Physics

Physics is the science that studies the nature of things— the fundamental structure of matter and the interaction of its parts. Physicists seek first to understand the way in which the most elementary systems in nature operate. OSU's undergraduate program provides a modern approach to physics and a variety of interactive class formats. Students who earn undergraduate degrees in physics have a wide variety of career opportunities. Many go on to graduate study in physics or related fields while others find employment in research and development in industry. Some also pursue an education degree and teach high school.

Physics Options

*not required

- Applied Physics
- Biological Physics
- Chemical Physics
- Computational Physics
- Geophysics
- Mathematical Physics
- Optical Physics
- Physics Teaching

Your Bachelor’s Degree (BS) in the 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.
- Some courses can count towards your major and the Baccalaureate Core. Check with your advisor.
- Options available. See “Important Notes”.
- See the OSU Catalog for a list of courses required for your major and option: catalog.oregonstate.edu

Courses for this Major (offered at Clackamas Community College)

Priority courses to complete before transferring are distinguished by ♪

<table>
<thead>
<tr>
<th>Requirement</th>
<th>LBCC Course</th>
<th>OSU Courses for Physics Majors</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics ♪</td>
<td>MTH 251, MTH 252,</td>
<td>MTH 251, MTH 252, MTH 253, MTH 254,</td>
<td>Math placement determines where students begin in math. Please speak</td>
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<tr>
<td></td>
<td>MTH 255, MTH 256</td>
<td>MTH 255, MTH 256</td>
<td>to your LBCC advisor.</td>
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<tr>
<td>General Chemistry ♪</td>
<td>CH 221, 222, 223</td>
<td>CH 231/261, 232/262, 233/263</td>
<td>Lecture &amp; lab for Chemistry have separate course numbers at OSU</td>
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<tr>
<td>Physics</td>
<td>PH 211, 212, 213</td>
<td>PH 211, 212, 213</td>
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</tbody>
</table>
Important Notes & Resources

Important Notes for the College and Major:

- Grade requirements: C- or better in all lower division math and science coursework
- See a sample degree plan by searching “Physics” at admissions.oregonstate.edu/find-your-major
- Options are not required for this major but interested students can select from: Applied Physics, Biological Physics, Chemical Physics, Computational Physics, Geophysics, Mathematical Physics, Optical Physics, and Physics Teaching
- Other similar majors to explore: Mathematics, Engineering, and Biochemistry & Biophysics
- Math, Chemistry and some Baccalaureate Core are priority courses to complete before transferring to OSU.
- For Physics students, the best time to transfer is fall term, particularly due to the required three term science series courses. Talk with the College of Science Transfer Advisor about your specific timeline.
- It is important to speak with the College of Science Transfer Advisor early on, and often, to ensure correct course selection and sequencing.

Resources and OSU Information:

- Students do not have to complete a transfer degree in order to transfer to OSU.
  - If you’ve completed the Oregon AAOT, all requirements of the Baccalaureate Core are complete except for Synthesis Courses and Writing Intensive Courses.
- Preparing to apply to OSU? See admissions info: oregonstate.edu/admissions/transfer.html
- Want to take classes at both OSU and an Oregon community college? Check out the Degree Partnership Program: partnerships.oregonstate.edu/students
- Visit OSU for a campus tour and meet with an advisor; schedule your visit at visitosu.oregonstate.edu/visit-campus
- It is important to speak with the College of Science Transfer Advisor early on, and often, to ensure correct course selection and sequencing.

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 visitosu.oregonstate.edu/visit-campus to schedule your personalized visit.

General Education Courses (called the Baccalaureate Core)

- Complete one course in each Perspectives category with no more than two in the same department.
- For full listing of courses that fulfill Baccalaureate Core, please refer to: https://admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-clackamas-community-college

<table>
<thead>
<tr>
<th>SKILLS COURSES</th>
<th>Math</th>
<th>Writing I</th>
<th>Writing II</th>
<th>Speech</th>
<th>Fitness</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Completed as part of major.</td>
<td>WR 121. Required to transfer.</td>
<td>Many options, see BaccCore link above</td>
<td>Many options, see BaccCore link above</td>
<td>PE 231</td>
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</table>

<table>
<thead>
<tr>
<th>PERSPECTIVE COURSES</th>
<th>Biological Science</th>
<th>Physical Science</th>
<th>Additional Biological or Physical Science</th>
<th>Cultural Diversity</th>
<th>Literature and the Arts</th>
<th>Social Processes and Institutions</th>
<th>Western Culture</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Many options, see BaccCore link above</td>
<td>Completed as part of major</td>
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<thead>
<tr>
<th>DPD COURSE</th>
<th>Difference, Power, &amp; Discrimination</th>
<th>Many options, see BaccCore link above</th>
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<thead>
<tr>
<th>SYNTHESIS COURSES</th>
<th>Contemporary Global Issues</th>
<th>Science, Technology, &amp; Society</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Upper division course, take through OSU</td>
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</tr>
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It is important to speak with the College of Science Transfer Advisor early on, and often, to ensure correct course selection and sequencing.

Advising Contacts & Resources

Clackamas Community College: http://www.clackamas.edu/Advising/Advising.aspx
OSU College of Science Transfer Advisor: Melissa Lee, Melissa.Lee@oregonstate.edu, 541-737-3522
OSU Science Success Center: sciencesuccess@oregonstate.edu, 541-737-3854
OSU Physics Website: https://physics.oregonstate.edu