

CHEMISTRY WITH TEACHER CERTIFICATION, B.A.

THE REQUIREMENTS FOR ADMISSION TO THIS CONCENTRATION ARE:

- A minimum cumulative undergraduate grade point average (CGPA) of 3.0.
- A minimum of B- or better on all education courses
- Passing scores on the Praxis CORE, **or** 560 verbal, 540 Math on the SAT, **or** 23 or higher on the ACT, **or** 155 verbal, 156 quantitative on the GRE.

Passing scores on the Praxis CORE Academic Skills for Educators Tests, as of 9/1/19:

- Math Test #5733 Passing Score 150
- Reading Test #5712 Passing Score 156
- Writing Test #5722 Passing Score 162

Students who meet the score levels below are not required to take the Praxis CORE:

SAT Scores

- If taken before 4/1/1995: Math 520, Reading 480
- If taken between 4/1/1995 to 2/28/2016: Math 540, Reading 560
- If taken on or after 3/1/2016: Math 570, 610 Evidence-Based Reading and Writing or 30 Reading Section

ACT Scores

- If taken before 8/28/1989: Math 23, English 20
- If taken on or after 8/28/1989: Math 23, English 23

GRE Scores

- If taken before 8/1/2011: Quantitative 720, Verbal 530
- If taken on or after 8/1/2011: Quantitative 156, Verbal 155

For more information on Praxis exams: <https://www.ets.org/praxis/nj/requirements> (<https://www.ets.org/praxis/nj/requirements/>)

THE REQUIREMENTS FOR COMPLETION OF THIS DEGREE TRACK ARE:

- Completion of NJCU General Education requirements or equivalent
- Successful completion of major in intended content area
- Passing scores on appropriate Praxis II Exam
- A minimum cumulative GPA of 3.0
- Successful completion of clinical experience and clinical practice (student teaching)

This includes successful submission of the performance assessment, edTPA, as required by the New Jersey Department of Education.

Note: For the most updated information on this teaching certification program, students are directed to contact the College of Education as changes may have occurred since publication.

Code	Title	Credits
Required		
CHEM 105	General Chemistry I Lecture	3

CHEM 1105	General Chemistry I Recitation/Laboratory	2
CHEM 106	General Chemistry II Lecture	3
CHEM 1106	General Chemistry II Recitation/Laboratory	2
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 205	Analytical Chemistry Lec	3
CHEM 2205	Analytical Chemistry Laboratory	2
CHEM 316	Instrumental Analysis, Lecture	3
CHEM 3316	Instrumental Methods of Analysis, Laboratory	2
CHEM 305	Physical Chemistry I	3
CHEM 307	Biochemistry I	4
CHEM 405	Seminar	1
CHEM 416	Inorganic Chemistry	3

Required Supported courses in Mathematics & Physics

MATH 192	Calculus and Analytic Geometry I	4
MATH 193	Calculus and Analytic Geometry II	4

Select eight credits as one of the following sequences of Physics courses:

Sequence I:		
PHYS 140	Principles of Physics I - Lecture	3
PHYS 1140	Principles of Physics I - Laboratory and recitation	1
PHYS 141	Principles of Physics II - Lecture	3
PHYS 1141	Principles of Physics II - Laboratory and Recitation	1

Sequence II:		
PHYS 130	College Physics I (Lecture)	3
PHYS 1130	Physics I Recitation & Laboratory	1
PHYS 131	Physics II (Lecture)	3
PHYS 1131	Physics II Recitation & Laboratory	1

Electives

Select a minimum of three credits from the following courses:		3
CHEM 220	Environmental Chemistry	4
CHEM 306	Physical Chemistry II, Lecture	3
CHEM 308		4
CHEM 401	Medicinal Chemistry	3
CHEM 412	Inorganic Chemistry Laboratory	2
CHEM 414	Advanced Organic Chemistry	3
CHEM 420	Food Chemistry	4
CHEM 425	Nanomaterial and Microelectronic Fabrication	3
CHEM 435	Materials Chemistry	3

Required General Studies Program Courses

MATH 215	Problem Solving in Mathematics ¹	3
LTED 160	Languages of Power and Social Justice ²	3
BIOL 224	The Human Body	3
or BIOL 225	Human Sexual Biology	
or BIOL 106	Practical Nutrition	

Required Education Courses ³

Phase I:		
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EDU 280	Challenges in Urban Education	3
LTED 230	Focus: Reading Language & Literacy	3
Phase II:		
EDU 330	Focus: Development, Behavior and Learning	3
EDU 371	Grades 7-12 Methods/Materials	3
Phase III: Courses should be taken concurrently; offered fall semester only		
LTED 370	Secondary:Reading & Language Workshop	2
EDU 3372	Methods and Materials of Teaching Science in Middle and Secondary Schools	3
EDU 331	Clinical Practice I	2
Phase IV:		
EDU 470	Concurrent Student Teaching Seminar	2
EDU 480	Clinical Practice II	8
EDU 485	Classroom Management and Assessment Internship Seminar	2

¹ Required of students who have yet to meet Praxis Core Math requirement.

² Strongly recommended for students who have yet to meet Praxis Core Writing and Reading requirements.

Freshman

Semester 1		Credits
ENGL 101 or ESL 101	English Composition I or English Composition I for English as a Second Language Students	4
INTD 101	Orientation to College ^{First time freshman only}	1
MATH 175	Enhanced Precalculus	4
BIOL 225	Human Sexual Biology	3
OR		
BIOL 224	The Human Body	3
OR		
BIOL 106	Practical Nutrition	3
Credits		18
Semester 2		
ENGL 102	English Composition II	4
INTD 180	Computers Tools for Science and Math	3
MATH 215	Problem Solving in Mathematics	3
General Education Tier II course		3
General Education Tier II course		3
Credits		16

Sophomore

Semester 1		
PHYS 130	College Physics I (Lecture)	3
PHYS 1130	Physics I Recitation & Laboratory	1
MATH 192	Calculus and Analytic Geometry I	4
CHEM 105	General Chemistry I Lecture	3
CHEM 1105	General Chemistry I Recitation/Laboratory	2
EDU 280	Challenges in Urban Education	3
LTED 230	Focus: Reading Language & Literacy	3
Credits		19

Semester 2		
PHYS 131	Physics II (Lecture)	3
PHYS 1131	Physics II Recitation & Laboratory	1
MATH 193	Calculus and Analytic Geometry II	4
CHEM 106	General Chemistry II Lecture	3
CHEM 1106	General Chemistry II Recitation/Laboratory	2
General Education Tier III Capstone course		3
Credits		16

Junior

Semester 1		
CHEM 207	Organic Chemistry I	3
CHEM 2207	Organic Chemistry I Laboratory	1
CHEM 305	Physical Chemistry I	3
EDU 330	Focus: Development, Behavior and Learning	3
EDU 371	Grades 7-12 Methods/Materials	3
Chemistry elective		3
Credits		16

Semester 2

CHEM 208	Organic Chemistry II	3
CHEM 2208	Organic Chemistry II Laboratory	1
CHEM 316	Instrumental Analysis, Lecture	3
CHEM 3316	Instrumental Methods of Analysis, Laboratory	2
CHEM 405	Seminar	1
CHEM 416	Inorganic Chemistry	3
CHEM 307	Biochemistry I	4
Credits		17

Senior

Semester 1		
LTED 370	Secondary:Reading & Language Workshop	2
EDU 3372	Methods and Materials of Teaching Science in Middle and Secondary Schools	3
CHEM 205	Analytical Chemistry Lec	3
EDU 331	Clinical Practice I	2
CHEM 2205	Analytical Chemistry Laboratory	2
Credits		12
Semester 2		
EDU 470	Concurrent Student Teaching Seminar	2
EDU 480	Clinical Practice II	8
EDU 485	Classroom Management and Assessment Internship Seminar	2
Credits		12
Total Credits		126