

CHEMISTRY: SECONDARY EDUCATION BA/BS

The Teacher Education program prepares candidates for certification in grades K-12. The Secondary Education program requires 27 credits of Education course work in professional foundations and studies and 13 credits during internship. Students apply for admission to the program after successfully completing nine credits of Education course work in professional foundations. During the course of the studies, candidates may be asked to reapply to the program if their GPA falls below 3.0.

Teaching endorsement areas are attached to a Standard Instructional Certificate (grades K-12), according to Idaho Teacher Certification standards. All endorsements require a minimum of 45 semester credits, with the exception of dual endorsements where 30 semester for a major endorsement and 20 semester credits for a minor endorsement is required. The following LC State areas are approved for teaching field majors: Biology, Chemistry, Communication Arts, Earth Science, English; Kinesiology-Physical Education K-12 and Health 6-12; Mathematics; Natural Sciences; Psychology; and Social Science with a History emphasis (see degree requirements for each major). Teacher candidates must successfully pass the related Praxis II exam in their teaching content area(s).

For marketability purposes, students are encouraged to pursue endorsements and minors in a second teaching field; consult with an advisor for the proper procedure. Secondary Education majors must have a content area advisor and a Secondary Education advisor.

Graduates from other colleges or universities seeking secondary teacher certification must fulfill all Secondary Education professional course work requirements in addition to meeting all academic major or minor teaching field requirements for subject area endorsement.

Students in the Teacher Education Certification program are expected to provide evidence through performance that they have met Idaho's requirements for certification and become dedicated and knowledgeable professionals, content specialists, competent educational designers, capable educational facilitators, insightful educational evaluators, reflective professionals, and culturally responsive professionals before being recommended for teacher certification.

Advising

Secondary Teacher Education candidates must have two advisors; one for their academic major and one for teacher certification.

General Education Requirements

| Code | Title | Credits |
|--|---|-----------|
| Written Communication | | |
| Select one of the following: | | 6.00 |
| ENGL-101 & ENGL-102 | WRITING AND RHETORIC I and WRITING AND RHETORIC II | |
| ENGL-109 | COLLEGE WRITING AND RESEARCH | |
| Oral Communication | | |
| Select one from the following: | | 3.00 |
| COMM-101 | FUNDAMENTALS OF ORAL COMMUNICATION | |
| COMM-203 | SMALL GROUP COMMUNICATION | |
| COMM-204 | PUBLIC SPEAKING | |
| Mathematical Ways of Knowing | | |
| Select one of the following: | | 3.00-5.00 |
| MATH-143 | COLLEGE ALGEBRA | |
| MATH-147 | COLLEGE ALGEBRA AND TRIGONOMETRY | |
| MATH-170 | CALCULUS I | |
| Humanistic & Artistic Ways of Knowing | | |
| Select one course from two categories: | | 6.00-8.00 |
| Literature | | |
| ENGL-175 | LITERATURE AND IDEAS | |
| ENGL-257 | WORLD CLASSICS | |
| ENGL-258 | INTERNATIONAL LITERATURE | |
| ENGL-260 | NATIVE AMERICAN LITERATURE | |
| ENGL-261 | MYTHOLOGIES | |
| Arts | | |
| ART-100 | INTRODUCTION TO ART | |
| HUM-101 | THE ART AND HISTORY OF THE MOTION PICTURE | |

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| HUM-150 | INTRODUCTION TO THE ARTS | |
| MUS-101 | SURVEY OF MUSIC | |
| MUS-102 | MUSIC IN AMERICA | |
| MUS-150 | WORLD MUSIC | |
| MUS-151 | HISTORY OF MUSICAL THEATER | |
| MUS-152 | HISTORY OF JAZZ AND POPULAR MUSIC STYLES | |
| THEA-101 | SURVEY OF THE THEATER | |
| Language | | |
| NP-101 | NEZ PERCE LANGUAGE AND CULTURE | |
| NP-102 | NEZ PERCE LANGUAGE AND HISTORY | |
| SPAN-101 | ELEMENTARY SPANISH I | |
| SPAN-102 | ELEMENTARY SPANISH II | |
| Scientific Ways of Knowing | | |
| CHEM-111 | PRINCIPLES OF CHEMISTRY I | 4.00 |
| Select one of the following: | | 4.00-5.00 |
| PHYS-111 | GENERAL PHYSICS I | |
| PHYS-211 | PHYSICS FOR SCIENTISTS AND ENGINEERS I | |
| Social & Behavioral Ways of Knowing | | |
| PSYC-205 | LIFESPAN DEVELOPMENTAL PSYCHOLOGY | 3.00 |
| Select one of the following: | | 3.00 |
| ANTH-102 | CULTURAL ANTHROPOLOGY | |
| ANTH-120 | WORLD PREHISTORY | |
| ANTH-170 | INTRODUCTION TO NATIVE AMERICAN STUDIES | |
| ECON-201 | PRINCIPLES OF MACROECONOMICS | |
| ECON-202 | PRINCIPLES OF MICROECONOMICS | |
| GEOG-102 | INTRODUCTION TO GEOGRAPHY | |
| HIST-101 | WORLD HISTORY I | |
| HIST-102 | WORLD HISTORY II | |
| HIST-111 | UNITED STATES HISTORY I | |
| HIST-112 | UNITED STATES HISTORY II | |
| HRPT-184 | DIVERSITY IN ORGANIZATIONS | |
| HRPT-185 | HUMAN RELATIONS IN ORGANIZATIONS | |
| POLS-101 | AMERICAN NATIONAL GOVERNMENT | |
| POLS-237 | INTERNATIONAL POLITICS | |
| POLS-285 | COMPARATIVE GOVERNMENT | |
| SOC-101 | INTRODUCTION TO SOCIOLOGY | |
| SOC-102 | SOCIAL PROBLEMS | |
| SS-184 | DIVERSITY IN ORGANIZATIONS | |
| SS-185 | HUMAN RELATIONS IN ORGANIZATIONS | |
| Diversity | | |
| Select one of the following: | | 3.00-4.00 |
| ANTH-102 | CULTURAL ANTHROPOLOGY | |
| ANTH-120 | WORLD PREHISTORY | |
| ANTH-170 | INTRODUCTION TO NATIVE AMERICAN STUDIES | |
| ANTH-360 | RACE AND ETHNICITY | |
| COMM-345 | INTERCULTURAL COMMUNICATION | |
| ENGL-258 | INTERNATIONAL LITERATURE | |
| ENGL-474 | NATIVE AMERICAN WRITTEN LITERATURE | |
| GEOG-102 | INTRODUCTION TO GEOGRAPHY | |
| HIST-101 | WORLD HISTORY I | |
| HIST-102 | WORLD HISTORY II | |
| HIST-111 | UNITED STATES HISTORY I | |

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| HIST-112 | UNITED STATES HISTORY II |
| HRPT-184 | DIVERSITY IN ORGANIZATIONS |
| ID-300C | ETHICS AND IDENTITY |
| KIN-220 | SOCIAL-CULTURAL ASPECTS OF SPORTS |
| NP-101 | NEZ PERCE LANGUAGE AND CULTURE |
| NP-102 | NEZ PERCE LANGUAGE AND HISTORY |
| POLS-285 | COMPARATIVE GOVERNMENT |
| SOC-101 | INTRODUCTION TO SOCIOLOGY |
| SPAN-101 | ELEMENTARY SPANISH I |
| SPAN-102 | ELEMENTARY SPANISH II |
| SPAN-201 | INTERMEDIATE SPANISH I |
| SPAN-202 | INTERMEDIATE SPANISH II |
| SS-184 | DIVERSITY IN ORGANIZATIONS |

Integrative Seminar: Ethics & Values

Select one of the following: 3.00

ID 300A - 300Z (see course descriptions for options)

ID-301A HELLS CANYON INSTITUTE

Foreign/Heritage Language

Select 16 credits of language if selecting Bachelor of Arts Degree 16.00

Total Credits 38.00-44.00

Program Requirements

Secondary certification candidates must meet the graduation requirements for their major and the Secondary Teacher Education Program and must have two advisors. (see below)

| Code | Title | Credits |
|--------------------------|--|-----------|
| Chemistry Program | | |
| CHEM-112 | PRINCIPLES OF CHEMISTRY II | 4.00 |
| CHEM-300 | PHYSICAL CHEMISTRY I WITH LABORATORY | 4.00 |
| CHEM-306 | PHYSICAL CHEMISTRY II | 3.00 |
| CHEM-325 | QUANTITATIVE ANALYSIS | 3.00 |
| CHEM-325L | QUANTITATIVE ANALYSIS LABORATORY | 2.00 |
| CHEM-371 | ORGANIC CHEMISTRY I | 3.00 |
| CHEM-372 | ORGANIC CHEMISTRY II | 3.00 |
| CHEM-373 | ORGANIC CHEMISTRY I LAB | 1.00 |
| CHEM-376 | ORGANIC CHEMISTRY II LAB | 2.00 |
| CHEM-454 | INSTRUMENTAL ANALYSIS | 5.00 |
| CHEM-463 | INORGANIC CHEMISTRY | 4.00 |
| CHEM-481 | BIOCHEMISTRY I | 4.00 |
| MATH-170 | CALCULUS I (Required if not taken as core) | |
| MATH-175 | CALCULUS II | 4.00 |
| PHYS-112 | GENERAL PHYSICS II | 4.00-5.00 |
| or PHYS-212 | PHYSICS FOR SCIENTISTS AND ENGINEERS II | |

Secondary Education Certificate

See Secondary Education Certificate Requirements below

Total Credits 46.00-47.00

¹ See Catalog section "Teacher Education Division: Secondary Teacher Certification" regarding certification requirements for this major. Selective course choices could be affected.

Secondary Education Certificate Requirements

Application for admission to the Teacher Education Program is required after successful completion of the first three Phase I courses.

| Code | Title | Credits |
|--|---|--------------|
| Phase I - Professional Foundations of Education | | |
| ED-214 | PRINCIPLES OF EDUCATION ¹ | 3.00 |
| ED-225 | TECHNOLOGIES FOR TEACHING, K-12 | 3.00 |
| ED-318 | ASSESSMENT OF LEARNING ¹ | 3.00 |
| ED-321 | EDUCATIONAL PSYCHOLOGY ¹ | 3.00 |
| ED-345 | CULTURALLY RELEVANT TEACHING | 3.00 |
| SE-322 | INCLUSION STRATEGIES K-12 (may be taken in Phase I or Phase II) | 3.00 |
| Phase II - Professional Studies in Education | | |
| ED-445 | INSTRUCTIONAL STRATEGIES AND CLASSROOM MANAGEMENT, 6-12 | 3.00 |
| ED-447 | TEACHING METHODS IN THE CONTENT AREA | 2.00 |
| RE-309 | DISCIPLINARY LITERACY | 3.00 |
| Phase III - Instructional Methods in Education | | |
| ED-452 | INTERNSHIP SEMINAR | 1.00 |
| ED-460 | PROFESSIONAL INTERNSHIP IN EDUCATION 6-12 | 12.00 |
| Total Credits | | 39.00 |

¹ Additional requirements must be met for teacher certification. See your Teacher Education Division advisor for details.

No grade lower than a "C-" will be accepted in any General Education core, Content Major, or 200-level Professional Foundations course. No grade lower than a "B-" will be accepted in any 300- or 400-level courses for Secondary Education.

A minimum cumulative GPA of 3.0 is required for admission into the Secondary Teacher Education Program. Candidates must also maintain a 3.0 cumulative GPA in their content area classes.

Sequential Plan of Study

| Course | Title | Credits |
|-------------------------|--|--------------------|
| First Year | | |
| Fall | | |
| ENGL-101 | WRITING AND RHETORIC I | 3.00 |
| CORE | Oral Communication | 3.00 |
| CHEM-111 | PRINCIPLES OF CHEMISTRY I | 4.00 |
| CORE | MATH-143, MATH-147 or MATH-170 | 3.00-5.00 |
| Credits | | 13.00-15.00 |
| Spring | | |
| ENGL-102 | WRITING AND RHETORIC II | 3.00 |
| CORE | Humanistic & Artistic Ways of Knowing | 3.00 |
| PSYC-205 | LIFESPAN DEVELOPMENTAL PSYCHOLOGY | 3.00 |
| CHEM-112 | PRINCIPLES OF CHEMISTRY II | 4.00 |
| Credits | | 13.00 |
| Second Year | | |
| Fall | | |
| CHEM-300 | PHYSICAL CHEMISTRY I WITH LABORATORY | 4.00 |
| CORE | Diversity | 3.00 |
| CORE | Humanistic & Artistic Ways of Knowing | 3.00 |
| PHYS-111 or PHYS-211 | GENERAL PHYSICS I or PHYSICS FOR SCIENTISTS AND ENGINEERS I | 4.00-5.00 |
| MATH-175 | CALCULUS II | 4.00 |
| Credits | | 18.00-19.00 |
| Spring | | |
| CORE | Integrative Seminar: Ethics & Values | 3.00 |
| CORE | Social & Behavioral Ways of Knowing | 3.00 |

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|-------------------------|--|--------------------|
| PHYS-112 or PHYS-212 | GENERAL PHYSICS II or PHYSICS FOR SCIENTISTS AND ENGINEERS II | 4.00-5.00 |
| CHEM-306 | PHYSICAL CHEMISTRY II | 3.00 |
| CHEM-325 | QUANTITATIVE ANALYSIS | 3.00 |
| Credits | | 16.00-17.00 |
| Third Year | | |
| Fall | | |
| CHEM-371 | ORGANIC CHEMISTRY I | 3.00 |
| CHEM-373 | ORGANIC CHEMISTRY I LAB | 1.00 |
| CHEM-454 | INSTRUMENTAL ANALYSIS | 5.00 |
| CHEM-463 | INORGANIC CHEMISTRY | 4.00 |
| Credits | | 13.00 |
| Spring | | |
| CHEM-372 | ORGANIC CHEMISTRY II | 3.00 |
| CHEM-376 | ORGANIC CHEMISTRY II LAB | 2.00 |
| CHEM-481 | BIOCHEMISTRY I | 4.00 |
| Credits | | 9.00 |
| Total Credits | | 82.00-86.00 |

Graduates with a BA/BS Chemistry: Secondary Education go on to obtain careers in a variety of fields:

- Secondary Chemistry Teacher (6-12)
- Adult and Continuing Education
- Research
- Lab Technician
- Training Specialist
- Business and Industry
- Instructional Coach