



**Associates of Science
Medical Sciences Pre-Professional
to
Bachelor of Science
Chemistry**

**HCCC
Medical Sciences Pre-Professional - AS**

**NJCU
Chemistry - BS**

| COURSE NUMBER | COURSE NAME | CREDITS | COURSE NUMBER | COURSE NAME | CREDITS |
|--|------------------------------------|---------|---------------|-----------------------------------|---------|
| Complete the following Courses for Gen Ed Requirements: | | | | | |
| 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 |
| ENG112 | Speech | 3 = | ENGL147 | Effective Speaking | 3 |
| MAT 110 | Precalculus | 4 = | MATH175 | Precalculus | 4 |
| CSC100 | Intro to Computers and Computing | 3 = | CS107 | Computers & Information Systems | 3 |
| BIO111 | Anatomy and Physiology I | 4 = | BIOL236 | Anatomy and Physiology I | 4 |
| PSY101 | Introduction to Psychology | 3 = | PSYC110 | Introduction to Psychology | 3 |
| 1 Humanities Elective | TBD | 3 = | TBD | | 3 |
| 1 Diversity Elective | TBD | 3 = | TBD | | 3 |
| 1 Humanities or Social Science Elective | TBD | 3 = | TBD | | 3 |
| Complete the following Courses for Major Requirements: | | | | | |
| BIO211 | Anatomy and Physiology II | 4 = | BIOL237 | Anatomy and Physiology II | 4 |
| BIO115 | Principles of Biology I | 4 = | BIOL130 | Principles of Biology I | 4 |
| HLT210 | Medical Law and Ethics | 3 = | HLTH2XX | Health Sciences Elective Credits | 3 |
| BIO116 | Principles of Biology II | 4 = | BIOL131 | Principles of Biology II | 4 |
| Complete 1 of the following Courses: | | | | | |
| BIO250 | Microbiology | 4 = | BIOL303 | Microbiology | 4 |
| PHY113 | Physics I | 4 = | PHYS130+1131 | College Physics I + Lab | 4 |
| Complete 1 Group of Courses for Electives: | | | | | |
| * Pre-Medicine/Pharmacy * | | | | | |
| CHP111 | College Chemistry I | 4 = | CHEM105 | General Chemistry I Lecture | 4 |
| CHP211 | College Chemistry II | 4 = | CHEM1105 | Recitation/Labratory | |
| | | | CHEM 106 | General Chemistry II Lecture | 4 |
| | | | CHEM1106 | Recitation/Labratory | |
| or | | | | | |
| Pre-Physical Therapy/Pre-Athletic Trainer | | | | | |
| EXS101 | Intro to Exercise Science | 2 = | FES207 | Introduction to Exercise Science | 2 |
| HLT111 | Introduction to Healthcare | 2 = | HLTH1XX | Health Sciences Elective Credits | 2 |
| EXS203 | Exercise Measurement and Prescript | 4 = | FES325 | Exercise Testing and Prescription | 4 |
| or | | | | | |
| Pre-Health Sciences | | | | | |
| MDA106 | Medical Terminology | 3 = | HLTH1XX | Health Sciences Elective Credits | 3 |
| HLT112 | Pathophysiology | 3 = | BIOL311 | Pathophysiology | 3 |
| HLT111 | Introduction to Healthcare | 2 = | HLTH1XX | Health Sciences Elective Credits | 2 |

Note:
* Recommended

Total Credits 60

General Education Waived

Remaining NJCU Courses

| COURSE NUMBER | COURSE NAME | CREDITS |
|---|---|--------------|
| Required Core Courses: | | 41-49 |
| CHEM105 * | General Chemistry I Lecture | 0-4 * |
| CHEM1105 * | Recitation/Labratory | |
| CHEM106 * | General Chemistry II Lecture | 0-4 * |
| CHEM1106 * | Recitation/Labratory | |
| CHEM205 ** | Analytical Chemistry Lecture | 3 ** |
| CHEM2205 ** | Analytical Chemistry Lab | 2 ** |
| CHEM316 *** | Instrumental Analysis I | 3 *** |
| CHEM3316 | Instrumental Methods of Analysis, Laboratory | 2 |
| CHEM305 ** | Physical Chemistry I Lecture | 3 ** |
| CHEM306 *** | Physical Chemistry II Lecture | 3 *** |
| CHEM3306 *** | Physical Chemistry II Lab and Recitation | 2 *** |
| CHEM307 | Biochemistry I | 4 |
| CHEM405 ** | Seminar | 1 ** |
| CHEM416 *** | Inorganic Chemistry | 3 *** |
| INTD180 | Computer Tools for Science and Math | 3 |
| MATH 192 | Calculus and Analytic Geometry I | 4 |
| MATH 193 | Calculus and Analytic Geometry II | 4 |
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| PHYS131 | Physics II | 3 |
| PHYS1131 | Physics II Labratory and Recitation | 1 |
| | OR | |
| PHYS 141 | Physics II | 3 |
| PHYS1141 | Physics II Recitation and Labratory | 1 |
| <hr/> | | |
| Select a Minimum of 2 additional CHEM electives: | | 6-8 |
| CHEM 220 | Environmental Chemistry | 4 |
| CHEM308 | Biochemistry II | 4 |
| CHEM430 | Spectroscopic Identification of Organic Compounds | 3 |
| CHEM401 | Medicinal Chemistry | 3 |
| CHEM420 | Food Chemistry | 4 |
| CHEM412 | Inorganic Chemistry Laboratory | 2 |

Free Elective Courses

3-13

Notes:

* This course may be a part of the transfer if taken at HCCC

** Fall Only

*** Spring Only