## Woodring College of Education <br> Endorsement Evaluation

## Chemistry and Mathematics with Option to Add Science

Name: $\qquad$ Student ID Number: $\qquad$

Candidates also complete a secondary education professional program. Grade required for endorsement courses: C (2.0) or better. Course substitutions must be clearly noted below.

## Chemistry and Mathematics

Choose one of the following series:
CHEM 161 - General Chemistry I
CHEM 162 - General Chemistry II
CHEM 163 - General Chemistry III
CHEM 333 - Analytical Chemistry
OR
CHEM 175 - General Chemistry I, Honors
CHEM 176 - General Chemistry II, Honors
CHEM 225 - General Chemistry III, Honors
$\square$ CHEM 461 - Physical Chemistry
CHEM 462 - Physical Chemistry
Choose either option A or B:
Option A:
CHEM 251 - Elementary Organic Chemistry
CHEM 375 - Elements of Biochemistry
Option B:
CHEM 351 - Organic Chemistry
CHEM 352 - Organic Chemistry
CHEM 353 - Organic Chemistry
CHEM 354-Organic Chemistry Laboratory I
and choose either:
CHEM 375 - Elements of Biochemistry
OR
CHEM 471 - Biochemistry I $\diamond$
CHEM 472 - Biochemistry II
CHEM 473 - Molecular Biology $\diamond$
Choose either:
MATH 124 - Calculus and Analytic Geometry I $\diamond$ and
MATH 125 - Calculus and Analytic Geometry II
OR
MATH 134 - Calculus I Honors $\diamond$ and
MATH 135 - Calculus II Honors
OR
MATH 138 - Accelerated Calculus

- Choose either:

MATH 204 - Elementary Linear Algebra and
MATH 331 - Ordinary Differential Equations
OR
MATH 203 - Linear Algebra and Differential Equations and

- MATH 224 - Multivariable Calculus and Geometry I
- MATH 309 - Introduction to Proof in Discrete Mathematics
MATH 360 - Euclidean and Non-Euclidean Geometry
- MATH 419 - Historical Perspectives of Mathematics
$\square$ MATH 483 - Methods of Teaching Secondary Mathematics
$\square$ At least two of the following:
MATH 307 - Mathematical Computing
MATH 341 - Probability and Statistical Inference
MATH 410 - Mathematical Modeling
- PHYS 161 - Physics with Calculus I
- PHYS 162 - Physics with Calculus II

P PHYS 163 - Physics with Calculus III

- SCED 370 - Science and Society
- SCED 481 - Fundamentals of Teaching Science
- SCED 491 - Methods in Secondary Education for Science

NES Chemistry Test Code 306
NES Mathematics Test Code 304

## Add Science (Optional)

You can add a science add-on endorsement by passing the NES Science Test Code 311 (Pathway 1).
You can be recommended by WWU, waive the OSPI fee, and get test preparation through taking the following coursework:
One course from:

- ASTR 103 - Intro to Astronomy
- ASTR 113 - Sun, Moon, and Planets
$\square$ BIOL 204 - Introduction to Evolution, Ecology and Biodiversity
$\square$ BIOL 205 - Introduction to Cellular and Molecular Biology
- BIOL 206 - Introduction to Organismal Biology
- GEOL 211 - Physical Geology
$\square$ GEOL 212 - Historical Geology
- NES Science Test Code 311

MATH 303 - Linear Algebra and Differential Equations
II
$\diamond$ These classes at WWU have associated prerequisites not listed in the above endorsement requirements. When planning your course of study, please attend to these. You are encouraged to talk with an advisor about how to do this.

- CHEM 471: BIOL 205
- CHEM 473: BIOL 321 or BIOL 323
- MATH 124: MATH 115 or MATH 118 with C- or better or suitable assessment score.
- MATH 134: MATH 115 or MATH 118 with A or better or suitable assessment score

Outstanding Courses:

