

SECONDARY SCIENCE ENDORSEMENT APPLICATION - CHEMISTRY PATHWAY

Application for the Utah State Board of Education

APPLICANT INFORMATION

Name: _____ CACTUS ID#: _____

E-mail: _____

PURPOSE

This application allows an educator to apply for the Chemistry Pathway Secondary Science Endorsements which includes the Science Core, Chemistry 1, and the Chemistry 2 endorsements. This application can be used to apply for one, two, or all three endorsements

Science Core Endorsement

This endorsement, when attached to a current Educator License, verifies that the individual has the skills and knowledge necessary to teach students three-dimensionally in a secondary science classroom and is required to teach Middle School Science Courses in Grades 6, 7, or 8. Additionally, this endorsement is required as a prerequisite to earn any high school Level-1 or Level-2 content specific science endorsement.

Chemistry 1 Endorsement

This endorsement, when attached to a current Secondary Education License, verifies that the individual has the skills and knowledge necessary to teach students in a secondary physical chemistry science classroom and is required to teach High School (9-12) General Chemistry Courses. This endorsement is required as a prerequisite to earn Secondary Chemistry 2 which is required for Advanced Chemistry (AP, CE, and IB) courses.

Chemistry 2 Endorsement

This endorsement, when attached to a current Secondary Education License, verifies that the individual has the skills and knowledge necessary to teach students in an advanced secondary physical chemistry science classroom and is required to teach Advanced Chemistry (AP, CE, and IB) and high school chemistry elective courses. Those with this endorsement can also teach all the courses a Chemistry 1 endorsed

educator can teach. NOTE: Advanced Chemistry (AP, CE, and IB) courses may also include additional requirements in order to be approved by the university or college board to teach.

ENDORSEMENT LEVEL

Professional endorsements will be awarded when all the requirement areas for that endorsement are met, including the prerequisite professional endorsements requirement areas. An associate endorsement will be awarded if one of the following options are completed for that endorsement as outlined below:

- Science Core
 - Complete at least 3 of the 7 requirement areas.
- Chemistry 1 Endorsement
 - Holds Professional Science Core endorsement
 - Major/Minor in Chemistry
 - Completed at least 5 of the 11 requirement areas
- Chemistry 2
 - Holds Professional Chemistry 1 Endorsement
 - Major in Chemistry
 - Completed at least 6 of the 13 requirement areas.

PRELIMINARY QUESTIONS

Endorsements Applying For: Which endorsements and endorsement level are you applying for? (Select all that apply)

- Associate Science Core
- Professional Science Core

- Associate Chemistry 1
- Professional Chemistry 1

- Associate Chemistry 2
- Professional Chemistry 2

Science Core Endorsement: A professional Science Core Endorsement meets requirement areas 1-7 of the Chemistry Endorsement Pathway. Do you have a Professional Science Core Endorsement?

- Yes, year completed _____
- No

Elementary Science Endorsement: A professional Elementary Science Endorsement meets requirement area 5 of the Chemistry Endorsement Pathway. Do you have a Professional Elementary Science Endorsement?

- Yes, Year Completed_____
- No.

Chemistry 1 Endorsement: A professional Chemistry 1 Endorsement meets requirement areas 8-11 of the Chemistry Endorsement Pathway. Do you have a Professional Chemistry 1 Endorsement?

- Yes, Year Completed_____
- No.

Middle School Praxis Exam: Did you pass the Middle School Science Praxis exam (5442) with a score of 152 or higher? Note: Praxis exam IS NOT required, but is one way to demonstrate competency for requirement areas 1-4.

- No
- Yes Score: _____ Year Taken: _____
- I passed an equivalent exam. Test Name: _____

Middle Grades NES Test: Did you pass the Middle Grades General Science (205) NES Test with a score of 220 or higher? Note: NES exam IS NOT required, but is one way to demonstrate competency for requirement areas 1-4.

- No
- Yes Score: _____ Year Taken: _____

Chemistry Praxis Exam: Did you pass the Chemistry Praxis exam (5246) with a score of 140 or higher? Note: Praxis exam IS NOT required, but is one way to demonstrate competency for requirement areas 8-11.

- No
- Yes Score: _____ Year Taken: _____
- I passed an equivalent exam. Test Name: _____

Chemistry NES Test: Did you pass the Chemistry (321) NES Test with a score of 220 or higher? Note: NES exam IS NOT required, but is one way to demonstrate competency for requirement areas 8-11.

- No
- Yes Score: _____ Year Taken: _____

College Major or Minor: Do you have a degree major or minor in Chemistry, Chemistry Education, Physical Science Education, or a Chemistry Variation (e.g., Biochemistry, Geochemistry, Physical Chemistry)? A degree major/minor IS NOT required but is one way to demonstrate competency for several requirement areas.

- No
- Yes University: _____ Major or minor? _____
Major/minor name: _____ Year: _____

Teaching Experience and Professional Learning: Have you taught either AP Chemistry or IB Chemistry for 3 years and attended the associated Professional Learning (i.e. AP Chemistry Summer Institute or IB DP Chemistry Workshop) with at least 2 years of teaching the course after the professional learning? Note: Teaching Experience and Professional Learning is NOT required but is one way to demonstrate competency for requirement areas 12 & 13.

- No
- Yes, I taught AP Chemistry for 3 years and attended 1 Chemistry Summer Institute
- Yes, I taught IB Chemistry for 3 years and attended 1 IB Chemistry Workshop

Course name: _____

Location: _____ Dates: _____

(*Attach documentation of completion)

ENDORSEMENT REQUIREMENT AREAS

Use the checkboxes below to indicate how each requirement area in the Chemistry Endorsement Pathway has been met. Only one demonstration of competency is needed per requirement area. For more information about the requirement areas, please see the [Science Core Endorsement Specs](#) for requirement areas 1-7, the [Chemistry 1 Endorsement Specs](#) for requirement areas 8-11 and the [Secondary Chemistry 2 Endorsement Specs](#) for requirement areas 12 and 13.

Science Core Requirement Areas

1. Earth Science Content Knowledge

- Professional Science Core Endorsement
- University Course in General Earth Science, Astronomy, Geology, or Meteorology

University: _____ Course code: _____

Course name: _____ Semester/Year: _____ Grade: _____

- Middle School Science Praxis Exam Passed
- Middle Grades General Science NES Test Passed

2. Life Science Content Knowledge

- Professional Science Core Endorsement
- University Course in General Biology

University: _____ Course code: _____

Course name: _____ Semester/Year: _____ Grade: _____

- Middle School Science Praxis Exam Passed
- Middle Grades General Science NES Test Passed

3. Chemistry Content Knowledge

- Professional Science Core Endorsement
- University Course in General Chemistry

University: _____ Course code: _____

Course name: _____ Semester/Year: _____ Grade: _____

- Middle School Science Praxis Exam Passed
- Middle Grades General Science NES Test Passed

4. Physics Content Knowledge

- Professional Science Core Endorsement
- University Course in General Physics

University: _____ Course code: _____

Course name: _____ Semester/Year: _____ Grade: _____

- Middle School Science Praxis Exam Passed
- Middle Grades General Science NES Test Passed

5. Three-Dimensional Science & Engineering Pedagogical Knowledge

- Professional Science Core Endorsement
- University Course in Three-Dimensional Science and Engineering Pedagogy

University: _____ Course code: _____

Course name: _____ Semester/Year: _____ Grade: _____

- Have a Professional Elementary Science Endorsement
- Microcredential Stack - [Three-Dimensional Science and Engineering](#)
(*Must include MIDAS Transcript)
- Approved USBE or District Course

Course name: _____ Year: _____

(*Must include MIDAS Transcript or other Documentation of Completion)

6. Science Education Teaching & Dispositions Knowledge

- Professional Science Core Endorsement
- University Course in Teaching Methods in Science

University: _____ Course code: _____

Course name: _____ Semester/Year: _____ Grade: _____

- Microcredential Stack - [Science Teaching Methods](#)
(*Must include MIDAS Transcript)

7. Science Classroom Lab Safety Knowledge

- Professional Science Core Endorsement
- University Course in Classroom Lab Safety

University: _____ Course code: _____

Course name: _____ Semester/Year: _____ Grade: _____

- Flinn Safety Certificate, District approved Safety Course, USBE Approved Safety Course

Course name: _____ Year: _____

(*Must include MIDAS Transcript or other Documentation of Completion)

Chemistry 1 Requirement Areas

8. Atoms, Bonds, & Reactions Content Knowledge

- Professional Chemistry 1 Endorsement
- University Course in Principles of Chemistry 1

University: _____ Course code: _____

Course name: _____ Semester/Year: _____ Grade: _____

- College Major or Minor in Chemistry, Chemistry Education, Physical Science Education, or a Chemistry Variation
- Chemistry Praxis Exam Passed
- Chemistry NES Test Passed

9. Equilibrium, Thermodynamics, & Electrochemistry Content Knowledge

- Professional Chemistry 1 Endorsement
- University Course in Principles of Chemistry 2

University: _____ Course code: _____

Course name: _____ Semester/Year: _____ Grade: _____

- College Major or Minor in Chemistry, Chemistry Education, Physical Science Education, or a Chemistry Variation
- Chemistry Praxis Exam Passed
- Chemistry NES Test Passed

10. Chemistry Laboratory Content Knowledge

- Professional Chemistry 1 Endorsement
- University Course in Chemistry Lab

University: _____ Course code: _____

Course name: _____ Semester/Year: _____ Grade: _____

- College Major or Minor in Chemistry, Chemistry Education, Physical Science Education, or a Chemistry Variation
- Chemistry Praxis Exam Passed
- Chemistry NES Test Passed

11. Integration with Life & Earth Science Content Knowledge

- Professional Chemistry 1 Endorsement
- University Course in one of the following 3 credit course options:
 - Bio or Organic Chemistry
 - Geochemistry
 - Physical Chemistry

University: _____ Course code: _____

Course name: _____ Semester/Year: _____ Grade: _____

- College Major or Minor in Chemistry, Chemistry Education, Physical Science Education, or a Chemistry Variation
- Chemistry Praxis Exam Passed
- Chemistry NES Test Passed

Chemistry 2 Requirement Areas

12. Advanced Quantitative Chemistry Lab Content Knowledge

- University Course in Analytical Chemistry (with Required Lab)

University: _____ Course code: _____

Course name: _____ Semester/Year: _____ Grade: _____

- College Major in Chemistry, Chemistry Education, or a Chemistry Variation
- Teaching Experience with AP/IP Chemistry and Professional Learning

13. Advanced Chemistry Content Knowledge

- Two University Courses in any two of the following Advanced/Applied Chemistry course options (In addition to the Integration with Life and Earth Science Course used to earn the Secondary Chemistry 1 Endorsement):
 - Biochemistry I and/or II
 - Geochemistry I and/or II
 - Organic Chemistry I and/or II
 - Physical Chemistry I and/or II
 - Other Upper Division (3000+) chemistry course

University: _____ Course code: _____

Course name: _____ Semester/Year: _____ Grade: _____

University: _____ Course code: _____

Course name: _____ Semester/Year: _____ Grade: _____

- College Major in Chemistry, Chemistry Education, or a Chemistry Variation
- Teaching Experience with AP/IP Chemistry and Professional Learning

APPLICANT'S CERTIFICATIONS

- I certify that the information contained in this application is true.
- *I have submitted any required documentation such as original transcripts, MIDAS transcripts, etc.
- I have sent electronic transcripts directly from the College/University clearinghouse to the USBE Licensing Department at transcripts@schools.utah.gov.

APPLICATION SUBMISSION

Please submit application online in the Utah Educator Licensing Application system, [Survey Monkey Apply](https://usbelicensing.smapply.us) (<https://usbelicensing.smapply.us>)