Biology Sc.B. Pre-Planning Worksheet (20 courses)

Part A: 7 Background Courses

Course	Semester	Substitution/ Equivalency
MATH 0090		
STATS/MATH 0100		
CHEM 0330		
CHEM 0350		No substitutions
CHEM 0360		
PHYS 0030/0050		
PHYS 0040/0060		

Part B: 10 Core Courses

Must include: 1 course in each area, 3 labs, 2 1000 level courses, and 2 semesters of research or equivalent.

Course	Semester	Fulfills
BIOL 200		__Lab *OR* __AP/IB Credit __Biology Placement Test
		__Lab __1000 level __Area 1 __Area 2 __ Area 3
		__Lab __1000 level __Area 1 __Area 2 __ Area 3
		__Lab __1000 level __Area 1 __Area 2 __ Area 3
		__Lab __1000 level __Area 1 __Area 2 __ Area 3
		__Lab __1000 level __Area 1 __Area 2 __ Area 3
		__Lab __1000 level __Area 1 __Area 2 __ Area 3
		__Lab __1000 level __Area 1 __Area 2 __ Area 3
		__Lab __1000 level __Area 1 __Area 2 __ Area 3
		__Lab __1000 level __Area 1 __Area 2 __ Area 3

Research 1 satisfied via: ____Bio 1950/1960 _____UTRA/Summer
Research 2 satisfied via: ____Bio 1950/1960 _____UTRA/Summer

Part C: 3 Courses Track Title: _____

Track course 1	
Track course 2	
Track course 3	

Biology Sc.B. Worksheet Instructions

Part A: Background Courses

Course	Approved Substitutions
MATH 0090	AP / IB Placement or MATH 0050 & 0060 combined (successful completion of MATH 0100 confers retroactive placement)
STATS/MATH 0100	Approved STATS course or AP/ IB Placement for MATH 0100
CHEM 0330	IB - HL (Chemistry) score of 6 or 7
CHEM 0350	No substitutions
CHEM 0360	BIOL 0280 may substitute
PHYS 0030/0050	See PHYS department guidelines for AP/ IB credit. ENGN 0040 may substitute
PHYS 0040/0060	ENGN 0510 may substitute

Part B: These are selected from within BIOL/NEUR course offerings. Chosen courses must meet the following 6 requirements:

1. **BIOL 0200:** This requirement may be satisfied by either AB/IB credit OR a passing score on the Biology placement exam. BIOL 0200 confers lab credit. The other options do not.
2. **Three laboratory/fieldwork courses:** Must be BIOL/NEUR or CLPS 1195.
3. **Two BIOL/NEUR courses above the 1000 level**
4. **One course from each of three Areas**
    a. Area 1: BIOL 0280, 0470, 0500, 0510, 0530, 1050, 1310, 1515, 1810, 1820,1865, NEUR 1020
    b. Area 2: BIOL 0410, 0440, 0800, 1120, 1155, 1310, 1330, 1505, 1820,1865,1885, NEUR 0010
    c. Area 3: BIOL 0210, 0380, 0410, 0420, 0430, 0450, 0480, 1515,1880, ENVS 0490, ENVS/EEPS 1300, ENVS 1775
5. Please note: A course may satisfy more than on of these requirements simultaneously. For example, a single course may satisfy a lab and an area requirement if it qualifies for each.
6. **Two semesters of research preferably related to the track.** Options for satisfying the research requirement include:
    - Research for course credit at Brown via BIOL 1950/1960 (or other relevant departmental research courses such as CHEM 0970/0980 & NEUR 1970); each

semester of research can be counted as either ONE lab or ONE 1000+ course towards core.
- Advisor-approved research conducted over summer via UTRA or equivalent at another institution. Each summer research experience will count towards one semester of research.

PLEASE NOTE: Away or summer projects do NOT count towards the Core and must be replaced by additional courses to make up difference.

Part C: Track Courses
Three approved courses from one of the following tracks. Selections should form a cohesive grouping and be approved by the concentration advisor and/or Assistant Dean of Biology, Toni-Marie Achilli. At least 2 (ideally 3) MUST be above the 1000 level.

- BMIN - Biomedical Informatics
- CEMB - Cell and Molecular Biology
- EBIO - Ecology, Evolution and Organismal Biology
- IMMU - Immunobiology
- NBIO - Neurobiology
- PHBI - Physiology and Biotechnology
- PHSC - Physical Sciences

Some courses might be inactive during the current academic year. Please refer to Courses@Brown and BUE Course Offerings for further references.

Links to current course listings:

- Approved Lab Courses
- Area Courses
- Approved Track Courses
- Related Sciences

For additional questions or considerations, please consult with your Concentration Advisor or Associate Dean of Biology Education, Toni-Marie Achilli.