

Some advice for chemistry majors who wish to study away

The Chemistry Department values Macalester's emphasis on internationalism and encourages its majors to consider studying away for a semester. The chemistry faculty are happy to talk with you about various programs and options. You should begin planning well in advance so that you can best integrate your academic experience away with your continuing development as a chemist back at Macalester. Here are some suggestions to help guide your thinking.

Advice for those planning to study away in the fall semester of their junior year

The only course required for the chemistry major that you will miss is CHEM 311: Thermodynamics and Kinetics. Since CHEM 311 is not a prerequisite for any other required course in the chemistry major, we recommend that, if possible, majors study away in the fall semester. This allows for the maximum flexibility if any last minute changes arise. Three options are possible:

- **Option 1:** Take a suitable chemistry course that covers thermodynamics (and kinetics if possible) at the university where you are studying away. If you would like to explore this option, talk with Prof. Varberg or Prof. Green as you begin preparing your study away application to Macalester. The Chemistry Department needs to certify *in advance* a course taken away to meet the requirements for CHEM 311. If you are able to take a suitable lecture course in thermodynamics and kinetics while studying away, but not a suitable accompanying lab, you will need to take the CHEM 311 lab as a one-credit independent study (CHEM 611) in the fall of your senior year.
- **Option 2:** Delay taking CHEM 311 until the fall of your senior year.
- **Option 3:** Take a suitable chemistry course that covers inorganic chemistry at the university where you are studying away. (An advantage of this option is that you will not need to take both CHEM 311 and 411 simultaneously in the fall of your senior year.) If you would like to explore this option, talk with Prof. Green or the inorganic chemistry instructor as you begin preparing your study away application to Macalester. The Chemistry Department needs to certify *in advance* a course taken away to meet the requirements for CHEM 411. If you are able to take a suitable lecture course in inorganic chemistry while studying away, but not a suitable accompanying lab, you will need to take the CHEM 411 lab as a one-credit independent study (CHEM 611) in the fall of your senior year.

If you are also completing the biochemistry emphasis, we recommend that you take BIOL/CHEM 351: Biochemistry I in the spring semester of your junior year. This will let you avoid taking CHEM 311, BIOL/CHEM 351, and CHEM 411 simultaneously in the fall of your senior year.

Advice for those planning to study away in the spring semester of their junior year

The only course required for the chemistry major that you will miss is CHEM 312: Quantum Chemistry and Spectroscopy. CHEM 312 is also a prerequisite for CHEM 411: Advanced Inorganic Chemistry. Three options are possible:

- **Option 1:** Take a suitable chemistry course that covers quantum chemistry at the university where you are studying away. If you would like to explore this option, talk with Prof. Varberg or Prof. Green as you begin preparing your study away application to Macalester. The Chemistry Department needs to certify *in advance* a course taken away to meet the requirements for CHEM 312. If you are able to take a suitable lecture course in quantum chemistry while studying away, but not a suitable accompanying lab, you will need to take the CHEM 312 lab as a one-credit independent study (CHEM 611) in the spring of your senior year.

- **Option 2:** Take a suitable chemistry course that covers inorganic chemistry at the university where you are studying away. If you would like to explore this option, talk with Prof. Green or the inorganic chemistry instructor as you begin preparing your study away application to Macalester. The Chemistry Department needs to certify *in advance* a course taken away to meet the requirements for CHEM 411. If you are able to take a suitable lecture course in inorganic chemistry while studying away, but not a suitable accompanying lab, you will need to take the CHEM 411 lab as a one-credit independent study (CHEM 611) in the fall of your senior year.

Option 3: Take CHEM 411 in the fall of your senior year without having met the CHEM 312 prerequisite. You should talk with the inorganic chemistry instructor before making this decision, as this faculty member will need to give you permission to take CHEM 411 without the CHEM 312 prerequisite.

If you are also completing the biochemistry emphasis, we recommend that you take CHEM 222: Analytical Chemistry in the spring semester of your sophomore year. This will let you avoid taking BIOL/CHEM 352: Biochemistry II, CHEM 222, and CHEM 312 simultaneously in the spring of your senior year.

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