

# City Colleges of Chicago

## **Transfer Guide**

BS in Biological Sciences

The Department of Biological Sciences offers a Bachelor of Science degree, a minor, and a Master of Science degree. Students may take courses in biological science, botany, physiology, and zoology. Students who graduate with a B.S. in Biology are prepared for a variety of positions in industry, government, health sciences, and education, and are prepared for graduate school in any area of life sciences or professional school in medicine, veterinary science, pharmacy, and dentistry. The Department of Biological Sciences is committed to maximizing the academic success of its students and uses student learning data and surveys to measure this. Direct and indirect measures of learning are collected each semester in core courses and non-major courses. Student self-efficacy surveys help determine how students perceive their learning experiences.

Admission to the Biology UG program is open to all incoming freshmen and transfer students. The department does not accept D transfer credits in biology courses. A Biology Major requires a minimum of 120 semester hours. Biology majors must earn a grade of C or better in required biology courses and may earn a maximum of one D in required supportive courses. Biology majors can retake a required course twice but require permission from the instructor and chair of the department to enroll a third time. Students who fail the third attempt will not be permitted to complete the Biology Major. Once enrolled at Chicago State University, biology majors may not take a major or supportive course at a two-year college.

### **Highlights**

A CSU Biology degree is a gateway to careers in diverse life science disciplines. Examples are: Agronomist; Science Middle and High Teacher; Biomedical Scientist; Biostatistician; Biotechnologist; Botanist; Conservationist; Dentist; Ecologist; Environmental Scientist; Forestry Scientist; Forensic; Scientist; Geneticist; Horticulturalist; Medical Technologist; Microbiologist; Laboratory Technician; Occupational Therapist; Optometrist; Pharmaceutical Scientist; Physician; Physician Assistant; Physical Therapist; Urban Agriculturalist; and Veterinarian. Most recent graduates have found jobs as laboratory technicians.

#### **Advisor Contact Information**

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## **Articulation Crosswalk for BS in Biological Sciences**

| Chicago City Colleges<br>Associate in Science (0211) AS |   |                 | Chicago State University BS in Biological Sciences |   |                 |
|---|---|-----------------|--|---|-----------------|
| Course #  | Title                                   | Credit<br>Hours | Course #   | Title                                   | Credit<br>Hours |
| ENG 101   | Composition I                           | 3               | ENG 1270   | Composition I                           | 3               |
| ENG 102   | Composition II                          | 3               | ENG 1280   | Composition II                          | 3               |
| SPEECH 101  | Fundamentals of Speech<br>Communication | 3               | CMAT 2030  | Basic Speech<br>Communications          | 3               |
| Fine Arts   | IAI Fine Arts*                          | 3               | Fine Arts  | IAI Fine Arts                           | 3               |
| Humanities  | IAI Humanities*                         | 3               | Humanities   | IAI Humanities                          | 3               |
| Social Science  | IAI Social/Behavioral<br>Science* **    | 3               | Social<br>Science                                  | IAI Social/Behavioral Science           | 3               |
| Social Science  | IAI Social/Behavioral<br>Science* **    | 3               | Social<br>Science                                  | IAI Social/Behavioral Science           | 3               |
| Recomm  | nended Mathematics Courses:             | :               |  |   |                 |
| MATH 125  | Introductory Statistics                 | 4***            | MATH 1600  | Basic Probability and Statistics        | 3 (4)           |
| MATH 140  | College Algebra                         | 4***            | MATH 1200  | College Algebra                         | 3 (4)           |
| Recor   | nmended Elective Courses:               |                 |  |   |                 |
| BIOL 121  | Biology I                               | 5***            | BOT 2050   | Biology of Algae, Plants &<br>Fungi     | 4 (5)           |
| BIOL 122  | Biology II                              | 5***            | BIOL 1702  | Introduction to Biology II              | 4 (5)           |
| CHEM 201  | General Chemistry I                     | 5***            | CHEM<br>1400/1410                                  | General Chemistry I<br>Lecture and Lab  | 4 (5)           |
| CHEM 203  | General Chemistry II                    | 5***            | CHEM<br>1450/1460                                  | General Chemistry II<br>Lecture and Lab | 4 (5)           |
| MATH 141  | Plane Trigonometry                      | 3               | MATH 1210  | Algebra and Trigonometry                | 3               |
| Choose  | e Any Two Elective Courses:             | _               |  |   |                 |
| CHEM 205  | Organic Chemistry I                     | 6***            | CHEM<br>2400/2410                                  | Organic Chemistry I                     | 4 (6)           |
| CHEM 207  | Organic Chemistry II                    | 6***            | CHEM<br>2450/2460                                  | Organic Chemistry II                    | 4 (6)           |
| PHYSICS 221   | General Physics I                       | 5***            | PHYS 1510  | General Physics I                       | 4 (5)           |
| PHYSICS 222   | General Physics II                      | 5***            | PHYS 1520  | General Physics II                      | 4 (5)           |
| BIOL 226  | Human Structure and Function I          | 4               | ZOOL 2050  | Human Functional Anatomy                | 4               |
| BIOL 227  | Human Structure and Function II         | 4               | PSLY 2040  | Human Physiology                        | 4               |
| Total Credit Hours Taken at CCC                         |   | 60-64           | Total  | Credit Hours Transferred to CSU         | 60-64           |

<sup>\*</sup>One course must satisfy the CCC Human Diversity (HD) requirement.

<sup>\*\*</sup>Must include two disciplines

<sup>\*\*\*</sup>Math courses and science lab courses that equal 4, 5, or 6 credit hours at City Colleges transfer as such to CSU.

| Courses required at CSU for BS in Biological Sciences   |                   |  |
|---|-------------------|--|
| CSU Courses   |                   |  |
| College of Arts and Sciences Course                     |                   |  |
| Foreign Language  | 3                 |  |
| Required CSU Courses (Two taken as Electives at CCC)    |                   |  |
| CHEM 2400/2410 Organic Chemistry I Lecture and Lab      | 4                 |  |
| CHEM 2450/2460 Organic Chemistry II Lecture and Lab     | 4                 |  |
| PHYS 1510 General Physics I                             | 4                 |  |
| PHYS 1520 General Physics II                            | 4                 |  |
| PSLY 2040 Human Physiology                              | 4                 |  |
| ZOOL 2050 Human Functional Anatomy                      | 4                 |  |
| Required Supportive Course                              |                   |  |
| MATH 1415 Calculus for Life Sciences I                  | 4                 |  |
| Biological Sciences Core Courses                        |                   |  |
| BIOL 1600 Introduction to Biological Professions        | 1                 |  |
| BIOL 2400 Scientific Inquiry in the Biological Sciences | 4                 |  |
| BIOL 3040 Genetics                                      | 4                 |  |
| BIOL 3051 Cell Biology                                  | 4                 |  |
| BIOL 3072 Ecology                                       | 4                 |  |
| Biology Electives (Must include two lab courses)        | 14-16             |  |
| BIOL 3000 level   |                   |  |
| BIOL 3000 level   |                   |  |
| BIOL 4000 level   |                   |  |
| BIOL 4000 level   |                   |  |
| Biology Capstone Course                                 |                   |  |
| BIOL 4801 Capstone for Biology                          | 4                 |  |
| Electives to Complete 120 Hours                         | 0-2               |  |
| CSU Completion Cr                                       | redit Hours 58-60 |  |

| CCC Transferred Credit Hours | 60-64   |
|------------------------------|---------|
| CSU Completion Credit Hours  | 58-60   |
| Total Degree Credit Hours    | 120-122 |