## Sample Four-year Plan for Biochemistry

Note: The four-year plan is for example purposes only. Students should refer to the catalog in effect upon their entry to Viterbo for more specifics on requirements of the core curriculum, major, and degree. Some courses have certain semester rotations that may or may not be reflected below. Your advisor will assist you with actual registration planning to accommodate these rotations. For complete information, see the current undergraduate catalog. Students pursuing graduate studies in biochemistry should adhere to the American Chemical Society's guidelines, which mandate completion of the following courses: MATH 220, 221, and 320; as well as PHYS 260 and 261.

| Fall Semester - First Year |  | Spring Semester - First Year |  |
| :---: | :---: | :---: | :---: |
| ENGL 103/104/105 - CCF Written Communication | 3-4 | ENGL 104/105/195 - CCF Written Communication | 3-4 |
| VUSM FVT - Franciscan Values and Traditions | 3 | BIOL 160/161 - General Biology | 4 |
| BIOL 160/161 - General Biology (CCWOT Nat. Science) | 4 | CHEM 121 - General Chemistry II | 4 |
| CHEM 112 - Science Success | 1 | MATH 230 - Statistics with R Programming ${ }^{1}$ (CCF Quantitative Literacy) | 4 |
| CHEM 120 - General Chemistry I | 4 |  |  |
| CHEM 210 - Subjectivity and Science I | 1 |  |  |
| TOTAL CREDITS | 16-17 | TOTAL CREDITS | 15-16 |
| Fall Semester - Second Year |  | Spring Semester - Second Year |  |
| CCWOT (Recommend Historical Inquiry) | 3 | CCF Written Communication II (Recommend BIOL 251) | 4 |
| BIOL 250 - Molecular and Cellular Basis of Life (CCF Oral Communication) | 4 | CCWOT (Recommend Theological Inquiry) | 3 |
| CHEM 240 - Organic Chemistry I | 4 | CHEM 330-Analytical Chemistry OR CHEM 340 - Organic Chemistry II | 4 |
| PHYS 250/260-General/University Physics I | 3 | PHYS 251/261 - General/University Physics II (Recommended) | 3 |
| PHYS 270 - Introductory Physics Lab I | 1 | PHYS 271 - Introductory Physics Lab II (Recommended) | 1 |
| TOTAL CREDITS | 15 | TOTAL CREDITS | 15 |
| Fall Semester - Third Year |  | Spring Semester - Third Year |  |
| VUSM LDW - Living in a Diverse World | 3 | CCWOT (Recommend Social Sciences) | 3 |
| BIOL 370 - Biochemistry | 4 | VUSM SJE - Social Justice and Equity | 3 |
| CHEM 320 - Energy | 3 | BIOL/CHEM 489/498 - Field Experience or Research | 1 |
| CHEM 397 - Introduction to Research | 3 | CHEM 475 - Advanced Biochemistry | 4 |
| CHEM 410 - Subjectivity and Science II | 1 | General Elective/Minor ${ }^{2}$ | 3 |
|  |  | General Elective/Minor ${ }^{2}$ | 3 |
| TOTAL CREDITS | 14 | TOTAL CREDITS | 17 |
| Fall Semester - Fourth Year |  | Spring Semester - Fourth Year |  |
| CCWOT (Recommend Artistic Engagement) | 3 | CCWOT (Recommend Integrating Faith and Practice) | 3 |
| CCWOT (Recommend Literary Analysis) | 3 | CCWOT (Recommend Philosophical Inquiry) | 3 |
| VUSM TEL - The Ethical Life | 3 | BIOL/CHEM 499 - Senior Seminar | 1 |
| BIOL 430 - Molecular Genetics | 4 | General Elective/Minor ${ }^{2}$ | 3 |
| BIOL/CHEM 489/498 - Field Experience or Research | 1 | General Elective/Minor² | 3 |
|  |  | General Elective/Minor ${ }^{\text {2 }}$ | 2-4 |
| TOTAL CREDITS | 14 | TOTAL CREDITS | 15-18 |

## Notes

${ }^{1}$ Contingent on math placement; if placed in MATH 112, student must take MATH 112 before MATH 230 and MATH 113 before PHYS 250.
${ }^{2}$ Pre-health students (medical, dental, optometry, chiropractic, podiatry, physical therapy, physician assistant, pharmacy, veterinary) should consider electives/minor that are requirements for entrance into graduate school (i.e., psychology, sociology, human anatomy/physiology, etc.). Students must complete 120 credits (including 40 credits upper division) for BS degree.

