

# ACADEMIC PATHWAYS



**Sinclair College –Associate of Science Degree in Chemistry  
To  
University of Dayton – Bachelor of Arts  
Major – Chemistry**

| SUBJECT CODE | COURSE NUMBER      | SINCLAIR CREDIT HOUR | COURSE TITLE   | UD COURSE #                | UD CREDIT HOUR |
|--------------|--------------------|----------------------|--|----------------------------|----------------|
| CHE          | 1211*              | 5                    | General Chemistry I  | CHM 1GF+1GFL               | 4              |
| CHE          | 1221*              | 5                    | General Chemistry II   | CHM 1GS+1GSL               | 4              |
| CHE          | 2111               | 5                    | Organic Chemistry I  | CHM 313 +<br>CHM 313L      | 4              |
| CHE          | 2121               | 5                    | Organic Chemistry II   | CHM 314 +<br>CHM 314L      | 4              |
| COM          | 2206 or<br>2211**  | 3                    | Interpersonal Communication<br>Effective Public Speaking     | CMM 320 or<br>CMM 351      | 3              |
| ENG          | 1101               | 3                    | English Composition I  | ENG 100                    | 3              |
| ENG          | 1201               | 3                    | English Composition II                                       | ENG 200                    | 3              |
| HIS          | 1112               | 3                    | Western Civilization II                                      | HST 103                    | 3              |
| MAT          | 2270               | 5                    | Calculus & Analytic Geometry I                               | MTH 168                    | 4              |
| MAT          | 2280               | 5                    | Calculus & Analytic Geometry II                              | MTH 169                    | 4              |
| MAT<br>PHY   | 2290 or<br>1141*** | 4-5                  | Calculus & Analytic Geometry III<br>College Physics I        | MTH 218 or<br>PHY 201+201L | 4              |
| MET          | 1131               | 1                    | Personal Computer Applications<br>for Engineering Technology | CPS 1XX                    | 1              |
| PHI          | 2205 or<br>2206    | 3                    | Introduction to Philosophy<br>Introduction to Ethics         | PHL 103                    | 3              |
| PSY          | 1100****           | 3                    | General Psychology   | PSY 101                    | 3              |
| SCC          | 1101               | 1                    | First Year Experience  | ASI 150                    | 1              |
| SOC          | 1101****           | 3                    | Introduction to Sociology                                    | SOC 101                    | 3              |
| SOC          | 1145               | 3                    | Introduction to Cultural<br>Anthropology                     | ANT 150                    | 3              |
| <b>TOTAL</b> |                    | <b>60-61</b>         |  |                            | <b>54</b>      |

- **This Associate of Science in Chemistry from Sinclair College is designed for students considering a major in Biochemistry, Chemistry (Bachelor of Arts or Bachelor of Science), or Medicinal-Pharmaceutical Chemistry program at UD.**
- **\*Completion of both CHE 1211 and CHE 1221 are required for transfer credit. Consult with Sinclair College Advisor for course sequencing.**

# ACADEMIC PATHWAYS



- **\*\*COM 2206 or 2211 will meet the communication requirement at the University of Dayton with the completion of the Associate Degree. This exception applies to only UD-Sinclair Academy students. Consult with your UD advisor if you are eligible for this exception.**
- **\*\*\*MAT 2290 (equivalent to MTH 218 at UD) is required for only Biochemistry (BS) and Chemistry (BS) majors. Students interested in Medicinal-Pharmaceutical Chemistry (BS) or Chemistry (BA) program should take PHY 1141, instead, to complete an associate degree at Sinclair.**
- **\*\*\*\*PSY 1100 or SOC 1101 will meet the social science integrated course requirement at the University of Dayton with the completion of the Associate Degree.**
- **124 hours minimum are required for a BA degree and 120 hours minimum for a BS degree at UD. Required GPA at the time of the Associate Degree is 3.0.**

Students are recommended to complete the following additional coursework at Sinclair in order to graduate in a timely manner from UD:

| SUBJECT CODE | COURSE NUMBER                      | SINCLAIR CREDIT HOUR | COURSE TITLE   | UD COURSE #                     | UD CREDIT HOUR |
|--------------|------------------------------------|----------------------|--|---------------------------------|----------------|
| PHY          | 1141 or 2201 <sup>1</sup>          | 4-5                  | College Physics I<br>General Physics I   | PHY 201+201L or<br>PHY 206+210L | 4              |
| PHY          | 1142 or 2202 <sup>1</sup>          | 4-5                  | College Physics II<br>General Physics II   | PHY 202+202L or<br>PHY 207+211L | 4              |
| REL          | 1111,<br>1112,<br>2204, or<br>2255 | 3                    | Eastern Religions<br>Western Religions<br>Great Books: The Bible &<br>Western Culture<br>People and Religion | REL 103                         | 3              |
| <b>TOTAL</b> |                                    | <b>11-13</b>         |  |                                 | <b>11</b>      |

- <sup>1</sup>Students interested in Chemistry (BA degree) and Medicinal-Pharmaceutical Chemistry will complete PHY 1141+1142; students interested in Chemistry (BS degree) and Biochemistry will complete PHY 2201+2202. If students are undecided on a specific chemistry degree at UD, complete PHY 2201+2202.

## FALL SEMESTER YEAR 1

| SUBJECT CODE | COURSE NUMBER | SINCLAIR CREDIT HOUR | COURSE TITLE            | UD COURSE #  | UD CREDIT HOUR |
|--------------|---------------|----------------------|-------------------------|--------------|----------------|
| CHE          | 1211*         | 5                    | General Chemistry I     | CHM 1GF+1GFL | 4              |
| ENG          | 1101          | 3                    | English Composition I   | ENG 100      | 3              |
| HIS          | 1112          | 3                    | Western Civilization II | HST 103      | 3              |

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| SUBJECT CODE | COURSE NUMBER | SINCLAIR CREDIT HOUR | COURSE TITLE                   | UD COURSE # | UD CREDIT HOUR |
|--------------|---------------|----------------------|--------------------------------|-------------|----------------|
| MAT          | 2270          | 5                    | Calculus & Analytic Geometry I | MTH 168     | 4              |
| SCC          | 1101          | 1                    | First Year Experience          | ASI 150     | 1              |
| <b>TOTAL</b> |               | <b>17</b>            |                                |             | <b>15</b>      |

- **\*Completion of both CHE 1211 and CHE 1221 are required for transfer credit. Consult with Sinclair College Advisor for course sequencing.**

## SPRING SEMESTER YEAR 1

| SUBJECT CODE | COURSE NUMBER | SINCLAIR CREDIT HOUR | COURSE TITLE                    | UD COURSE #  | UD CREDIT HOUR |
|--------------|---------------|----------------------|---------------------------------|--------------|----------------|
| CHE          | 1221*         | 5                    | General Chemistry II            | CHM 1GS+1GSL | 4              |
| ENG          | 1201          | 3                    | English Composition II          | ENG 200      | 3              |
| MAT          | 2280          | 5                    | Calculus & Analytic Geometry II | MTH 169      | 4              |
| SOC          | 1101**        | 3                    | Introduction to Sociology       | SOC 101      | 3              |
| <b>TOTAL</b> |               | <b>16</b>            |                                 |              | <b>14</b>      |

- **\*Completion of both CHE 1211 and CHE 1221 are required for transfer credit. Consult with Sinclair College Advisor for course sequencing.**
- **\*\*PSY 1100 or SOC 1101 will meet the social science integrated course requirement at the University of Dayton with the completion of the Associate Degree.**

## FALL SEMESTER YEAR 2

| SUBJECT CODE | COURSE NUMBER   | SINCLAIR CREDIT HOUR | COURSE TITLE  | UD COURSE #        | UD CREDIT HOUR |
|--------------|-----------------|----------------------|---|--------------------|----------------|
| CHE          | 2111            | 5                    | Organic Chemistry I                                       | CHM 313+313L       | 4              |
| COM          | 2206 or 2211*** | 3                    | Interpersonal Communication Effective Public Speaking     | CMM 320 or CMM 351 | 3              |
| MET          | 1131            | 1                    | Personal Computer Applications for Engineering Technology | CPS 1XX            | 1              |
| PSY          | 1100**          | 3                    | General Psychology  | PSY 101            | 3              |
| <b>TOTAL</b> |                 | <b>12</b>            |   |                    | <b>11</b>      |

- **\*\*PSY 1100 or SOC 1101 will meet the social science integrated course requirement at the University of Dayton with the completion of the Associate Degree.**

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- **\*\*\*COM 2206 or 2211 will meet the communication requirement at the University of Dayton with the completion of the Associate Degree. This exception applies to only UD-Sinclair Academy students. Consult with your UD advisor if you are eligible for this exception.**

## SPRING SEMESTER YEAR 2

| SUBJECT CODE | COURSE NUMBER       | SINCLAIR CREDIT HOUR | COURSE TITLE  | UD COURSE #                | UD CREDIT HOUR |
|--------------|---------------------|----------------------|---|----------------------------|----------------|
| CHE          | 2121                | 5                    | Organic Chemistry II                                  | CHM 314 +<br>CHM 314L      | 4              |
| MAT<br>PHY   | 2290 or<br>1141**** | 4-5                  | Calculus & Analytic Geometry III<br>College Physics I | MTH 218 or<br>PHY 201+201L | 4              |
| PHI          | 2205 or<br>2206     | 3                    | Introduction to Philosophy<br>Introduction to Ethics  | PHL 103                    | 3              |
| SOC          | 1145                | 3                    | Introduction to Cultural<br>Anthropology              | ANT 150                    | 3              |
| <b>TOTAL</b> |                     | <b>15-16</b>         |   |                            | <b>14</b>      |

- **\*\*\*\*MAT 2290 (equivalent to MTH 218 at UD) is required for only Biochemistry (BS) and Chemistry (BS) majors. Students interested in Medicinal-Pharmaceutical Chemistry (BS) or Chemistry (BA) program should take PHY 1141, instead, to complete an associate degree at Sinclair.**

| Remaining Courses to Be Completed at UD for BA in Chemistry<br>Sample Curriculum <sup>2</sup> |              |  |              |
|---|--------------|--|--------------|
| Fall Semester Third Year  |              | Spring Semester Third Year               |              |
| Course  | Credit Hours | Course                                   | Credit Hours |
| MTH 367   | 3            | CHM 201                                  | 3            |
| CHM 302   | 3            | CHM 201L                                 | 1            |
| CHM Elective  | 3            | CHM Elective                             | 3            |
| Social Science 300/400 Level  | 3            | CAP Crossing Boundaries:<br>Integrative  | 3            |
| Foreign Language 101  | 4            | CAP Arts/Creative and<br>Performing Arts | 3            |
|   |              | Foreign Language 141                     | 4            |
| <b>TOTAL</b>  | <b>16</b>    | <b>TOTAL</b>                             | <b>17</b>    |
| Fall Semester Fourth Year   |              | Spring Semester Fourth Year              |              |

# ACADEMIC PATHWAYS



| Remaining Courses to Be Completed at UD for BA in Chemistry<br>Sample Curriculum <sup>2</sup> |              |  |              |
|---|--------------|--|--------------|
| Course  | Credit Hours | Course                                       | Credit Hours |
| CHM 480   | 1            | CHM 490 (Capstone)                           | 1            |
| CHM Elective  | 3            | CHM Elective                                 | 3            |
| CAP Crossing Boundaries:<br>Practical Ethical Action  | 3            | CAP Advanced Religious<br>Studies            | 3            |
| CAP Advanced Historical<br>Studies  | 3            | CAP Crossing Boundaries:<br>Faith Traditions | 3            |
| CAP Advanced Philosophical<br>Studies   | 3            | Literature                                   | 3            |
| Foreign Language 201 or<br>Contextual Course  | 3            | General Elective                             | 3            |
| <b>TOTAL</b>  | <b>16</b>    | <b>TOTAL</b>                                 | <b>16</b>    |

- <sup>2</sup>The above is a sample curriculum guide. Review your DegreeWorks audit with your UD academic advisor to fully understand the remaining degree requirements and specific course options.