Sample Schedules for Biochemistry Majors Participating in a Non-science Study Abroad Program

Below are modified 4-year schedules of science classes for biochemistry majors wishing to go abroad to a non-science location. Deviations from the typical course schedule are given in blue. This schedule is based on the assumption that the student has followed the typical course schedule through their first three semesters at Notre Dame.

**Abroad Fall Semester Junior Year**

**Freshman Year**

**Fall**
- CHEM 10181/11181: Intro to Chemical Principles (with lab)
- BIOS 10171/11173: Biology I: Big Questions (with lab)
- MATH 10550: Calculus I

**Spring**
- CHEM 10182/11182: Organic Structure and Mechanism (with lab)
- BIOS 10172/11174: Biology II: Molecules to Ecosystems (**lab optional**)
- MATH 10560: Calculus II

(Although optional for the biochemistry major, students on a pre-professional track should take the BIOS11174 lab.)

**Sophomore Year**

**Fall**
- CHEM 20283/21283: Organic Reactions and Applications (with lab)
- CHEM 23201: Chemistry Seminar
- CHEM 23212: Biochemistry Seminar
- PHYS 20210/21210: Physics I for Life Sciences (with lab)

**Spring**
- CHEM 20284/21284: Chemistry Across the Periodic Table (with lab)
- PHYS 20220/21220: Physics II for Life Sciences (with lab)
- BIOS 20303/21303: Fundamentals of Genetics (optional lab*)

(*lab can be postponed until spring Sr. year if you want; avoids 3 labs in one semester. Lab requirement can also be fulfilled with the cell biology lab or undergraduate research.)

**Junior Year**

**Fall**

Semester Abroad-No Science Classes

**Spring**
- CHEM 20262: Mathematical Methods
- BIOS 30341/31341: Cell Biology (optional lab*)
- CHEM 30333/31333§: Analytical Chemistry (with lab)

**Senior Year**

**Fall**
- CHEM 50531: Molecular Biology I
- CHEM 30341/31341: Fundamentals of Biochemistry (with lab)

**Spring**
- CHEM 30342: Intermediary Metabolism (no lab)
- CHEM 30338: Physical Biochemistry (no lab)

Plus two additional chemistry seminars. Can be taken at any time.

§Analytical chemistry is offered both fall and spring semesters, allowing for flexibility in when you choose to take this course. It can be taken as early as spring semester sophomore year.
**Abroad Spring Semester Junior Year**

**Freshman Year**

**Fall**
- CHEM 10181/11181: Intro to Chemical Principles (with lab)
- BIOS 10171/11173: Biology I: Big Questions (with lab)
- MATH 10550: Calculus I

**Spring**
- CHEM 10182/11182: Organic Structure and Mechanism (with lab)
- BIOS 10172/11174: Biology II: Molecules to Ecosystems (*lab optional*)
- MATH 10560: Calculus II

*(Although optional for the biochemistry major, students on a pre-professional track should take the BIOS11174 lab.)*

**Sophomore Year**

**Fall**
- CHEM 20283/21283: Organic Reactions and Applications (with lab)
- CHEM 23201: Chemistry Seminar
- CHEM 23212: Biochemistry Seminar
- PHYS 20210/21210: Physics I for Life Sciences (with lab)

**Spring**
- CHEM 20284/21284: Chemistry Across the Periodic Table (with lab)
- CHEM 20262: Mathematical Methods
- PHYS 20220/21220: Physics II for Life Sciences (with lab)

**Junior Year**

**Fall**
- CHEM 30341/31341: Fundamentals of Biochemistry (with lab)
- BIOS 30341/31341: Cell Biology (optional lab*)

**Spring**
- Semester Abroad-No Science Classes

**Senior Year**

**Fall**
- CHEM 50531: Molecular Biology I
- CHEM 30333/31333*: Analytical Chemistry (with lab)

**Spring**
- CHEM 30342: Intermediary Metabolism (no lab)
- CHEM 30338: Physical Biochemistry (no lab)
- BIOS 20303/21303: Fundamentals of Genetics (optional lab*)

*Plus two additional chemistry seminars. Can be taken at any time.*

*-Analytical chemistry is offered both fall and spring semesters, allowing for flexibility in when you choose to take this course. It can be taken as early as spring semester sophomore year.*

*The advanced lab requirement can be fulfilled with cell biology lab, genetics lab or 2 credits of UG research.*