HIGHER EDUCATION COORDINATING COMMISSION

Proposal for Delivery of an Existing Program to a New Location

1. Program Description

a. Program title, level, and delivery sites.

The BS in Biochemistry and Molecular Biology is currently delivered at only OSU Corvallis. This proposal seeks to extend the program to OSU Cascades.

b. Department and school/college that would offer the program. Include the name of the institution program coordinator.

The program is offered by the Department of Biochemistry and Biophysics in the College of Science at Oregon State University – Corvallis and Cascades campuses. The program coordinator is Kristina Smith.

c. Briefly describe the academic program. List all course titles, including number of credits.

The Biochemistry and Molecular Biology undergraduate degree has options in advanced molecular biology, computational molecular biology, and pre-medicine. The BS degree in Biochemistry and Molecular Biology will prepare students for careers in health fields, education, and the biotechnology industry utilizing the breadth and depth of knowledge gained in the BS in Biochemistry and Molecular Biology. The Biochemistry and Molecular Biology major is outstanding preparation for graduate studies in many fields as it develops analytical skills that are highly coveted by both academics and employers.

Biochemistry and Molecular Biology Core Curriculum - 96 credits

BB 111, Introduction to Biochemistry and Biophysics Research – 1 credit
BB 314, Cell and Molecular Biology – 4 credits
BB 315, Molecular Biology Laboratory – 3 credits
BB 317, Scientific Theory and Practice – 3 credits
BB 481, Macromolecular Structure – 3 credits
BB 486, Advanced Molecular Genetics – 3 credits
BB 490, Biochemistry 1: Structure and Function – 3 credits
BB 491, Biochemistry 2: Metabolism – 3 credits
BB 492, Biochemistry 3: Genetic Biochemistry – 3 credits
BB 494, Biochemistry Laboratory Molecular Techniques – 3 credits
BB 498, ASBMB Certification Exam – 0 credits
BI 221, Principles of Biology: Cells – 4 credits
BI 222, Principles of Biology: Organisms – 4 credits
BI 223, Principles of Biology: Populations – 4 credits
CH 231, General Chemistry – 4 credits
CH 261, Laboratory for CH 231 – 1 credit
CH 232, General Chemistry – 4 credits

CH 262, Laboratory for CH 232 – 1 credit
CH 233, General Chemistry – 4 credits
CH 263, Laboratory for CH 233 – 1 credit
CH 334, Organic Chemistry – 3 credits
CH 335, Organic Chemistry – 3 credits
CH 336, Organic Chemistry – 3 credits
CH 337, Organic Chemistry Laboratory – 4 credits
or
CH 324, Quantitative Analysis – 4 credits
MTH 251, Differential Calculus – 4 credits
MTH 252, Integral Calculus – 4 credits
PH 201, General Physics – 5 credits
PH 202, General Physics – 5 credits
PH 203, General Physics – 5 credits
ST 351, Introduction to Statistical Methods – 4 credits
Total 96 credits

Required Option – 21-22 credits
Complete one of three options in Advanced Molecular Biology, Computational Molecular Biology or Pre-Medicine/Biochemistry and Molecular Biology – **21-22 credits**

Baccalaureate Core and General Electives – 62-63 credits

Total Credits: 180

d. Indicate in what ways the proposed program at the new location(s) will differ from the on-campus program.

The proposed program at OSU-Cascades will not differ from the program at OSU-Corvallis.

e. **List any special requirements or prerequisites for admission to the** program at the new location(s).

None

f. **Is there an accrediting agency or professional society that has established standards for this program? If so, is the program currently accredited? If accredited, what steps would be needed to accredit the program at the proposed new location(s)?**

N/A

g. Provide evidence of consultation with other public universities regarding non-duplication of similar programs offered in the same region, or ones that will cause undue hardship to another public university.

An Early Alert notification was on the May 21, 2021, agenda for the Statewide Provost's Council. As a result of that process, we are not aware of any undue hardship to another public university.

2. Demand

a. List any similar programs offered at the proposed or nearby location(s).

Other public institutions in Oregon offer degrees in related subject areas with varying program titles but, to our knowledge, none that are identical to this program.

b. Provide evidence of need for the program at the new location(s).

The central Oregon region has one of the fastest population growth rates in the country. The extension of the BS in Biochemistry and Molecular Biology to OSU-Cascades will meet the increasing educational demands of the region. Freshman who attend public universities typically do so within 50 miles of home. The creation of the BS in Biochemistry and Molecular Biology degree at Cascades will expand accessibility to higher education and serve a greater number of first-generation students, under-served students, and adults seeking career advancement. These students are most often place-bound and seek higher education closer to their current residence and employment.

c. Estimate enrollment and number of graduates over the next five years. Will any enrollment limitation be imposed? If so, how will those to be enrolled be selected?

Anticipate Enrollment

1st Year	2nd Year	3rd Year	3rd Year	4th Year	5th Year
15	20	25	30	40	100

There is no enrollment limitation proposed. The estimate of enrollment was completed using data from trends in completions from Hanover Research. The estimate of the first five years of enrollment was also based on historical growth trends for new programs at OSU-Cascades.

Anticipated Graduation

1st Year	2nd Year	3rd Year	3rd Year	4th Year	5th Year
2	12	10	20	22	55

3. Personnel

a. List qualifications of faculty (regular and/or adjunct) who will be involved in delivering the program to the proposed location(s).

Current faculty at OSU Cascades are vetted for their credentials by the OSU Corvallis faculty. Faculty are required to hold a minimum of a master's degree with a PhD preferred.

Many courses related to the Biochemistry and Molecular Biology major (both in the major and electives) are already offered on the OSU-Cascades campus, in

addition to all courses needed to complete the Baccalaureate Core and the Liberal Arts Core. All current instructors and professors were vetted by their respective Corvallis home departments upon hiring. In FY 23 (the first year of the program, or zero year), the intention is to hire a part-time instructor to deliver electives in the major and to act as the initial program coordinator. Instructors at OSU-Cascades hold a minimum of a master's degree in their field (PhD preferred) and provide evidence of teaching experience and success. The program coordinator work will support coordination with the Corvallis campus on assessment plans, the recruitment of students, and the coordination with advising staff. In FY 23, a search will be conducted for a tenure track professor who will take on the role as the OSU-Cascades program coordinator, teach 5-6 courses in the program, and assist the Dean of Academic Affairs and the program coordinator in Corvallis in rolling out additional courses and recruiting additional part-time faculty. The full complement of courses needed for a student to complete this major can be fulfilled with a full-time instructor or tenure track professor with a limited number of courses taught by part-time faculty.

b. Estimate the number and type of support staff needed to provide the program at the new location(s).

.5 FTE academic advisor
No other support staff needed

4. Other Resources

a. Describe facilities (e.g., buildings, labs, equipment) necessary to offer the program at the new location(s).

Library, space, and facilities have been deemed to be adequate by the appropriate OSU library staff and OSU Space Management.

b. Indicate how library needs will be met.

The OSU-Cascades library is staffed by a library technician under the guidance of the OSU-Cascades Assistant Dean and OSU-Cascades Library Program Lead. The OSU-Cascades library is an extension of the OSU-Corvallis Valley Library and operates in close collaboration. Library services at OSU-Cascades are specifically tailored to the needs to the OSU-Cascades campus faculty and students. Students have access to all the physical collections and digital resources curated by the Valley and Guin Libraries, as well as the Summit, Interlibrary loan programs managed by the OSU-Corvallis Valley Library. The Biochemistry and Molecular Biology program is well-established at OSU-Corvallis and the resources available to OSU-Cascades students are adequate to support the program at that location.

c. Indicate how students at the new location(s) will receive student services (e.g., academic advising, financial aid assistance, course registration, access to book/text purchases).

Students in the Biochemistry and Molecular Biology major at OSU-Cascades have access to existing services such as: academic advising, financial aid, course registration, textbook purchases, career development, veteran's support

services, experiential learning access, tutoring and student support services, disability services, and mental and health counseling. Where appropriate, OSU-Cascades students have access to the on-line services provided by the OSU Corvallis campus such as the Writing Center and technology support services.

5. Alternative Delivery Methods/Formats

a. Are alternative delivery methods being used (e.g., distance learning or technology-enhanced)? Please describe.

N/A

b. Will this program be delivered in an alternative format (e.g., weekend, evening, on-site)? Please describe.

This program will not be delivered in an alternative format.

6. 40-Mile Radius Rule

"Significant change" to a university's academic program includes, but is not limited to, any new undergraduate or graduate degree program, or any existing undergraduate or graduate degree program that will be offered more than 40 miles from the site at which it is currently offered. "Significant change" to a university's academic program does not mean a new undergraduate or graduate certificate program, new minor, or a new name for an existing degree program.
Source: Oregon Administrative Rules (OAR) 715-013-0020(1)

Revised May 2016

Oregon State University

HECC Docket Submission

Oregon State University seeks the Oregon Higher Education Coordinating Commission approval to offer an instructional program leading to a Bachelor of Science in Biochemistry and Molecular Biology.

Program Description and Justification

1. Identify the institution, degree, and title of the program.

   Oregon State University is proposing to offer a Bachelor of Science degree program in Biochemistry and Biophysics beginning Winter 2023. The program will be located in the College of Science, Department of Biochemistry and Biophysics. The proposed program will be delivered face-to-face at OSU Cascades.

2. Describe the purpose and relationship of the proposed program to the institution's mission and strategic plan.

   The BS in Biochemistry and Molecular Biology at Cascades directly addresses OSU's Strategic Plan 4.0 to "provide a transformative education that is accessible to all learners." The extension of the Biochemistry and Molecular Biology BS degree to the Cascades campus will serve the diverse needs of students in the central Oregon area. The Biochemistry and Molecular Biology program at OSU-Cascades will actively work to produce graduates who will contribute as educated citizens and will support the workforce needs of the region and the state. The addition of the Biochemistry and Molecular Biology BS program at OSU-Cascades will produce a high quality, comprehensive academic program to develop and expand the next generation of scholars.

3. What evidence of need does the institution have for the program?

   The central Oregon region has one of the fastest population growth rates in the country. The extension of the BS in Biochemistry and Molecular Biology to OSU-Cascades will meet the increasing educational demands of the region. Freshman who attend public universities do so within 50 miles of home. The creation of the BS in Biochemistry and Molecular Biology degree at Cascades will expand access to higher education and serve a greater number of first-generation students, under-served students, and adults seeking career advancement. These students are most often place-bound and seek higher education closer to their current residence and employment.

4. Are there similar programs in the state? If so, how does the proposed program supplement, complement, or collaborate with those programs?

All appropriate University committees and the Statewide Provosts Council have approved the proposed program. The Oregon State University Board of Trustees approved the program on May 28, 2022.

Recommendation to the Commission

The Statewide Provosts Council recommends that the Oregon Higher Education Coordinating Commission authorize Oregon State University to establish an instructional program leading to a Bachelor of Science in Biochemistry and Molecular Biology effective Winter 2023.

Revised May 2016

Institution: Oregon State University
Program: BS in Biochemistry & Molecular Biology, Extension of Location

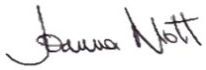
Action: At the **August 4, 2022** meeting, the Statewide Provosts Council approved a new program for **Oregon State University, BS in Biochemistry & Molecular Biology, Extension of Location** to move forward to the Oregon Higher Education Coordinating Commission for its review and approval. The **Oregon State University** Board of Trustees approved the **BS in Biochemistry & Molecular Biology, Extension of Location** program at its **May 26, 2022** meeting.

Eastern Oregon University
Dr. Matt Seimears, Interim Provost
X Approved
__Opposed
__Abstained

Oregon Health & Science University
Marie Chisholm-Burns, Provost
X Approved
__Opposed
__Abstained

Oregon State University
Ed Feser, Provost
X Approved
__Opposed
__Abstained

Oregon Tech
Joanna Mott, Provost
X Approved
__Opposed
__Abstained



Portland State University
Susan Jeffords, Provost
X Approved
__Opposed
__Abstained

Southern Oregon University
Susan Walsh, Provost
X Approved
__Opposed
__Abstained

University of Oregon
Patrick Phillips, Provost
X Approved
__Opposed
__Abstained

Western Oregon University
Rob Winningham, Provost
X Approved
__Opposed
__Abstained