**Chemistry Major**

**General Track**

**Catalog Years 2023 – 2024**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Advisee |  |  | Advisor |  |
| Student ID |  |  | Date |  |

Please use the following notations when you complete the checklist:

 X = course completed

 IP = course in progress

 F21 = intend to register for the course in fall 2021

**Core Curriculum Requirements**

To fulfill Towson University’s Core Curriculum requirements students must

Complete one course from each of the following 14 categories. For further explanation of Core Curriculum Courses, visit: <https://www.towson.edu/advising/current/curriculum.html>

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| **Core Curriculum Requirements** |
|  | 1. Towson Seminar\* |  |  | 10. Metropolitan Perspectives |
|  | 2. English Composition\* |  |  | 11. The United States as a Nation |
|  | 3. EXEMPT |  |  | 12. Global Perspectives |
|  | 4. Creativity and Creat. Develop. |  |  | 13. Diversity and Difference |
|  | 5. Arts and Humanities |  |  | 14. Ethical Issues and Perspectives |
|  | 6. Social and Behavioral Sciences |  |  |  |
|  | 7. EXEMPT |  |  |  |
|  | 8. EXEMPT |  |  | \****Grade of ‘C’ or better required;***  |
|  | 9. Advanced Writing Seminar\* |  |  | ***all others require ‘D’ or better.*** |

**Core Courses (32-34 units)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | CHEM | 131/131L | 3+1 units | General Chemistry I  |
|  | CHEM | 132/132L | 3+1 units  | General Chemistry II  |
|  | CHEM | 220/220L | 3+2 units | Analytical Chemistry  |
| \_\_\_\_\_ | CHEMCHEM | 323**OR**351 | 5 units3 units | Inorganic Chemistry Biochemistry |
|  | CHEM | 334 | 3 units | Organic Chemistry I [Lecture] |
|  | CHEM | 336 | 2 units | Introductory Organic Chemistry Lab |
|  | CHEM  | 337 | 3 units | Organic Chemistry II [Lecture] |
|  | CHEM | 339 | 2 units | Intermediate Organic Chemistry Lab |
|  | CHEM | 345 | 3 units | Principles of Physical Chemistry |
|  | CHEM | 372 | 2 units | Physical Chemistry Laboratory |
|  | CHEM | 401 | 1 unit | Communication Skills in Chemistry |

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| **Elective Courses, 4 units minimum** |
|  | CHEM | 310 | 4 units | Instrumental Analysis |
|  | CHEM | 323 | 5 units | Inorganic Chemistry |
|  | CHEM | 346 | 3 units+ | Theoretical Foundations of Physical Chemistry  |
|  | CHEM | 351 | 3 units | Biochemistry |
|  | CHEM | 356 | 2 units | Biochemistry Laboratory  |
|  | CHEM | 357 | 3 units | Advanced Biochemistry |
|  | CHEM | 461 | 1-3 units | Advanced Lecture Topics  |
|  | CHEM | 462 | 1-2 units | Advanced Laboratory Techniques  |
|  | CHEM | 472 | 3 units | Applications of Environmental Chemistry  |
|  | CHEM | 480 | 3 units | Chemical Toxicology  |
|  | CHEM | 499 | 2 units | Honors Thesis in Chemistry  |
|  | FRSC | 363 | 3 units | Chemistry of Dangerous Drugs  |
|  | FRSC | 367 | 3 units | Forensic Chemistry  |
|  | FRSC | 467 | 3 units | Forensic Analytical Chemistry |

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| **Additional Science and Mathematics Courses (17 units)** |
| \_\_\_\_ | GEOLASTR | 121**OR**161 | 4 units4 units | Physical GeologyThe Sky and the Solar System |
|  |  |  |  |  |
| \_\_\_\_ | BIOLBIOL | 191/191L**OR**200/200L | 4 units4 units | Intro Biology for Health ProfessionsBiology I: Intro to Cellular and Molecular Biology |
|  |  |  |  |  |
| \_\_\_\_ | MATHMATH | 211**OR**273 | 3 units3 units | Calculus for ApplicationsCalculus I |
|  |  |  |  |  |
| \_\_\_\_ | PHYS | 211 | 4 units | General Physics I; Non-Calculus-Based |
| \_\_\_\_ | PHYS | 212 | 4 units | General Physics II; Non-Calculus-Based |
|  |  | **OR** |  |  |
| \_\_\_\_ | PHYS | 241 | 4 units | General Physics I; Calculus-Based |
| \_\_\_\_ | PHYS | 242 | 4 units | General Physics II; Calculus-Based |
|  |  |  |  |  |
| \_\_\_\_ | SCIE | 380 | 3 units | Teaching Science in the Secondary Schools |

+ **Course has a prerequisite not listed among the core courses above.**

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| NOTE: A student may repeat no more than three courses, including multiple attempts at the same course, required for the major. This includes all foundation courses, as well as required courses and electives for the major.# repeats: \_\_\_\_\_\_ |

**Towson UTeach Course Requirements (37 units)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| \_\_\_\_\_ | SEMS | 110  | 1 unit | Intro to STEM Teaching I: Inquiry Approaches to Teaching  |
|  | SEMS | 120 | 1 unit | Intro to STEM Teaching II: Inquiry-Based Lesson Design |
|  |  | **OR** |  |  |
| \_\_\_\_\_ | SEMS | 130 | 2 units | Intro to STEM Teaching I & II Combined |
| \_\_\_\_\_ | SEMS | 230 | 3 units | Knowing and Learning |
| \_\_\_\_\_ | SEMS | 240 | 3 units | Classroom interactions |
| \_\_\_\_\_ | SEMS | 250 | 3 units | Perspectives in Science and Mathematics |
| \_\_\_\_\_ | SEMS | 370 | 3 units | Project-Based Instruction |
| \_\_\_\_\_ | SEMS | 498 | 3 units | Internship in Mathematics and Science Secondary Education |
| \_\_\_\_\_ | SCED | 460 | 4 units | Using Literacy in the Secondary Schools |
| \_\_\_\_\_ | SCED | 461 | 3 units | Teaching Literacy in the Secondary Content Areas |
| \_\_\_\_\_ | SCIE | 393 | 12 units | Internship in Secondary Education-Science |
| \_\_\_\_\_ | SEMS | 490 | 1 unit | Seminar in Apprentice Teaching |

**General Graduation Requirements**

**120 Units Required**

Total units to date including current semester: \_\_\_\_\_\_ units.

**32 Units Upper Division Required**

Total Upper Division units to date including current semester: \_\_\_\_\_\_ units

Current GPA: ­\_\_\_\_\_\_

Expected Graduation Date: \_\_\_\_\_\_

**Advisor Notes:**