

Department of Chemistry

Chemistry Major *Medicinal Chemistry and Pharmacology Concentration (121-124)*

All students completing this degree program will earn a Bachelor of Science (BS) degree in Chemistry. This degree concentration provides students with ***pre-professional training in the health sciences*** and is ideal for students that want to attend medical school, pharmacy school or other professional health programs. It is also ideal for students pursuing graduate school related to medical and disease research. Students pursuing this degree are required to maintain a C average in their major coursework. Chemistry majors must complete the chemistry core courses and the medicinal chemistry and pharmacology concentration.

Chemistry Core Courses (57):

CH 221 General Chemistry Credits: 5
CH 222 General Chemistry Credits: 5
CH 223 General Chemistry Credits: 5
CH 312 Quantitative Analysis Credits: 4
CH 313 Instrumental Analysis Credits: 4
CH 334 Organic Chemistry Credits: 3
CH 335 Organic Chemistry Credits: 3
CH 336 Organic Chemistry Credits: 3
CH 337 Organic Chemistry Lab I Credits: 1

CH 338 Organic Chemistry Lab II Credits: 2
CH 350 Chemical Literature Credits: 1
CH 365 Materials Chemistry: 3
CH 407 Seminar Credits: 1
CH 450 Biochemistry Credits: 3
CH 461 Experimental Chemistry Credits: 3
CH 462 Experimental Chemistry Credits: 3
MTH 251 Calculus I Credits: 4
MTH 252 Calculus II Credits: 4



Western Oregon
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TOGETHER WE
SUCCEED

Medicinal Chemistry and Pharmacology Concentration (64 - 67)

BI 211 Principles of Biology Credits: 4
BI 212 Principles of Biology Credits: 4
BI 213 Principles of Biology Credits: 4
BI 314 Introduction to Genetics Credits: 4
BI 315 Cell Biology Credits: 4
BI 331 Microbiology Credits: 4
CH247 Foundations of Integrative Medicine
Credits: 4
CH 322 Medicinal Chemistry and
Pharmacology Credits: 4
CH 340 Elementary Physical Chemistry
Credits: 4
CH 451 Biochemistry II Credits: 3
MTH 243 Introduction to Probability and
Statistics Credits: 4

Choose 1 Series Credits: 12

PH 201 General Physics Credits: 4
and PH 202 General Physics Credits: 4
and PH 203 General Physics Credits: 4
Or
PH 211 General Physics with Calculus
Credits: 4
and PH 212 General Physics with Calculus
Credits: 4
and PH 213 General Physics with Calculus
Credits: 4

Electives Credits: 9-12*

BI 334 Advanced Human Anatomy and
Physiology Credits: 4
BI 335 Advanced Human Anatomy and
Physiology Credits: 4
BI 336 Human Histology and Physiology
Credits: 4
BI 432 Immunology Credits: 4
BI 437 Neurobiology Credits: 4
BI 426 Developmental/Molecular
Biology Credits: 4
CH 345 Introduction to Toxicology
Credits: 3
CH 370 Special Topics (1-3 Credits)
CH 401 Research (1 – 3 Credits)
CH 409 Practicum (1 – 3 Credits)

**Pre-pharmacy students should take
BI334, BI335, and BI336 as their
elective series*

CONTACTS:

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