



**Associate of Science
in Biology
to
Bachelor of Science
in Biochemistry**

**HCCC
Biology A.S.**

**NJCU
Biochemistry B.S.**

| Course Number | Course Name | Credits | = | Course Number | Course Name | Credits |
|--------------------------------|----------------------------|---------|---|---------------|---|---------|
| CSS100 | College Student Success | 1 | = | INTD101 | Orientation to College | 1 |
| ENG101 | College Composition I | 3 | = | ENGL101 | English Composition I | 3 |
| ENG102 | College Composition II | 3 | = | ENGL102 | English Composition II | 3 |
| BIO115 | Principles of Biology I | 4 | = | BIOL130 | Principles of Biology I | 4 |
| BIO116 | Principles of Biology II | 4 | = | BIOL131 | Principles of Biology II | 4 |
| BIO111 | Anatomy and Physiology I | 4 | = | BIOL236 | Anatomy and Physiology I | 4 |
| BIO211 | Anatomy and Physiology II | 4 | = | BIOL237 | Anatomy and Physiology II | 4 |
| PSY101 | Introduction to Psychology | 3 | = | PSYC110 | Introduction to Psychology | 3 |
| SOC101 | Introduction to Sociology | 3 | = | SOCI111 | Principles of Sociology | 3 |
| HUM101 | Cultures and Values | 3 | = | WGST110 | Diversity and Difference: Identities, Communities, and Cultures | 3 |
| CHP111 | College Chemistry I | 4 | = | CHEM 105+1105 | General Chemistry I Lecture and Recitation/Lab | 4 |
| PHY113 | Physics I | 4 | = | PHYS130+1131 | College Physics I + Lab | 4 |
| BIO230 | Histology | 4 | = | BIOL305 | Histology | 4 |
| BIO 270 | Cell Biology | 4 | = | BIOL230 | Cell Biology | 4 |
| CHP211 | College Chemistry II | 4 | = | CHEM 106+1106 | General Chemistry II Lecture and Recitation/Lab | 4 |
| Complete 1 Math Course: | | | | | | |
| MAT110 | Precalculus | 4 | = | MATH175 | Enhanced Precalculus | 4 |
| MAT111 | Calculus I | 4 | = | MATH192 | Calculus and Analytical Geometry I (Recommended) | 4 |
| Take 4 credits below: | | | | | | |
| BIO208 | Ecology | 4 | = | BIOL402 | Ecology | 4 |
| BIO250 | Microbiology | 4 | = | BIOL303 | Microbiology (Recommended) | 4 |
| BTN201 | Molecular Biology | 4 | = | BIOL2XX | Biology Elective Credits | 4 |
| BIO260 | Molecular Biology | 4 | = | BIOL2XX | Biology Elective Credits | 4 |
| MAT111 | Calculus I | 4 | = | MATH192 | Calculus and Analytical Geometry I | 4 |
| MAT112 | Calculus II | 4 | = | MATH193 | Calculus and Analytic Geometry II OR (Recommended) | 4 |

Total Credits Transferred 60

General Education Waiver Awarded!

Remaining NJCU Courses

| COURSE NUMBER | COURSE NAME | CREDITS | |
|---|--|--------------|-------------|
| Math and Physics | | 7-15 | |
| MATH 140 | Statistics I | 3 | |
| MATH 192 | Calculus and Analytic Geometry I (Note: This course may transfer in) | 0-4 | |
| MATH 193 | Calculus and Analytic Geometry II (Note: This course may transfer in) | 0-4 | |
| PHYS 131 | Physics II (Lecture) | 3 | |
| PHYS 1131 | Physics II Recitation & Laboratory | 1 | |
| Chemistry and Biology | | 29-33 | |
| CHEM 205 | Analytical Chemistry Lec | 3 | Fall Only |
| CHEM 2205 | Analytical Chemistry Laboratory | 2 | Fall Only |
| CHEM 207 | Organic Chemistry I | 3 | |
| CHEM 2207 | Organic Chemistry I Laboratory | 1 | |
| CHEM 208 | Organic Chemistry II | 3 | |
| CHEM 2208 | Organic Chemistry II Laboratory | 1 | |
| CHEM 305 | Physical Chemistry I | 3 | Fall Only |
| CHEM 307 | Biochemistry I | 4 | |
| CHEM 308 | Biochemistry II | 4 | Spring Only |
| CHEM 405 | Seminar | 1 | |
| BIOL 303 | Microbiology (Note: This course may transfer in) | 0-4 | |
| BIOL 304 | Genetics | 4 | |
| Required elective courses: select from the following courses | | 7 | |
| CHEM 220 | Environmental Chemistry | 4 | |
| CHEM 316 | Instrumental Analysis, Lecture | 3 | |
| CHEM 3316 | Instrumental Methods of Analysis, Laboratory | 2 | |
| CHEM 401 | Medicinal Chemistry | 3 | |
| CHEM 420 | Food Chemistry | 4 | |
| BIOL 252 | Evolution: A Biological and Geological Approach | 3 | |
| BIOL 404 | Immunology | 3 | |
| BIOL 406 | Molecular Genetics | 4 | |
| CHEM 492 | Chemical Research | 2-3 | |
| or CHEM 493 | Chemical Research | | |
| or BIOL 350 | Biology Research | | |
| or BIOL 450 | Biology Research | | |
| Free Elective Courses | | 5-17 | |
| Total Credits To Graduate | | 120 | |