



| Term 1             | Course Title/Description    | Pre-requisite  | Cr Hrs    | Milestone/Notes   |
|--------------------|-----------------------------|--|-----------|---|
| 17-117             | Precalculus                 |  | 5         | Minimum ACT math score of 24 OR minimum high school GPA 3.8 OR minimum grade of C in MATH 17082 OR concurrent with MATH 17017 |
| 29-102             | Fund of Oral Communication  |  | 3         |   |
| 77-101             | University Seminar          |  | 1         |   |
|                    | Digital Literacy            |  | 3         |   |
| 24-114/115         | General Chemistry I & Lab   |  | 4         |   |
| <b>Total Hours</b> |                             |  | <b>16</b> |   |
| Term 2             | Course Title/Description    | Pre-requisite  | Cr Hrs    | Milestone/Notes   |
| 44-141             | Computer Programming I      |  | 3         |   |
| 24-116/117         | General Chemistry II & Lab  | Gen Chem I & Lab                                       | 5         |   |
| 04-106/107         | Principles of Biology & Lab |  | 4         |   |
| 17-120             | Calculus I                  | Precalculus OR Precalculus Algebra AND Trigonometry    | 4         | ACT Math score of at least 27, or high school FPA of 3.9 recommended  |
| <b>Total Hours</b> |                             |  | <b>16</b> |   |
| Term 3             | Course Title/Description    | Pre-requisite  | Cr Hrs    | Milestone/Notes   |
| 17-121             | Calculus II                 | Calculus I   | 5         |   |
| 24-342/343         | Organic Chemistry I & Lab   | General Chemistry II & Lab                             | 4         |   |
| 25-120/121         | Classical Physics I & Lab   | Calculus I   | 5         | FALL ONLY   |
| 33-155 OR 33-156   | Civics: History             |  | 3         |   |
| <b>Total Hours</b> |                             |  | <b>17</b> |   |
| Term 4             | Course Title/Description    | Pre-requisite  | Cr Hrs    | Milestone/Notes   |
| 04-310             | Cell Biology                | Principles of Biology & Lab AND Gen Chemistry II & Lab | 4         |   |
| 34-102             | Civics: Political Science   |  | 3         |   |
| 17-114             | General Statistics          |  | 3         | ACT Math score of 33 or higher, high school GPS of 3.00 or higher OR concurrent with Strategies for General Statistics        |
| 25-230/231         | Classical Physics II & Lab  | Classical Physics I & Lab AND Calculus II              | 5         | SPRING ONLY   |
| <b>Total Hours</b> |                             |  | <b>15</b> |   |



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= a milestone courses taken in final year to complete degree requirements.




| Term 5             | Course Title/Description           | Pre-requisite  | Cr Hrs       | Milestone/Notes     |
|--------------------|------------------------------------|--|--------------|---------------------|
| 04-350             | Genetics                           | Principles of Biology & Lab  | 4            |                     |
| 25-430             | Optics                             | Calculus II  | 3            | FALL EVEN YEARS     |
| 48-314             | Nanoscale I                        | Calculus I, Calculus II, General Chemistry I & Lab, General Chemistry II & Lab, Classical Physics I & Lab, Classical Physics II & Lab, Organic Chemistry I AND Junior Standing | 4            | FALL EVEN YEARS     |
| 25-420             | Advanced Physics Laboratory        | Classical Physics II & Lab AND Calculus III  | 1            |                     |
| 10-111             | Composition I                      |  | 3            |                     |
| <b>Total Hours</b> |                                    |  | <b>15</b>    |                     |
| Term 6             | Course Title/Description           | Pre-requisite  | Cr Hrs       | Milestone/Notes     |
| 10-112             | Composition II                     | Composition I  | 3            |                     |
| 48-315             | Nanoscale II                       | Calculus I, Cell Biology, Classical Physics I & Lab, Classical Physics II & Lab AND Junior Standing  | 4            | SPRING ODD YEARS    |
| 25-352             | Modern Physics                     | Classical Physics II & Lab   | 3            | SPRING ODD YEARS    |
|                    | Approved Physics Emphasis Elective |  | 3-4          | See list below      |
| <b>Total Hours</b> |                                    |  | <b>13-14</b> |                     |
| Term 7             | Course Title/Description           | Pre-requisite  | Cr Hrs       | Milestone/Notes     |
| 25-350             | Intro to Quantum Mechanics         | Classical Physics II & Lab   | 3            | FALL ODD YEARS only |
|                    | Social & Behavior Science          |  | 3            |                     |
| 10-220             | Intro to Literature                |  | 3            |                     |
|                    | Elective                           |  | 3            |                     |
|                    | Fine Art                           |  | 3            |                     |
| <b>Total Hours</b> |                                    |  | <b>15</b>    |                     |

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| Term 8             | Course Title/Description           | Pre-requisite   | Cr Hrs                           | Milestone/Notes        |
|--------------------|------------------------------------|---|----------------------------------|------------------------|
|                    | Approved Physics Emphasis Elective |   | 3-4                              | See list below         |
|                    | Social & Behavioral Science        |   | 3                                |                        |
| 39-276             | Biomedical Ethics                  |   | 3                                |                        |
|                    | Humanities                         |   | 3                                |                        |
| 25-450             | Computational Physics              | Classical Physics II & Lab<br>AND Computer<br>Programming I | 3                                | SPRING EVEN YEARS only |
| <b>Total Hours</b> |                                    |   | <del>12-13</del><br><b>15-16</b> |                        |

| Approved Physics Emphasis Electives |                                    |  |     |                               |
|-------------------------------------|------------------------------------|--|-----|-------------------------------|
| 17-321                              | Calculus III                       | Calculus II                                    | 4   | FALL ONLY course              |
| 17-361                              | Differential Equations             | Calculus II                                    | 3   | SPRING ONLY course            |
| 24-135                              | Laboratory Safety                  | General Chemistry I & Lab                      | 2   | <del>SPRING ONLY course</del> |
| 24-552/555                          | Advanced Inorganic Chemistry & Lab | Physical Chemistry I & Lab                     | 3   | SPRING ONLY course            |
| 25-479                              | Undergraduate Research             | Permission of Instructor                       | 1-3 |                               |
| 25-330                              | Electricity & Magnetism I          | Classical Physics II & Lab                     | 3   | FALL EVEN YEARS only          |
| 25-332/333                          | Electronics & Lab                  | Classical Physics II & Lab                     | 4   | SPRING ODD YEARS only         |
| 25-360                              | Quantum Mechanics                  | Classical Physics II & Lab<br>AND Calculus III | 3   | SPRING EVEN YEARS only        |
|                                     |                                    |  |     |                               |

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