

## WORKSHEET FOR THE MAJOR IN CELL BIOLOGY & NEUROSCIENCE (146)

### DIVISION OF LIFE SCIENCES – SCHOOL OF ARTS AND SCIENCES

STUDENT NAME \_\_\_\_\_ ID NUMBER \_\_\_\_\_

*This worksheet outlines the requirements for majoring in Cell Biology and Neuroscience (CBN) in the default or honors track.*

#### CBN major requirements (nb146 default curriculum, minimum 70 credits)

##### Requirement R1 : General Biology (3 courses = 10 credits)

Course name	Course number	Credits	Semester	Grade
General Biology I	01:119:115	4		
General Biology II	01:119:116	4		
Biological Research Lab	01:119:117	2		

##### Requirement R2 : General Chemistry and Lab (3 courses = 9 credits)

Course name	Course number	Credits	Semester	Grade
General Chemistry <i>Acceptable substitute:</i>	01:160:161	4		
General Chemistry <i>Acceptable substitute:</i>	01:160:162	4		
Intro to Experimentation	01:160:171	1		

##### Requirement R3 : Organic Chemistry and Lab (3 courses, 1 from each set = min 10 credits)

Course name	Course number	Credits	Semester	Grade
Organic Chemistry <i>Acceptable substitute:</i>	01:160:307	4		
Organic Chemistry <i>Acceptable substitute:</i>	01:160:308	4		
Organic Chemistry Lab <i>Acceptable substitute:</i>	01:160:311	2		

##### Requirement R4 : Physics lecture (2 courses, 1 from each set = min 6 credits)

Course name	Course number	Credits	Semester	Grade
Physics for the Sciences I (*also R5) <i>Acceptable substitute:</i>	01:750:193	4		
Physics for the Sciences II (*also R5) <i>Acceptable substitute:</i>	01:750:194	4		

##### Requirement R5 : Physics Lab (2 courses, 1 from each set = min 2 credits)

Course name	Course number	Credits	Semester	Grade
Physics for the Sciences I (*also R4) <i>Acceptable substitute:</i>	01:750:193	1		
Physics for the Sciences II (*also R4) <i>Acceptable substitute:</i>	01:750:194	1		

**NOTE: BOTH R4 and R5 can be satisfied with 2 semesters of Physics for the Sciences (8 credits)**

**Requirement R6 : Calculus/Statistics (2 courses, 1 from each set = min 7 credits)**

Course name	Course number	Credits	Semester	Grade
<b>Calc I for Life/Soc Sci</b> <i>Acceptable substitute:</i>	01:640:135	4		
<b>Basic Statistics for Research</b> <i>Acceptable substitute:</i>	01:960:401	3		

**NOTE: Students who have credits for Statistics I (01:960:211) need to take Statistics II (01:960:212) instead of Basic Stat Res or other Statistics course.**

**Requirement R7 : Genetics (1 course = 4 credits)**

Course name	Course number	Credits	Semester	Grade
Genetics	01:447:380	4		

**Requirement R8 : Fundamentals of Cell & Dev Bio and Neurobiology (2 courses = 6 credits)**

Course name	Course number	Credits	Semester	Grade
Fund Neurobiology	01:146:245	3		
Fund Cell and Dev Bio	01:146:270	3		

**Requirement R9: Biochemistry (1 course = 3 credits)**

Course name	Course number	Credits	Semester	Grade
<b>Intro Biochem &amp; Mol Bio</b> <i>Acceptable substitute:</i>	01:694:301	3		

**Requirement R10 : Advanced courses (3 courses = min 9 credits)**

	Course name	Course number	Credits	Semester	Grade
Choose ANY 3 course combination	<b>Advanced Neuro I (Fall)</b>	01:146:445	3		
	<b>Advanced Neuro II (Spring)</b>	01:146:447	3		
	<b>Advanced Cell Bio I (Fall)</b>	01:146:470	3		
	<b>Advanced Cell Bio II (Spring)</b>	01:146:480	3		
	<b>Advanced Development (Spring)</b>	01:146:472	3		
	<b>Immunology (Fall)</b>	01:146:474	3		
	<b>Honors Immuno (Spring)</b>	01:146:476	3		

**NOTE: Adv Neuro I and II, as well as Adv Cell Bio I and II are NOT sequences and have different content. Immunology and Honors Immunology have similar content and credits will not be given for both these courses.**

**Requirement R11 : Life Science Electives (choose 1 upper level course from the Approved Elective or Elective+Lab list - min 3 credits)**

Course name	Course number	Credits	Semester	Grade

**Requirement R12 (default track): Laboratory courses (choose 1 course from the Approved Lab or Elective+Lab list - min 1 credit)**

Course name	Course number	Credits	Date	Grade

### **CBN Honors Program requirements (nb146 Honors curriculum, minimum 78 credits)**

**Apply at the beginning of the Senior year!** Contact program coordinator (Prof. Hsu) at [hsu@dls.rutgers.edu](mailto:hsu@dls.rutgers.edu) and submit a [CBN Honors Application Form](#).

This program requires a minimum CBN major and cumulative GPA of 3.4.

Previous research experience and credits are required for admission into this program.

The Honors Seminar is a thesis preparation course.

2 consecutive semesters of Honors Research are required, culminating in a written thesis and oral thesis defense due at the end of the senior Spring semester.

#### **Requirement R12 (Honors track): Honors Seminar (1 course = 3 credits)**

Course name	Course number	Credits	Semester	Grade
Honors Seminar (Spring)	01:146:405	3		

#### **Requirement R13 (Honors track): Honors Research (2 courses = 6 credits)**

Course name	Course number	Credits	Semester	Grade
Honors Research (Fall)	01:146:408	3		
Honors Research (Spring)	01:146:409	3		

For more information on the CBN major please visit the Departmental website:

<https://cbn.rutgers.edu/academics/undergraduate/about-the-major>