Natural Science: Secondary Education BA/BS

# **NATURAL SCIENCE: 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 credits 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 education.

### **General Education Requirements**

ochiciai Educatio	in requirements	
Code	Title	Credits
Written Communication		
Select one of the following:		6.00
ENGL-101	WRITING AND RHETORIC I	
& ENGL-102	and WRITING AND RHETORIC II	
ENGL-109	COLLEGE WRITING AND RESEARCH	
Oral Communication		
Select one from the following	j:	3.00
COMM-101	FUNDAMENTALS OF ORAL COMMUNICATION	
COMM-203	SMALL GROUP COMMUNICATION	
COMM-204	PUBLIC SPEAKING	
Mathematical Ways of Knowi	ing	
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 o	of Knowing	
Select one course from two c	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	

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		
Select two of the following:		8.00
CHEM-111	PRINCIPLES OF CHEMISTRY I	
PHYS-111	GENERAL PHYSICS I	
or PHYS-211	PHYSICS FOR SCIENTISTS AND ENGINEERS I	
Social & Behavioral Ways of	Knowing	
Select one course from two	disciplines:	6.00
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	
PSYC-101	INTRODUCTION TO GENERAL PSYCHOLOGY	
PSYC-205	LIFESPAN DEVELOPMENTAL PSYCHOLOGY	
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	

<b>Total Credits</b>		38.00-43.00
Select 16 credits of la	anguage if selecting Bachelor of Arts Degree	16.00
Foreign/Heritage Lan	guage	
ID-301A	HELLS CANYON INSTITUTE	
ID 300A - 300Z (se	e course descriptions for options)	
Select one of the follo	owing:	3.00
Integrative Seminar: I	Ethics & Values	
SPAN-202	INTERMEDIATE SPANISH II	
SPAN-201	INTERMEDIATE SPANISH I	
SPAN-102	ELEMENTARY SPANISH II	
SPAN-101	ELEMENTARY SPANISH I	
SOC-101	INTRODUCTION TO SOCIOLOGY	
POLS-285	COMPARATIVE GOVERNMENT	
NP-102	NEZ PERCE LANGUAGE AND HISTORY	
NP-101	NEZ PERCE LANGUAGE AND CULTURE	
KIN-220	SOCIAL-CULTURAL ASPECTS OF SPORTS	
ID-300C	ETHICS AND IDENTITY	
HRPT-184	DIVERSITY IN ORGANIZATIONS	
HIST-112	UNITED STATES HISTORY II	
HIST-111	UNITED STATES HISTORY I	

# **Program Requirements**

LUOTIII

LINUTED OTATEO LUOTODVI

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
Natural Science Program		
BIOL-181	ECOLOGY, EVOLUTION, DIVERSITY OF LIFE	4.00
BIOL-182	CONCEPTS IN CELLULAR MECHANISMS	4.00
CHEM-112	PRINCIPLES OF CHEMISTRY II	4.00
GEOL-101	PHYSICAL GEOLOGY	4.00
or GEOL-120	INTRODUCTION TO EARTH SYSTEMS	
GEOL-202	HISTORICAL GEOLOGY	4.00
PHYS-111	GENERAL PHYSICS I	4.00
PHYS-112	GENERAL PHYSICS II	4.00
PHYS-205	DESCRIPTIVE ASTRONOMY	4.00
MATH-144	TRIGONOMETRY	2.00
Select one of the following:		4.00
CS-108	INTRODUCTION TO COMPUTER SCIENCE	
CS-111	FOUNDATIONS OF PROGRAMMING	
Area of Emphasis		
Select 12 credits from one e	mphasis below	12.00
<b>Secondary Education Certifi</b>	cate	
See Secondary Education Co	ertificate Requirements below	
Total Credits		50.00

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

# **Areas of Emphasis**

### **Biology Emphasis**

Code	Title	Credits
BIOL-213	PLANT AND ANIMAL FORM AND FUNCTION	4.00
Select 8 credits from	m BIOL from the 200/300/400 level	8.00
Total Credits		12.00

#### **Chemistry Emphasis**

, ,		
Code	Title	Credits
CHEM-371	ORGANIC CHEMISTRY I	3.00
CHEM-373	ORGANIC CHEMISTRY I LAB	1.00
Select 4 credits from CHE	EM from the 300/400 level	4.00
Select one of the followin	ng:	4.00
CHEM-325	QUANTITATIVE ANALYSIS	
CHEM-481	BIOCHEMISTRY I	
Total Credits		12.00

#### **Earth Science Emphasis**

Code	Title	Credits
Select 4 credits from GEOL of	or GIS course numbered 200 or higher	4.00
Select 8 credits from GEOL of	course numbered 300 level or higher	8.00
Total Credite		12.00

## **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 Found	lations of Education	
ED-214	PRINCIPLES OF EDUCATION 1	3.00
ED-225	TECHNOLOGIES FOR TEACHING, K-12	3.00
ED-318	ASSESSMENT OF LEARNING <sup>1</sup>	3.00
ED-321	EDUCATIONAL PSYCHOLOGY <sup>1</sup>	3.00
ED-345	CULTURALLY RELEVANT TEACHING	3.00
SE-322	INCLUSION STRATEGIES K-12	3.00
Phase II - Professional Studi	es 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 Meth	nods in Education	
ED-452	INTERNSHIP SEMINAR	1.00
ED-460	PROFESSIONAL INTERNSHIP IN EDUCATION 6-12	12.00
Total Credits		39.00

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 in 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**

	Total Credits	85.00-87.00
	Credits	6.00
Program Requirement	Select Emphasis course	3.00
Program Requirement	Select Emphasis course	3.00
Spring		
	Credits	19.00
Program Requirement	Select Emphasis course	3.00
PHYS-205	DESCRIPTIVE ASTRONOMY	4.00
PHYS-112	GENERAL PHYSICS II	4.00
PHYS-111	GENERAL PHYSICS I	4.00
Fall CHEM-112	PRINCIPLES OF CHEMISTRY II	4.00
Third Year		
Third Vacu	Credits	14.00
NS-150	INTRODUCTION TO NATURAL SCIENCES	3.00
or CS-111	or FOUNDATIONS OF PROGRAMMING	2.22
CS-108	INTRODUCTION TO COMPUTER SCIENCE	4.00
GEOL-202	HISTORICAL GEOLOGY	4.00
CORE	Integrative Seminar. Ethics & Values	3.00
Spring	Credits	14.00
or GEOL-120	or INTRODUCTION TO EARTH SYSTEMS	
GEOL-101	PHYSICAL GEOLOGY	4.00
CHEM-111	PRINCIPLES OF CHEMISTRY I	4.00
CORE	Diversity	3.00
CORE	Humanistic & Artistic Ways of Knowing	3.00
Fall		
Second Year	Geuts	16.00
Program Requirement	Select Emphasis course  Credits	16.00
		3.00
CORE ENGL-102	Social & Behavioral Ways of Knowing WRITING AND RHETORIC II	3.00 3.00
CORE	Humanistic & Artistic Ways of Knowing	3.00
BIOL-182	CONCEPTS IN CELLULAR MECHANISMS	4.00
Spring		
	Credits	16.00-18.00
PSYC-205	LIFESPAN DEVELOPMENTAL PSYCHOLOGY	3.00
ENGL-101	WRITING AND RHETORIC I	3.00
CORE	Oral Communication	3.00
CORE	MATH-143 or MATH-147	3.00-5.00
BIOL-181	ECOLOGY, EVOLUTION, DIVERSITY OF LIFE	4.00
Fall		
First Year		
Course	Title	Credits

# **Secondary Education Certificate Requirements**

Course	Title	Credits
First Year		
Fall		
ED-214	PRINCIPLES OF EDUCATION	3.00
ED-225	TECHNOLOGIES FOR TEACHING, K-12	3.00

#### Natural Science: Secondary Education BA/BS

ED-318	ASSESSMENT OF LEARNING	3.00
ED-321	EDUCATIONAL PSYCHOLOGY	3.00
ED-345	CULTURALLY RELEVANT TEACHING	3.00
	Credits	15.00
Spring		
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
SE-322	INCLUSION STRATEGIES K-12	3.00
	Credits	11.00
Second Year		
Fall		
ED-452	INTERNSHIP SEMINAR	1.00
ED-460	PROFESSIONAL INTERNSHIP IN EDUCATION 6-12	12.00
	Credits	13.00
	Total Credits	39.00

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

- Secondary Science Teacher (6-12)
- Adult and Continuing Education
- Training Specialist
- · Business and Industry
- Research

6

- Lab Technician
- · Instructional Coach