| Chemistry Curriculum Map | PLO 1 | PLO 2 | PLO 3 | PLO 4 | PLO 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Students will demonstrate their mastery of the four principle core disciplines: analytical, organic, physical, and inorganic chemistry. (Knowledge, Application) | Students will recognize and understand the concepts and skills learned in prerequisite courses at or before the start of the new course or laboratory (Knowledge and Comprehension) | Students or student teams will demonstrate mastery <br> in problem solving by performing a broad variety of analytical, computational and synthetic procedures, using proper safety protocols, and will critically evaluate the results <br> (Application, Synthesis and Evaluation) | Students will demonstrate effective scientific communications skills in both written and oral form. Students will be able to write reports and present results while following professional policies regarding intellectual property, plagiarism, and ethical group work. (Comprehension and Analvsis) | Students will apply their experience and knowledge of the discipline in the successful conduct of at least 80 hours of in-depth work via undergraduate research, experimental biochemistry, integrated lab or chemistry electives. (Knowledge, Application, Synthesis and Evaluation) |
| Courses |  |  |  |  |  |
| 111/113 General Chem I/II | D | D | I | I |  |
| 230 Organic Chem | I | D |  | I |  |
| 232L Organic Chem Lab | D |  | I | D |  |
| 231 Organic Chem II | D | M |  |  |  |
| 233L Org Chem Lab II (majors) |  |  | D | D |  |
| 260 Analytical Chem | D | D | M | D |  |
| 340/341 Physical Chem I/II | M | D |  | M |  |
| 350/351 Biochem I/II | M | D |  | M |  |
| 352 Exp Biochem |  |  | D | M | D |
| 356 Fundamentals of Biochem | D | D | M | M |  |
| 410 Integrated Lab | M | M | D | D | M |
| 420 Inorganic Chem | D | D | M | D |  |
| 397 Research Methods/Practice | M | M | M | M | D |
| Electives | M | M | M | M | D |

I = Introduced
D = Developed
M = Mastery

