  |  |  |

SSI1

SSI2

AR

HM

MA (MATH 180 or 181)

NS (BIOL 111 or 112)

SL

CN

**KEY**

SSI1= Seminar in Scholarly Inquiry1 MA= Mathematical Approaches

SSI2= Seminar in Scholarly Inquiry2 NS= Natural Scientific Approaches

AR= Artistic Approaches SL= Social Scientific Approaches

HM= Humanistic Approaches CN= Connections

FL= Foreign Language

**Foreign Language Requirement** (circle one)

1. Two semesters at 101/102 level or One semester at 200+ level
2. Proficiency exam (3rd year high school level or 1st year college level)
3. AP foreign language score of 4 or 5
4. IB higher level foreign language score of 5, 6, or 7

**Upper Division Level Requirement**

Three units at the upper division level outside the first major.

**Recommendations**

* There is no best major to prepare for a health profession—choose a subject that you love, and then be sure to take the pre-requisite courses.
* For a higher probability of success in your classes, **spread out the science courses.** Science majors will spend most of their semesters taking 2 lab courses; non-science majors have the luxury of tackling the science classes one course at a time. **Warning**: taking 3 science courses with labs in one semester is NOT recommended.
* Start with Chemistry. The first year chemistry sequence is a pre-requisite for future chemistry courses AND for Biology 212 (recommended for most pre-health professions students). Since Chemistry is a year-long sequence, it can’t be started mid-year. [Many of the Biology courses are offered each semester.]
* Minors/second majors are less important than the actual classes you take. Health professions programs generally appreciate breadth—this means strength in the sciences, but also exposure to courses that provide insight on other cultures, diverse ways of thinking, ethical issues, and psychological and societal influences on individual health and healthcare systems.

**THIS FORM IS NOT AN OFFICIAL GRADUATION ANALYSIS**

|  |  |  |  |
| --- | --- | --- | --- |
| COURSE | UNITS | TERM | GRADE |
|  |  |  |  |
| BIOL 111 |  |  |  |
|  |  |  |  |
| BIOL 112 |  |  |  |
|  |  |  |  |
| BIOL 211 |  |  |  |
|  |  |  |  |
| BIOL 212 |  |  |  |
|  |  |  |  |
| BIOL 311 |  |  |  |
|  |  |  |  |
| BIOL 332 or 334 |  |  |  |
|  |  |  |  |
| Advanced BIOL\*: |  |  |  |
|  |  |  |  |
| 1. (312-489) |  |  |  |
|  |  |  |  |
| 2. (312-489) |  |  |  |
|  |  |  |  |
| 3. BIOL 361 or CHEM 461 |  |  |  |
|  |  |  |  |
| CHEM 110 (or 115) |  |  |  |
|  |  |  |  |
| CHEM 120 (or 230) |  |  |  |
|  |  |  |  |
| CHEM 250 |  |  |  |
|  |  |  |  |
| MATH 180 or 181 |  |  |  |
|  |  |  |  |
| Science electives\*\*: |  |  |  |
|  |  |  |  |
| 1. CHEM 251 recommended |  |  |  |
|  |  |  |  |
| 2. PHYS 111 or 121 recommended |  |  |  |
|  |  |  |  |
| 3. PHYS 112 or 122 recommended |  |  |  |
|  |  |  |  |
| PSYC 101 |  |  |  |
|  |  |  |  |
| SOAN 101 (SOAN 360 recommended) |  |  |  |
|  |  |  |  |

**NOTES**

\*Excluding BIOL 398, but including GEOL 306 or CHEM 461. Two of three advanced electives must be taken in residence at Puget Sound. Biochemistry (BIOL 361 or CHEM 460/461) is required by many medical schools, and recommended by others. Students should check individual medical school prerequisites at the beginning of their junior year.

\*\* Science electives for the BS in Biology may be chosen from among: One unit from BIOL 312 or higher; CHEM 251 or higher; EXSC 222; MATH 150 or higher; CSCI 161 or higher; GEOL; NRSC 201; or PHYS 111 or higher. We advise choosing CHEM 251 and either PHYS 111/112 or PHYS 121/122, since these courses meet pre-medicine requirements. CHEM 460/461 (CHEM 230 or 231 required) may also be taken in place of BIOL 361. Contact with Chair of the Health Professions Advising Committee or program assistant is recommended early on, preferably in the freshman year.