Chemistry

The Chemistry major (CH) provides a solid foundation for many professions including teaching, forensics, biotechnology, medicine, materials science and nanotechnology, chemical processing, electronics, agricultural and food science, oceanography, and environmental science. Chemistry students choose from among the 10 different options in the major including advanced chemistry, biochemistry, business, chemistry education, chemical engineering, environmental chemistry, forensic science, materials science, & pre-medicine.

Your Bachelor’s Degree in the OSU College of Science:

- A minimum of 180 credits are required for graduation. 60 must be upper division (300 and 400-level courses).
- A maximum of 124 credits earned at a community college may be applied toward a bachelor’s degree at OSU.
- Only courses with letter prefixes and numbers above 100 can be accepted.
- See OSU Catalog for a list of courses required for your major and option: http://catalog.oregonstate.edu/DegreeSearcher.aspx?formstate=undermajors

Courses for these Majors: (offered at the community college)

Mathematics and General Chemistry are priority courses to complete before transferring.
CH and BB majors must complete MTH 254, Physics, & Organic Chemistry (if offered) before transferring in order to graduate in 4 years.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>PCC Equivalent</th>
<th>OSU Courses Chemistry Majors</th>
<th>OSU Courses Biochemistry/Biophysics Majors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>MTH 251, MTH 252</td>
<td>MTH 251, MTH 252</td>
<td>MTH 251, MTH 252</td>
</tr>
<tr>
<td></td>
<td>MTH 253, MTH 254</td>
<td>MTH 253, MTH 254</td>
<td>MTH 253, MTH 254</td>
</tr>
</tbody>
</table>

Depending on math placement, students may need to take math courses prior to MTH 251 (e.g., MTH 111, 112, or others). Please speak to your PCC advisor.
The OSU Math Department enforces prerequisites of C- or better for all Math courses in order to move on to higher level Math courses.

General Chemistry

CH 221, 222, 223

Students need a C− or higher in the Chemistry 200-series (OSU or transfer) before moving on to upper division (300-400 level) Chemistry courses.

Physics

PHY 201, 202, 203 or
PHY 211, 212, 213

PH 201, 202, 203 or
PH 211/221, 212/222, 213/223**

*The calculus-based series (PH 21x/22x) is required for only some CH majors (depending on option selected).

PH 211/221, 212/222, 213/223^

Principles of Biology

BI 211, 212, 213**

(Required for some CH majors depending on option selected).

**Students should take the entire series at either PCC or OSU. Do not split series between schools.

Students need a C− or higher in BI 211, 212, & 213 (OSU or transfer) before moving on to upper division (300-400 level) Biology & Zoology courses.

Organic Chemistry

CH 241, 242, 243

CH 331, 332, 337

**Must pass ACS Organic Exam to receive upper division credit. http://chemistry.oregonstate.edu/organic_chem_transfer

CH 331, 332, 337

**Must pass ACS Organic Exam to receive upper division credit. http://chemistry.oregonstate.edu/organic_chem_transfer

^CH 200-series and PH 21x/22x series have separate course numbers at OSU for Lecture/Lab or Lecture/Recitation.
General Education Courses: (called the Baccalaureate Core)

- Complete one course in each Perspectives category with no more than two in the same department.
- The Oregon AAOT satisfies all lower division requirements of the Baccalaureate Core (all but Synthesis Courses*).
- The College of Science allows courses to double count between your major and the Baccalaureate Core.
- See Baccalaureate Core transfer guide* for specific community college courses meeting these requirements: http://oregonstate.edu/admissions/main/baccalaureate-core-course-equivalencies

<table>
<thead>
<tr>
<th>SKILLS COURSES</th>
<th>PERSPECTIVES COURSES</th>
<th>DPD COURSE</th>
<th>SYNTHESIS COURSES*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math</td>
<td>Biological Science</td>
<td>Difference, Power, &amp; Discrimination</td>
<td>Contemporary Global Issues</td>
</tr>
<tr>
<td>Writing I</td>
<td>Physical Science</td>
<td>Upper division course, take at OSU</td>
<td>Science, Technology, &amp; Society</td>
</tr>
<tr>
<td>Writing II</td>
<td>2nd Biological or Physical Science</td>
<td>Many options, see transfer guide*</td>
<td></td>
</tr>
<tr>
<td>Speech (Writing III)</td>
<td>Cultural Diversity</td>
<td>Many options, see transfer guide*</td>
<td></td>
</tr>
<tr>
<td>Fitness</td>
<td>Literature and the Arts</td>
<td>Many options, see transfer guide*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Processes and Institutions</td>
<td>Many options, see transfer guide*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Western Culture</td>
<td>Many options, see transfer guide*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Upper division course, take at OSU</td>
</tr>
</tbody>
</table>

Completed as part of major. Required to transfer.
WR 121. Required to transfer.
Many options, see transfer guide*
HE 295 & PE 295
Often completed as part of major
Completed as part of major
Completed as part of major
Many options, see transfer guide*
Many options, see transfer guide*
Many options, see transfer guide*
Many options, see transfer guide*

Important Notes and Resources:
- For science students, the best time to transfer is fall term, particularly due to the science series courses. Talk with an OSU advisor about your specific timeline.
- Students do not have to complete a transfer degree in order to transfer to OSU. Following the sample two-year plan below can help ease the transfer.
- Preparing to apply to OSU? See admissions info: http://oregonstate.edu/admissions/transfer.html
- Want to take classes at both OSU and an Oregon community college? Check out the Degree Partnership Program: http://oregonstate.edu/partnerships/students

Example Two-Year Transfer Plan:
This is one possible plan based on full-time attendance. See your community college academic advisor to create your personalized plan.

<table>
<thead>
<tr>
<th>Fall Term</th>
<th>Winter Term</th>
<th>Spring Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math</td>
<td>Math</td>
<td>Math</td>
</tr>
<tr>
<td>General Chemistry</td>
<td>General Chemistry</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>Principles of Biology (if required)</td>
<td>Principles of Biology (if required)</td>
<td>Principles of Biology (if required)</td>
</tr>
<tr>
<td>WR 121</td>
<td>Bacc Core</td>
<td>Bacc Core</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math (if needed) or Bacc Core</td>
<td>Math (if needed) or Bacc Core</td>
<td>Math (if needed) or Bacc Core</td>
</tr>
<tr>
<td>Physics</td>
<td>Physics</td>
<td>Physics</td>
</tr>
<tr>
<td>Organic Chemistry</td>
<td>Organic Chemistry</td>
<td>Organic Chemistry</td>
</tr>
</tbody>
</table>

Advising Contacts:
Academic advisors at your community college and OSU are available to answer your questions and assist you in creating a transfer plan. See your community college advisor first, and use this Transfer Guide to help you plan. Also, consider visiting OSU to take a campus tour and meet with an advisor. See http://oregonstate.edu/visitosu/tour to schedule your personalized visit.

Portland Community College http://www.pcc.edu/resources/advising/
OSU Biochemistry & Biophysics Dr. Kevin Ahern, 541-737-2305, ahernk@onid.orst.edu
OSU Chemistry Dr. Christine Pastorek, 541-737-6732, christine.pastorek@oregonstate.edu
OSU College of Science main office 541-737-4811, science@oregonstate.edu