Choosing Organic Courses

The Department of Chemistry offers several organic chemistry pathways. Choosing the right one is a matter of meeting the prerequisites, satisfying your major requirements, and leaving your options open for professional programs and/or graduate school.

Which Organic Chemistry Sequence Should You Take?

The requirements for organic chemistry for your major can be found in the chart below, in the UW course catalog, or on the UW degree programs website. If your major is followed by an asterisk*, the minimum requirements are not the ones specifically recommended for that major. In all cases, when planning to graduate with a degree, check with a departmental advisor before registering to make sure you are on the right track!

<table>
<thead>
<tr>
<th>Organic Chemistry Course/Sequence</th>
<th>Meets Minimum Requirement for these Majors/Programs</th>
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<tbody>
<tr>
<td>CHEM 220, 221</td>
<td>Some Biology programs and the UW Nursing BSN program.</td>
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<tr>
<td>CHEM 223, 224</td>
<td>Some Biology and Biology related programs</td>
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<tr>
<td>CHEM 223, 224, Labs 241, 242</td>
<td>pre-med/dent students sometimes take this sequence-- followed by BIOC 405 and 406, but check with the particular medical or dental school for recommendations</td>
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<tr>
<td>CHEM 237, 238, 239, Labs 241, 242</td>
<td>Biochemistry, Chemistry (all degrees); pre-pharmacy program; pre-med/dent students often take this sequence</td>
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<tr>
<td>CHEM 335, 336, 337, Labs 345, 346</td>
<td>Honors sequence not required of any major, but recommended for qualified students</td>
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Supplemental Organic Chemistry Course comments

**CHEM 220, 221: Principles of Chemistry II & III**

These courses usually follow CHEM 120 (Principles of Chemistry I) but can be taken after CHEM 142 (General Chemistry) or CHEM 145 (Honors General Chemistry). They are a two-quarter survey of organic chemistry and biochemistry. Both courses include a laboratory. This pathway is not intended for most science majors. Prerequisites include a 1.7 in either CHEM 120, 142, or 145. Offered: CHEM 220 (winter); CHEM 221 (spring).

**CHEM 223, 224: Organic Chemistry Short Program**

A two-quarter, lecture-only series in organic chemistry, covering many of the topics from the full year, three-quarter sequence in a less comprehensive way (see below for labs). Prerequisites: a 1.7 in CHEM 152 or 155. Offered: CHEM 223 (summer, A-term); CHEM 224 (summer, B-term).

**CHEM 237, 238, 239: Organic Chemistry Lecture**

The standard three-quarter sequence of organic chemistry lecture sequence (see below for accompanying labs). Prerequisites: a 1.7 in CHEM 162 or 155 for CHEM 237; a 1.7 in CHEM 237 or 335 for CHEM 238; a 1.7 in CHEM 238 or 336 for CHEM 239. Offered: CHEM
CHEM 241, 242: Organic Chemistry Laboratory

The standard two-quarter organic laboratory course sequence. CHEM 241 is designed to accompany CHEM 238 and CHEM 242 to accompany CHEM 239. However, CHEM 241 can be taken with CHEM 224 or 336. The CHEM 241 laboratory course is an introduction to the techniques used in organic laboratories, including distillation, crystallization, extraction, and chromatography. In CHEM 242, these techniques are combined with modern spectroscopy and applied to synthesis of unknown identification. CHEM 241 and 242 each have a weekly one hour pre-lab lecture and two weekly three hour lab sessions. CHEM 241: Prerequisite: minimum 1.7 grade in CHEM 237; 1.7 grade in either CHEM 224, 238, or 336, any of which may be taken concurrently. Offered: AWSpS. CHEM 242: Prerequisite: minimum 1.7 in CHEM 224 or in either CHEM 239 or 337, any of which may be taken concurrently), and a 1.7 in 241 or 346. Offered: AWSpS.

CHEM 335, 336, 337, 346, 347: Honors Organic Chemistry Lecture and Laboratory

The full year, three-quarter honors course sequence with three lecturer courses (CHEM 335, 336, 337) and two laboratory courses (CHEM 346, 347). The honors organic sequence is recommended for strong students who want to be further challenged by their chemistry courses. Laboratory courses are designed to accompany CHEM 336 and 337. Prerequisites for CHEM 335 include a 3.3 average in the regular general chemistry sequence (CHEM 142, 152, 162) or a 3.0 average in the honors general chemistry sequence (CHEM 145, 155, 165). The lecture sequence (CHEM 335, 336, 337) must be started in the autumn; the laboratory course sequence (CHEM 346, 347) begins in the winter. Please contact the Chemistry Undergraduate Advisors for registration information.

Summer Quarter Organic Chemistry Options

Many students inquire about taking a condensed organic chemistry sequence that can be completed during summer quarter. Our short organic course sequence (CHEM 223 and 224) is the only sequence can be completed in one summer session (CHEM 223 during A-term and CHEM 224 during B-term). There is great demand for this course sequence so students are advised to register early. We also refer students who are interested in taking the full year-long lecture and laboratory course equivalent of CHEM 237, 238, 239, 241, 242 to Bellevue Community College, which offers a summer intensive program covering these courses.

Source URL: https://chem.washington.edu/choosing-organic-courses