

Chemistry Placement Guide 2022

To register for Chemistry 1091 and above, students must take the Chemistry Placement Exam to receive their placement in chemistry.

If students are missing a Placement in chemistry, they need to:

- (1) Take the Chemistry Placement Exam
- (2) Notify Prof. Michael Danahy (mdanahy@bowdoin.edu) when they have completed the exam.

Summary of Placements in Chemistry

Placement	Permits registration in:
CHEM 1091	CHEM 1091 only
CHEM 1101	CHEM 1101 only
*CHEM 1109/1101	CHEM 1109 or CHEM 1101
CHEM 1109	CHEM 1109 only
*CHEM 2000-level/ CHEM 1109	CHEM at the 2000-level or CHEM 1109
CHEM 2000-level	CHEM at the 2000-level or CHEM 1109

*The **CHEM 2000-level/1109 or CHEM 1109/1101 placement** indicates that a student is on the border between two entry points to the chemistry curriculum. Students should consult with course instructors, or faculty at the Academic Fair to ensure a proper entry to the curriculum but are permitted to enroll in either course.

Entry Points (highlighted in grey) to the Chemistry Curriculum:

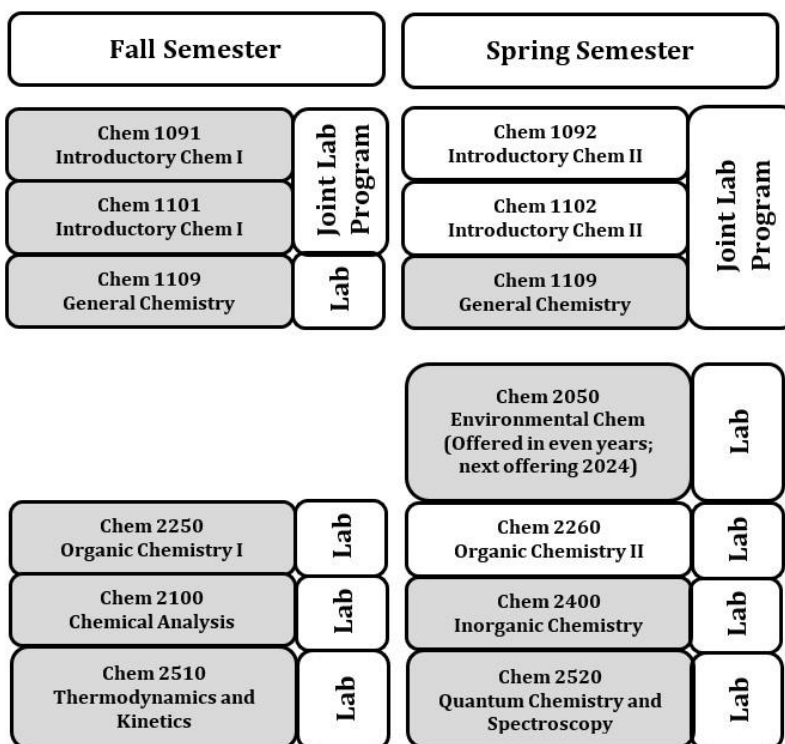


Figure 1. Summary of entry points (highlighted in grey) for matriculating students.

Course Summaries

CHEM 1091 (Introductory Chemistry and Quantitative Reasoning I) is offered as an invitation-only fall-semester course and is intended for students with limited background in chemistry who would benefit from additional time devoted to improving quantitative skills. CHEM 1091 leads to CHEM 1092 in the spring. CHEM 1091 meets for three one-hour lecture sections per week, one three-hour laboratory per week, and one 1.5-hour problem solving/quantitative skills building session per week. All sessions are mandatory. One session of CHEM 1101 meets as the same time as CHEM 1091, allowing a student (after consultation with the department) to transfer (in the first two weeks of the semester) from CHEM 1091 to CHEM 1101 if that is deemed appropriate. *Contact Prof. Danahy with questions about CHEM 1091.*

CHEM 1101 (Introductory Chemistry I) is only offered as a fall-semester course and is intended for students with limited to adequate backgrounds in chemistry. CHEM 1101 leads to CHEM 1102 in the spring. CHEM 1101 meets for a total of three lecture-hours per week, and one three-hour laboratory per week. All sessions are mandatory. Faculty may also elect to hold non-mandatory study/review sessions each week. *Contact Prof. Lutz or Prof. Ortoll-Bloch with questions about CHEM 1101.*

CHEM 1109 (General Chemistry) is a one-semester course, taught during both the fall and spring semesters, intended for students with solid high school chemistry preparation. CHEM 1109 meets for a total of three lecture-hours per week and one four-hour laboratory per week. All sessions are mandatory. Faculty may also elect to hold non-mandatory study/review sessions each week. *Contact Prof. Dube with questions about CHEM 1109.*

Chemistry 2000-level courses. This recommendation is targeted at students with outstanding high-school chemistry preparation. Depending on the Chemistry placement exam results, students with scores of 4 or 5 on the Chemistry AP exam (or comparable IB scores), and others with advanced backgrounds in chemistry, may bypass CHEM 1109 for an appropriate 2000-level chemistry course. These course options are CHEM 2250 (Organic Chemistry I) and CHEM 2100 (Chemical Analysis) in the fall semester, CHEM 2400 (Inorganic Chemistry; offered every spring) and Environmental Chemistry (CHEM 2050; offered in alternate even years in the spring – next offering in 2018). While CHEM 2510 (spring) and 2520 (fall) are also entry points, student must also meet prerequisites in Math and Physics to enroll in these courses. *Students are encouraged to contact Profs. Broene, Danahy, or Gorske about CHEM 2250. Students interested in CHEM 2100 are strongly encouraged to contact Prof. Stemmler before enrolling. Students can contact Prof. Ortoll-Bloch to discuss CHEM 2400, Prof. Takematsu to discuss CHEM 2510 or CHEM 2520.*

Students who start and complete a 2000-level chemistry course are not permitted to register concurrently or in a future semester in an introductory (1091/1092 or 1101/1102) or general chemistry (1109) chemistry course.

Students should consult with a chemistry faculty member at the Academic Fair or at some other time during Orientation regarding enrollment in an appropriate advanced level course. In the past, students who enrolled in CHEM 1109—as opposed to starting with the recommended 2000 level course—found this course to be a repetition of their previous course work and not challenging. Conversely, students who were recommended for, and chose to enroll in, 2000-level Chemistry courses during their first year were typically very successful in those courses. The most common 2000-level course for first year students is CHEM 2250.