**Name CCNY email Faculty advisor name: Date:**

**EMPLID (CUNY 8-digit ID):**

 **Faculty advisor signature:**

**BIOLOGY MAJOR REQUIREMENTS (students who declared their Major Spring 2014 or after)**

# REQUIRED CORE COURSES (see next page for more info on allowable Math and Physics sequences)

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***Transferred: TR In progress: IP***

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| **Course number** | Cr | Grade | **Course number** | Cr | Grade |
| Biology 10100 | 4 |  | Chem 10301 | 4 |  |
| Biology 10200 | 4 |  | Chem 10401 | 4 |  |
| Biology 20600 | 4 |  | Chem 26100 | 3 |  |
| Biology 20700 | 4 |  | Math 20500 | 4 |  |
| Biology 22800 | 4 |  | Math 20900 | 4 |  |
| Biology 22900 | 4 |  | Phys 20300 | 4 |  |
|  |  |  | Phys 20400 | 4 |  |

**BIOLOGY ELECTIVES (number of credits for required Biology core courses above + number of Biology elective credits below must equal at least 39)**

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| **Course number****(e.g. Bio 35000)** | **Number of credits** | **Grade** |
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| *The courses below are non-Biology courses that count towards the Biology 39 credit requirement described above.* |
| Chem 45902 or Chem 32002 | 3 |  |
| Phys 42200 or 42300 | 3 |  |
| Sci 28000 | 3 |  |
| Phil 34905 | 3 |  |
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**Research Electives – A max of 6 cr. can be counted as Bio electives (Bio 31000 can be counted multiple times):**

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| Bio 30100 | 3 |  | Bio 30300 | 3 |  |
| Bio 30200 | 3 |  | Bio 3100\_ |  |  |

***This student has fulfilled all requirements for the Major in Biology***

**Head Biology Major
Advisor Signature:**

**Date:**

 **OTHER REQUIREMENTS**

1. For general CCNY and Division of Science (B.S.) requirements, see Undergrad Bulletin or visit Science Advising Center (Dr. Roth's office)

2. A 2.0 GPA in Biology Dept. courses is required to remain in the Major and to graduate.

3. Major Residency Requirement -- 24 of the 39 required Biology Dept. credits must be taken within the CCNY Biology Department.

4. Chem 32002, Phys 422/42300, Sci 28000, and Phil 34905 count towards the 2.0 Major GPA requirement, but do NOT count towards the Major Residency Requirement.

5. All required Biology Core Courses must be passed with a grade of ‘C’ or higher.

6. To enroll in a Biology course, students must pass all Biology course prerequisites with a grade of 'C' or higher.

**COURSE PLAN -- List all courses you've taken at CCNY. Then list all courses you plan to take up through the semester you intend to graduate.**

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| **Summer 20??** |  |

### Requirements for Biology Major (B.S.)

## REQUIRED COURSES

**BIOLOGY**

BIO 10100 Biological Foundations I (4 cr)

BIO 10200 Biological Foundations II (4 cr)

BIO 20600 Introduction to Genetics (4 cr)

BIO 20700 Organismic Biology (4 cr)

BIO 22800 Ecology and Evolution (4 cr)

BIO 22900 Cell and Molecular Biology (4 cr)

**CHEMISTRY**

CHEM 10301 General Chemistry I (4 cr)

CHEM 10401 General Chemistry II (4 cr)

CHEM 26100 Organic Chemistry I (3 cr)

**MATHEMATICS -- *One of the following sequences must be completed***

1) MATH 20500 Elements of Calculus (4 cr)

MATH 20900 Elements of Calculus & Statistics (4 cr)

2) MATH 20100, 20200, 17300

3) MATH 20100, 20900

4) MATH 20100, 20200, 20300

5) MATH 20500; PSYCH 21500 (Psychology Double Majors Only)

**PHYSICS -- *One of the following sequences must be completed***

1) PHYS 20300 General Physics I (4 cr)

PHYS 20400 General Physics II (4 cr)

2) PHYS 20700, 20800

**FREQUENTLY TAUGHT ADVANCED BIOLOGY ELECTIVES** (new Biology electives may not be listed)

**P: Prerequisite C: Corequisite**

BIO 31100-32000 Selected Topics in Biology (3-4 cr)

BIO 34500 Botany (4 cr), *P: Bio 10200, Chem 10301*

BIO 35000 Advanced Microbiology (4 cr), *P: Bio 22900*

BIO 35400 Intro. to Neuro. (3 cr), *P: Bio 207 or 229*

BIO 35500 Analysis of Sci. Lit. (4 cr), *P: 206 or 229*

BIO 37500 Developmental Biology (3 cr), *P: 22900*

BIO 37900 Developmental Neurobiology (3 cr), *P: 22900*

BIO 40100 Cardiovascular, Renal, & Respiratory Phys. (4 cr), *P: Bio 20700*

BIO 41000 Cell Dev. and Senescence (3 cr), *P: Bio 229*

BIO 42000 Virology (3 cr), *P: Bio 22900*

BIO 42500 Cancer Biology (3 cr), *P: Bio 22900*

BIO 44300 Insect Ecology (4 cr), *P: Bio 22800*

BIO 44900 Biology of Birds (4 cr), *P: Bio 207 or 228*

BIO 45100 Muscle and Mvmt. (3 cr), *P: Bio 207 or 354*

BIO 45300 Conservation Biology (3 cr), *P: Bio 22800*

BIO 45400 Sensory Perception (3 cr), *P: Bio 207 or 229*

BIO 45500 Advanced Ecology (3 cr), *P: Bio 22800*

BIO 45800 Biogeography (3 cr), *P: Bio 22800*

BIO 46000 Animal Behavior (3 cr), *P: Bio 10200*

BIO 46600 Plant Physiology (3 cr), *P: Bio 207 or 229*

BIO 48100 Intro. To Epigenetics (3 cr), *P: Bio 20600*

BIO 48300 Laboratory in Biotech. (5 cr), *P: Bio 22900*

BIO 48500 Evolution (3 cr), *P: Bio 22800*

**NOTE: Bio 32100 is not for biology majors**

BIO 301-303 Honors I-III (*only 6 cr count towards Major requirements*)

BIO 310 Independent Study (1-3 cr/semester; *maximum 6 cr count towards Major requirements*)

The following can count towards the 39 credits required for the major, and count with respect to the 2.0 Major GPA requirement, but do not count towards the Major Residency Requirement (24 credits)

CHEM 45902 or 32002 Biochemistry (3 cr)

PHILOSOPHY 34905 Bioethics (3 cr)

PHYSICS 42200 or 42300 Biophysics (3 cr)

SCIENCE 28000 Bioinformatics and Biomolecular Systems (3 cr)