

## Course Planning Specifics: Biology and Biotechnology

The introductory sequence for Biology & Biotechnology majors includes Introduction to Biotechnology (BB 1035, C term), Biodiversity (BB 1045, C term), and Human Biology (BB 1025, D term). For those students who completed BB 1035, BB 2040 and/or BB 2950 in A/B terms, you may be interested in Cell Biology (BB 2550) or Genetics (BB 2920) in C term and in Cell biology (BB 2550), Fundamentals of Microbiology (BB 2003) or Plant Diversity (BB 2030) which are all taught in D term. Particularly for those who took Human Biology in B term, there is a laboratory course in Anatomy and Physiology (BB 2903) in C term. Again particularly for those planning to take BB 1045 in C term or who took BB 2040 in B term, there is a laboratory course in Ecology, Environment, and Animal Behavior in D term.

In addition to these, during the first year, BB majors should make progress on completing the chemistry and mathematics requirements. [Click here](#) to see the degree requirements for Biology and Biotechnology majors.

BB majors and all students planning careers in the health professions should complete the introductory chemistry sequence through CH 1030: Chemical Properties, Bonding and Forces (CH 1010), Chemical Reactions (CH 1020) and Kinetics, Equilibrium and Thermodynamics (CH 1030).

Mathematics for biology majors generally include Calculus I (MA 1021) and II (MA 1022) both of which fulfill requirements in health professions programs. After completing or receiving credit for Calculus I and II, students may elect to take statistics, an area of mathematics essential to biological data analysis. Statistics courses include Applied Statistics for the Life Sciences (MA 2610) which is offered in B Term and Applied Statistics I and II (MA 2611 and 2612). If you received AP credit for courses early in the CH or MA sequence, you can start at the next course in the sequence.

A well-balanced schedule should also include courses in the Humanities and Arts and Social Science and Policy Studies. Students planning careers in the health professions may choose to take courses in the social sciences to include PSY 1400, Introduction to Psychological Science (C or D term) and SOC 1202 Introduction to Sociology and Cultural Diversity (C term).

Biology & Biotechnology majors may also be interested in the Great Problems Seminars. Topics of particular interest may include the seminars related to global health and nutrition.

### Example of a typical course schedule

<u>C term</u>	<u>D term</u>
BB1035, BB 1045, BB 2550, or 2920	BB 1025, 2550, 2003 or 2030
BB lab 2903 (1/6 unit)	BB lab 2904 (1/6 Unit)
CH1010 or CH 1030	CH1020 or Math
GPS/HUA/MA/SS	GPS/HUA/SS
PE (optional)	PE (optional)

# Course Planning Worksheet: Biology and Biotechnology

AP/IB/Transfer Credit: \_\_\_\_\_

## Abbreviation Key for Course Planning Tracker:

- **GPS** = Great Problems Seminar
- **HU**= Humanities Course (includes AB, AR, CN, EN, GN, HI, HU, INTL, ISE, MU, PY, RE, SP, TH, WR)
- **SS** = Social Science Course (includes ECON, ENV, GOV, PSY, SD, SOC, SS)
- **BB** = Biology Course
- **PH**= Physics Course
- **CH**= Chemistry Course

Any courses marked with an asterisk (\*) are optional programs, and can be taken in addition to the three courses.

**Please Note:** The Great Problems Seminars are a two term sequence course. They are also **linked**. This means that when registering for a GPS course in C term, you must register for its second half in D term.

<u>A Term Selections</u>		<u>B Term Selections</u>	
	<u>(Include CRN)</u>		<u>(Include CRN)</u>
BB		BB	
CH		CH	
GPS, HU, MA		GPS, HU, MA	
*Physical Education (1/12 credit unit)		*Physical Education (1/12 credit unit)	
*Military Science (Must be affiliated with an ROTC unit)		*Military Science (Must be affiliated with an ROTC unit)	
Back-ups		Back-ups	