



Name: _____ Student ID Number: _____

Candidates also complete a secondary education professional program. Endorsement courses require a cumulative GPA of 2.5 or better and a grade of C (2.0) or better for individual courses. Course substitutions **must be clearly noted below**.

Chemistry and Mathematics (103 - 121 Credits)

Choose either:

- CHEM 161 - General Chemistry I (5)
- CHEM 162 - General Chemistry II (5)
- CHEM 163 - General Chemistry III (5)
- CHEM 333 - Analytical Chemistry (5)

or

- CHEM 125 - General Chemistry I, Honors (5)
- CHEM 126 - General Chemistry II, Honors (5)
- CHEM 225 - General Chemistry III, Honors (5)

CHEM 461 - Physical Chemistry (4)

CHEM 462 - Physical Chemistry (4)

Choose either option A or B:

Option A:

- CHEM 251 - Elementary Organic Chemistry (5)
- CHEM 375 - Elements of Biochemistry (4)

Option B:

- CHEM 351 - Organic Chemistry (4)
- CHEM 352 - Organic Chemistry (4)
- CHEM 353 - Organic Chemistry (3)
- CHEM 354 - Organic Chemistry Laboratory I **and**
- CHEM 375 - Elements of Biochemistry (4) **or**
- CHEM 471 - Biochemistry I (4)
- CHEM 472 - Biochemistry II (4)
- CHEM 473 - Molecular Biology (3)

Choose either:

- MATH 124 - Calculus and Analytic Geometry I (5) and
- MATH 125 - Calculus and Analytic Geometry II (5)

OR

- MATH 134 - Calculus I Honors (5) and
- MATH 135 - Calculus II Honors (5)

OR

- MATH 138 - Accelerated Calculus (5)

Choose either:

- MATH 204 - Elementary Linear Algebra (4) &
- MATH 331 - Ordinary Differential Equations (4)

OR

- MATH 203 - Linear Algebra and Differential Equations I &
- MATH 303 - Linear Algebra and Differential Equations II (4)

MATH 224 - Multivariable Calculus and Geometry I (5)

MATH 309 - Introduction to Proof in Discrete Mathematics (4)

MATH 360 - Euclidean and Non-Euclidean Geometry (4)

MATH 419 - Historical Perspectives of Mathematics (3)

MATH 483 - Methods of Teaching Secondary Mathematics (4)

At least two of the following:

MATH 307 - Mathematical Computing (4)

MATH 341 - Probability and Statistical Inference (4)

MATH 410 - Mathematical Modeling (4)

PHYS 161 - Physics with Calculus I (5)

PHYS 162 - Physics with Calculus II (5)

PHYS 163 - Physics with Calculus III (5)

SCED 370 - Science and Society (3)

SCED 481 - Fundamentals of Teaching Science (2)

SCED 491 - Methods in Secondary Education for Science (5)

NES Chemistry Test Code 306

NES Mathematics Test Code 304

Outstanding Courses:

Endorsement Advisor Signature / Date