# **CCNY Biology Undergraduate Student Advising Form**

Complete this form, email it to your advisor, and print the first page to bring to your advising meeting. Course registration is blocked by default prior to advising. CCAPP will un-block registration after receiving your signed advising form.

| Name:                   |                        |
|-------------------------|------------------------|
| CCNY Email Address:     |                        |
| CUNY EMPLID (8 digits): |                        |
| Faculty Advisor's Name: |                        |
| Demiliand               | for a D.C. in Dialore. |

#### Required courses for a B.S. in Biology

Use the drop-down list(s) for each course (select 'Transfer' for transferred courses). All required BIO courses must be passed with a grade of C or better.

| Course     | Name                      | Cr | Grade |
|------------|---------------------------|----|-------|
| BIO 10100  | Biological Foundations I  | 4  |       |
| BIO 10200  | Biological Foundations II | 4  |       |
| BIO 20600  | Introduction to Genetics  | 4  |       |
| BIO 20700  | Organismic Biology        | 4  |       |
| BIO 22800  | Ecology & Evolution       | 4  |       |
| BIO 22900  | Cell & Molecular Biology  | 4  |       |
| CHEM 10301 | General Chemistry I       | 4  |       |
| CHEM 10401 | General Chemistry II      | 4  |       |
| CHEM 26100 | Organic Chemistry I       | 3  |       |
| †          | General Physics I         | 4  |       |
| †          | General Physics II        | 4  |       |
| ‡          | Calculus                  |    |       |
| ‡          | Calculus                  |    |       |
| ‡          | Calculus and/or Stats     | 4  |       |

<sup>†</sup>PHYS 20300 & 20400 are preferred. PHYS 20700 & 20800 are calculus-based.

MATH 21200/21300 were previously numbered MATH 20200/20300.

## Biology elective course requirement

Fill in the requested information for all elective courses that count towards the biology major. List all courses you have taken, are currently taking, and plan to take in the future. At least 15 elective credits are required. See pgs.

3 and 4 of this form for information on which electives count.

| Course | Name | Cr | Grade |
|--------|------|----|-------|
|        |      |    |       |
|        |      |    |       |
|        |      |    |       |
|        |      |    |       |
|        |      |    |       |
|        |      |    |       |

## Other requirements to graduate in Biology

CCNY Credit Requirement: Earn at least 120 credits

CCNY Residency Requirement: Earn at least 80 credits at CCNY (not transferred from another institution) or complete the last 30 credits of the degree at CCNY

Biology Residency Requirement: Earn at least 24 credits that count towards the Biology Major requirements from CCNY BIO courses (not transferred or taken in another CCNY department).

Biology GPA Requirement: A 2.0 GPA in Biology courses, including non-BIO courses that count towards the Biology Major elective requirement, is required to remain in the major and to graduate.

| _ | Familie Addison Classica |  |
|---|--------------------------|--|
|   |                          |  |
|   |                          |  |
|   |                          |  |
|   |                          |  |
|   |                          |  |
|   |                          |  |
|   |                          |  |
|   |                          |  |
|   |                          |  |
|   |                          |  |

Faculty Advisor Signature

[To be signed after advising & before registration each semester.]

All information on this form is subject to change. Information in the CCNY Bulletin supersedes information on this form when discrepancies exist.

## Course Record & Plan

Under the appropriate school term and year that you select, provide the name (e.g., Bio 10100), number of credits, and grade for every CCNY course you have taken or are taking, then list all courses you plan to take before graduation. (Include courses taken by ePermit while at CCNY using their CCNY equivalent and marking with an asterisk, e.g. "Chem 26100\*")

| Courses    | Cr Grades        | Courses        | Cr Grades    |
|------------|------------------|----------------|--------------|
| Term:      |                  | Term:          |              |
|            |                  |                |              |
|            |                  |                |              |
|            |                  |                |              |
|            |                  |                |              |
| Term:      |                  | Term:          |              |
|            |                  |                |              |
|            |                  |                |              |
|            |                  |                |              |
|            |                  |                |              |
| Term:      |                  | Term:          |              |
|            |                  |                |              |
|            |                  |                |              |
|            |                  |                |              |
|            |                  |                |              |
| Term:      |                  | Term:          |              |
|            |                  |                |              |
|            |                  |                |              |
|            |                  |                |              |
|            |                  |                |              |
| Term:      |                  | Term:          |              |
|            |                  |                |              |
|            |                  |                |              |
|            |                  |                |              |
|            |                  |                |              |
| Term:      |                  | Term:          |              |
|            |                  |                |              |
|            |                  |                |              |
|            |                  |                |              |
|            |                  |                |              |
| Term:      |                  | Term:          |              |
|            |                  |                |              |
|            |                  |                |              |
|            |                  |                |              |
|            |                  |                |              |
|            |                  |                |              |
|            |                  |                |              |
|            |                  |                |              |
| Lload Piol | ogy Major Adviso | r Cianatura Gr | adCheck Date |

This student has fulfilled all requirements for the Biology Major

[To be signed during final semester.]

<sup>‡</sup>Acceptable MATH sequences: (preferred: 20500,20900) or (20100,20900)

or (20100,21200§,21300§) or (20100,21200§,17300)

Required courses<sup>0</sup> for all Biology majors

Terms Offered<sup>3</sup>

| Course                  | Name                      | Cr Prerequisites <sup>1</sup>                                  | Corequisites <sup>2</sup>              | Note | Fee  | Fa | Wi | Sp | Su |
|-------------------------|---------------------------|--|--|------|------|----|----|----|----|
| BIO 10100               | Biological Foundations I  | 4 MATH 19000   |  |      | \$30 | Α  |    | Α  | Α  |
| BIO 10200               | Biological Foundations II | 4 BIO 10100  | BIO 10100                              |      |      |    |    | Α  | Α  |
| BIO 20600               | Introduction to Genetics  | 4 BIO 10100 & BIO 10200  |  |      |      | Α  |    | Α  | Α  |
| BIO 20700               | Organismic Biology        | 4 BIO 10100 & BIO 10200  | CHEM 10301 & MATH 19500 & ENGL 210038  |      | \$40 | Α  |    | Α  | Α  |
| BIO 22800               | Ecology & Evolution       | 4  | BIO 20600 & (MATH 17300 or MATH 20900) | 4    | \$10 | Α  |    | S  | S  |
| BIO 22900               | Cell & Molecular Biology  | 4 BIO 20600  | BIO 20600                              |      | \$35 | Α  |    | Α  | S  |
| CHEM 10301              | General Chemistry I       | 4 MATH 19500 with grade of C or higher                         | MATH 19500 with grade of C or higher   |      | \$30 | Α  |    | Α  | Α  |
| CHEM 10401              | General Chemistry II      | <sup>4</sup> CHEM 10301 with grade of C or higher              | CHEM 10301 with grade of C or higher   |      | \$30 | Α  |    | Α  | Α  |
| CHEM 26100              | Organic Chemistry I       | 3 CHEM 10401 with grade of C or higher                         |  |      |      | Α  |    | Α  |    |
| PHYS 20300 <sup>5</sup> | General Physics I         | 4 MATH 19500   |  |      | \$10 | Α  |    | Α  | Α  |
| PHYS 20400 <sup>5</sup> | General Physics II        | 4 PHYS 20300   |  |      | \$10 | Α  |    | Α  | Α  |
| MATH 205006             | Elements of Calculus      | <sup>4</sup> Placement or MATH 19500 with grade of C or higher |  |      |      | Α  |    | Α  | Α  |
| MATH 209006             | Elements of Calc & Stats  | 4 Placement or MATH 20500 with grade of C or higher            |  |      |      | Α  |    | Α  | Α  |

<sup>&</sup>lt;sup>0</sup> Required BIO courses must be passed with grade of C or better. Other required courses must be passed with a D or better (but see footnote 1)

Honors & Independent Study courses (These courses count towards Bio Major elective credit and Biology residency requirements)

Terms Offered<sup>3</sup>

| Course    | Name              | Cr  | Prerequisites <sup>1</sup>    | Corequisites <sup>2</sup>                     | Note  | Fee | Fa | Wi | Sp | Su |
|-----------|-------------------|-----|-------------------------------|---|-------|-----|----|----|----|----|
| BIO 30100 | Honors I          | 3   | BIO 10100, BIO 10200, & 20600 | Two of these: BIO 20700, BIO 22800, BIO 22900 | 4,5   |     | Α  |    | Α  | S  |
| BIO 30200 | Honors II         | 3   | BIO 30100                     |   | 4,5   |     | Α  |    | Α  | S  |
| BIO 30300 | Honors III        | 3   | BIO 30200                     | See note 6 below.                             | 4,5,6 |     | Α  |    | Α  | S  |
| BIO 31000 | Independent Study | 1-3 | BIO 20600                     | Two of these: BIO 20700, BIO 22800, BIO 22900 | 5,7   |     | Α  |    | Α  | S  |

<sup>&</sup>lt;sup>1</sup>Must be passed with grade of C or better.

<sup>1</sup> BIO prerequisites must be passed with grade of C or better. Other preregs for BIO courses must be passed with a D or better. Consult Chem/Math/Physics for minimum grades for prerequisites for their courses.

<sup>&</sup>lt;sup>2</sup> May be taken at same time (if taken before, see footnote 1)

<sup>&</sup>lt;sup>3</sup> Fa = Fall, Wi = Winter, Sp = Spring, Su = Summer; A = Always, S = Sometimes

<sup>&</sup>lt;sup>4</sup> If MATH 20900 or 17300 not taken as a pre- or coreg, then MATH 21200<sup>7</sup> can be taken as a prereq.

<sup>&</sup>lt;sup>5</sup> Acceptable PHYS sequences: (most common: 20300,20400) or (20700,20400) or (20700,20800)

<sup>&</sup>lt;sup>6</sup> Acceptable MATH sequences: (most common: 20500,20900) or (20100,20900) or (20100,21200§,21300§) or (20100,21200<sup>7</sup>,17300)

 $<sup>^{7}\,\</sup>mathrm{MATH}\,21200$  was previously numbered MATH 20200. MATH 21300 was previously numbered MATH 20300.

<sup>8</sup> If transferring from another college or major, an equivalent second English course can serve as the prerequisite

<sup>&</sup>lt;sup>2</sup>Corequisite: May be taken at same time (if taken before, see footnote 1).

<sup>&</sup>lt;sup>3</sup>Fa = Fall, Wi = Winter, Sp = Spring, Su = Summer; A = Always, S = Sometimes

 $<sup>^4\</sup>mbox{A}$  minimum GPA of 3.5 in Biology Dept. courses and 3.0 overall is required for Honors.

<sup>&</sup>lt;sup>5</sup>Admission to Honors or Independent Study is by application to the Honors and Independent Study faculty committee; applications are due 3 weeks before the start of each term.

<sup>6</sup>A maximum of 6 credits from Honors courses may count towards biology elective credits. BIO 30300 therefore does not fulfill Biology Major elective credit requirements, but it does count towards the total needed for graduation.

<sup>&</sup>lt;sup>7</sup>A GPA of 3.0 in biology or better is required for Independent Study. BIO 31000 can be taken multiple times, but a maximum of 6 credits may count towards Biology Major elective credits. Credits above 6 still count towards the total needed for graduation.

Terms Offered<sup>3</sup>

| Course          | Name                                      | Cr  | Prerequisites <sup>1</sup>                               | Corequisites <sup>2</sup> | Note | Fee    | Fa | Wi | Sp | Su |
|-----------------|---|-----|--|---------------------------|------|--------|----|----|----|----|
| BIO 31007-31999 | Selected Topics in Biology                | 3   | Determined by instructor                                 |                           |      |        | S  |    | S  |    |
| BIO 33000       | Survey of the Vertebrates                 | 3   | BIO 10100  |                           |      |        | S  |    | S  |    |
| BIO 34500       | Botany                                    | 4   | BIO 10200 & CHEM 10301                                   |                           |      |        | S  |    | S  |    |
| BIO 35000       | Advanced Microbiology                     | 4   | BIO 22900  |                           |      | \$25   | S  |    | S  |    |
| BIO 35100       | Anthropological Genomics                  | 3   | BIO 22800 or ANTH 20300                                  |                           |      |        | S  |    | S  |    |
| BIO 35200       | Introduction to Immunology                | 3   | BIO 22900  |                           |      |        | S  |    | S  |    |
| BIO 35400       | Introduction to Neurobiology              | 3   | BIO 20700 or BIO 22900                                   |                           |      |        | S  |    | S  |    |
| BIO 37500       | Developmental Biology                     | 3   | BIO 22900  |                           |      |        | S  | S  | S  | S  |
| BIO 37800       | Science of Sex and Gender                 | 3   | BIO 10100 & BIO 10200                                    |                           |      |        | S  |    | S  |    |
| BIO 37900       | Developmental Neurobiology                | 3   | BIO 22900  |                           |      |        | S  |    | S  |    |
| BIO 38000       | Eukaryotic Genetics                       | 4   | BIO 22900  |                           |      |        |    | S  |    | S  |
| BIO 40100       | Cardiovascular, Renal, & Respiratory Phys | 4   | BIO 20700  |                           |      |        | S  |    | S  |    |
| BIO 41000       | Cell Development & Cellular Senescence    | 3   | BIO 22900  |                           |      |        | S  |    | S  |    |
| BIO 41200-99    | Seminars on Selected Topics in Biology    | 1-4 | Determined by instructor                                 |                           |      |        | S  |    | S  |    |
| BIO 41404       | Brain Plasticity & Disease                | 3   | BIO 20700  |                           |      |        | S  |    | S  |    |
| BIO 42000       | Virology                                  | 3   | BIO 22900  |                           |      |        | S  |    | S  |    |
| BIO 42500       | Cancer Biology                            | 3   | BIO 22900  |                           |      |        | S  |    | S  |    |
| BIO 43000       | Genetics of Prokaryotes                   | 3   | BIO 22900  |                           |      |        | S  |    | S  |    |
| BIO 43500       | Origins of Molecular Biology              | 3   | BIO 20600 & 22900  |                           |      |        | S  |    | S  |    |
| BIO 44300       | Insect Ecology                            | 4   | BIO 22800  |                           |      |        | S  |    | S  |    |
| BIO 44900       | Biology of Birds                          | 4   |  | BIO 20700 or 22800        |      |        | S  |    | S  |    |
| BIO 45000       | Symbiosis                                 | 3   |  | BIO 22900                 |      |        | S  |    | S  |    |
| BIO 45100       | Movement & Muscle                         | 3   | BIO 20700 or BIO 35400                                   |                           |      |        | S  |    | S  | S  |
| BIO 45200       | Neurogenetics & Behavior                  | 3   | BIO 22900  |                           |      |        | S  |    | S  |    |
| BIO 45300       | Conservation Biology                      | 3   | BIO 22800  |                           |      |        | S  |    | S  |    |
| BIO 45400       | Sensory Perception                        | 3   | BIO 20700 or BIO 22900                                   |                           |      |        | S  | S  | S  | S  |
| BIO 45500       | Advanced Ecology                          | 3   | BIO 22800 & (MATH 20900 or 17300 or 21200 <sup>5</sup> ) |                           |      |        | S  |    | S  |    |
| BIO 45800       | Biogeography                              | 3   | BIO 22800  |                           |      |        | S  |    | S  |    |
| BIO 46000       | Animal Behavior                           | 3   | BIO 10200  |                           |      |        | S  | S  | S  |    |
| BIO 46500       | Ethnobotany                               | 3   | CHEM 10301 & 10401(MIN C)                                | BIO 22900                 |      |        | S  |    | S  |    |
| BIO 46600       | Plant Physiology                          | 3   | BIO 20700 or BIO 22900                                   |                           |      |        | S  |    | S  |    |
| BIO 48000       | Current Topics in Microbiology            | 3   | BIO 22900  |                           |      |        | S  |    | S  |    |
| BIO 48100       | Introduction to Epigenetics               | 3   | BIO 20600  |                           |      |        | S  |    | Α  |    |
| BIO 48300       | Laboratory in Biotechnology               | 5   | BIO 22900  |                           |      | \$55   |    | S  |    |    |
| BIO 48500       | Evolution                                 | 3   | BIO 22800  |                           |      |        | S  |    | S  |    |
| BIO 48800       | Tropical Ecology & Conservation           | 4   | BIO 10200  |                           | 4    | \$1550 |    | S  |    | S  |
| BIO 49000       | Molecular Systematics                     | 3   | BIO 22800  |                           |      |        | S  |    | S  |    |

<sup>&</sup>lt;sup>0</sup>Elective courses must be passed with a grade of D or better

¹BIO prerequisites must be passed with grade of C or better. Other prerequisites for BIO courses and elective courses must be passed with D or better.

<sup>&</sup>lt;sup>2</sup>Corequisites may be taken at same tie (if taken before, see footnote 1 above).

<sup>&</sup>lt;sup>3</sup>Fa=Fall, Wi=Winter, Sp=Spring, Su=Summer, A=Always, S=Sometimes

<sup>&</sup>lt;sup>4</sup>Study abroad course. Course fee includes most meals & all accommodation but not air travel. Fee subject to change.

<sup>&</sup>lt;sup>5</sup>Math 21200 was previously numbered Math 20200.

# Electives<sup>1</sup> that count towards Bio Major credit requirement but NOT towards the Bio residency requirement Terms Offered<sup>3</sup>

| Course                  | Name                                  | Cr | Prereqs <sup>2</sup>                                   | Note | Fee | Fa | Wi | Sp | Su |
|-------------------------|---------------------------------------|----|--|------|-----|----|----|----|----|
| CHEM 32002 <sup>4</sup> | Biochemistry I                        | 2  | (CHEM 26100 & CHEM 26300 with grade of C or better)    |      |     | C  |    | C  | C  |
| CHEIVI 32002            | Biochemistry i                        | 3  | or (CHEM 26100 with grade of C or better & Inst. Perm) |      |     | 5  |    | 5  | 3  |
| CHEM 44000              | Journey to the Center of the Cell     | 3  | CHEM 32002 or Instructor Permission                    |      |     | S  |    | S  | S  |
| PHIL 34905              | Biomedical Ethics                     | 3  | One semester of philosophy or Instructor Permission    |      |     | S  |    | S  | S  |
| PHYS 42200 <sup>5</sup> | Biophysics                            | 3  | 1 yr. math & 1 yr. physics                             |      |     | S  |    | S  | S  |
| PHYS 42300 <sup>5</sup> | Biophysics in Applications            | 3  | 1 yr. math & 1 yr. physics                             |      |     | S  |    | S  | S  |
| SCI 28000               | Bioinformatics & Biomolecular Systems | 3  | 1 yr. biology & 1 yr. chemistry                        |      |     | S  |    | S  | S  |

<sup>&</sup>lt;sup>1</sup>Elective courses must be passed with a grade of D or better.

## Elective courses that DO NOT count towards the Bio Major credit requirement NOR the Bio residency requirement. Terms Offered<sup>2</sup>

| Course    | Name                                      | Cr | Prereqs <sup>1</sup>                              | Note | Fee  | Fa | Wi | Sp | Su |
|-----------|---|----|---|------|------|----|----|----|----|
| BIO 10004 | Human Biology                             | 3  | Not for Biology Majors                            |      |      |    |    |    |    |
| BIO 32100 | Physiological Processes                   |    | For Engineering Majors Only                       |      |      |    |    |    |    |
| BIO 24700 | Anatomy & Physiology I                    | 4  | BIO 10100 or Departmental Permission              |      | \$25 | Α  |    | Α  | Α  |
| BIO 24800 | Anatomy & Physiology II                   | 4  | BIO 24700   |      | \$35 | Α  |    | Α  | Α  |
| BIO 24900 | Microbiology for Healthcare Professionals | 4  | BIO 10100 & CHEM 10301 or Departmental Permission |      | \$55 | Α  |    | Α  | Α  |

<sup>&</sup>lt;sup>1</sup>Prerequisite: Must have completed the course and passed with grade of C or better.

<sup>&</sup>lt;sup>2</sup>Consult Chem//Physics for minimum grades for prerequisites.

<sup>&</sup>lt;sup>3</sup>Fa = Fall, Wi = Winter, Sp = Spring, Su = Summer; A = Always, S = Sometimes

<sup>&</sup>lt;sup>4</sup>Also called CHEM 45902; cannot take one course if you have taken the other.

<sup>&</sup>lt;sup>5</sup>Only one of Phys 42200 & Phys 42300 can be taken for Biology elective credit

<sup>&</sup>lt;sup>2</sup>Fa = Fall, Wi = Winter, Sp = Spring, Su = Summer; A = Always, S = Sometimes