#### **Major Offered Through:**

**CORVALLIS** 

# **Central Oregon Community College**

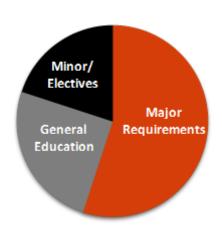
## **Physics**

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**

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

### 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 135 transfer credits may be applied toward a bachelor's degree at OSU.
- Only courses with letter prefixes and numbers above 100 can be accepted.
- 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 Central Oregon Community College)

This list is comprehensive. Speak with an OSU advisor for more information.

Priority courses to complete before transferring are distinguished by P

| Physics Core Requirement       | COCC Equivalent Course              | OSU Courses                           | Notes  |
|--------------------------------|-------------------------------------|---------------------------------------|--|
| Mathematics <sup>P</sup>       | MTH 251Z, 252Z, 253Z, 254, 255, 256 | MTH 251Z, 252Z, 253Z, 254, 255, 256   | Math placement determines where students begin in math. Please speak to your COCC advisor. |
| General Chemistry <sup>P</sup> | CH 221Z/227Z, 222Z/228Z, 223Z/229Z  | CH 221Z/227Z, 222Z/228Z,<br>223Z/229Z |  |
| Physics <sup>P</sup>           | PH 211, 212, 213                    | PH 211, 212, 213                      |  |



### **Important Notes & Resources**

#### Important Notes for the College and Major:

- Grade requirements: C- or better in all lower division math and chemistry coursework.
- See a sample degree plan here: Physics Sample Plan
- For more information the Physics major see here: More information
- Options are not required for this major but interested students can select from: Applied Physics, Astrophysics, Biological Physics, Chemical Physics, Computational Physics, Geophysics, Mathematical Physics, and Optical Physics.
- Other similar majors to explore: Mathematics, Engineering, and Biochemistry & Biophysics
- Physics, 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.
- It is important to speak with a College of Science 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 or ASOT, all lower division Core Ed requirements are considered complete.
- If you've completed to CTM (Core Transfer Map) or an MTM (Major Transfer Map), all lower division Core Ed requirements are considered complete <u>except</u> Difference, Power and Oppression Foundations. Preparing to apply to OSU? See admissions info: <u>transfer.oregonstate.edu/applying-oregon-state-university</u>

- 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
- Find more transfer student resources at transfer.oregonstate.edu.



## **Core Education Requirements**

- Please note, Core Education ("Core Ed"), include the general education requirements for students admitted to
   OSU Summer 2025 and onward. Students admitted Spring 2025 and earlier should refer to the Baccalaureate
   Core and/or their advisor for guidance.
- For full listing of courses that fulfill Core Education requirements, please refer to
   <a href="https://transfer.oregonstate.edu/oregon-and-hawaii-course-articulations">https://transfer.oregonstate.edu/oregon-and-hawaii-course-articulations</a> and search for the Oregon CC you are attending.

|                   | Writing Foundations                          | WR 121Z   |
|-------------------|--|---|
|                   | Arts and Humanities: General                 | Any course in this is acceptable for the major      |
|                   | Arts and Humanities: Global                  | Any course in this is acceptable for the major      |
| FOUNDATIONAL      | Quantitative Literacy and Analysis           | Completed as part of the major                      |
| CORE              | Communication, Media and Society             | Any course in this is acceptable for the major      |
|                   | Social Science                               | Any course in this is acceptable for the major      |
|                   | Scientific Inquiry and Analysis (2 courses)  | Can be completed as part of the major, depending on |
|                   |  | elective choices                                    |
|                   | Difference, Power and Oppression Foundations | Any course in this is acceptable for the major      |
| SIGNATURE<br>CORE | Transitions                                  | Any course in this is acceptable for the major      |
|                   | Difference, Power and Oppression Advanced    | Completed as part of the major (PH 301)             |
|                   | Seeking Solutions                            | Any course in this is acceptable for the major      |
|                   | Writing Elevation                            | WR 362 is required for the major                    |
|                   | Writing Intensive Curriculum                 | Completed as part of the major                      |

## **Advising Contacts**

It is important to speak with your OSU academic 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 meeting with an OSU transfer advisor (see email below) and visiting OSU to take a campus tour. See <u>visitosu.oregonstate.edu/visit-campus</u> to schedule your visit.

| Central Oregon Community College advising                         | https://cocc.edu/departments/cap/advising/  |
|---|---|
| College of Science Transfer Questions                             | COS-TransferQuestions@oregonstate.edu       |
| College of Science Science Success Center (for general questions) | sciencesuccess@oregonstate.edu 541-737-3854 |
| OSU Physics Website   | https://physics.oregonstate.edu/            |

