

LIBERAL STUDIES (BS)

Offered at: San Luis Obispo Campus and Cuesta College

The Department of Liberal Studies ensures that prospective elementary teachers have excellent content foundations in all subject matters, deep understanding of effective teaching methods and multiple opportunities to reflect on their learning and teaching. The department does this by providing students the opportunity to develop (1) broad-based proficiencies in multiple fields including, but not limited to: science, mathematics, language arts, social studies, technologies, and the fine and performing arts; (2) a sophisticated appreciation of the inter-relatedness of multiple disciplines as they are brought to bear on large historical and contemporary themes; and (3) readiness to serve a diverse and rapidly changing student population.

The BS Liberal Studies degree directly addresses California's need to produce more and better-trained elementary school teachers. LS graduates will be especially well prepared in the "high-need" teaching areas of science, mathematics, and reading. Students have the opportunity to earn a BS in four years including education classes that are pre-requisites to entering Cal Poly's multiple subject credential program.

A depth of study is required to earn a BS at Cal Poly. Liberal Studies majors select one of the following concentrations or listed minors that count towards a concentration. Students may also choose an individualized course of study with prior approval from the department chair.

Liberal Studies students may take any minor at Cal Poly; however, only the minors listed below will count towards a concentration.

Minors that can be taken in place of a concentration

- Ethnic Studies
- Music
- Spanish

Students in the Liberal Studies major will complete pre-requisite courses for the Cal Poly Multiple Subject teaching credential program. A Multiple Subject teaching credential requires one additional year. Application to credential programs is done during the last two quarters of the BS Liberal Studies degree. Visit Cal Poly's Multiple Subject Teaching Credential Program (<https://soe.calpoly.edu/content/multiple-subject/>) for more information.

Concentrations

Environmental Education

Offered at: San Luis Obispo Campus

Environmental Education connects students to nature through a variety of experiences and links social, political, and economic factors to help citizens make well-informed decisions about the environment and climate change. Courses in this concentration are interdisciplinary and structured to support the development of environmental literacy, address interrelated issues, and the impacts to society and the world at large.

Human Development

Offered at: San Luis Obispo Campus

The Human Development concentration provides students with a broad foundation covering a range of issues. Courses focus on psychological, sociological, and emotional development across the lifespan of humans. It also complements professional training and enhances personal development and interpersonal effectiveness. This concentration provides knowledge and skills that can be applied to real world settings such as families, schools, and work places.

Mathematics

Offered at: San Luis Obispo Campus

Mathematics as a discipline is structured around conceptual categories of numbers and quantity, algebra, functions, modeling, geometry and probability and statistics. Knowledge in this area is unified through context, coherence, and tasks that develop mathematical "habits of mind." Courses in this concentration are structured for higher mathematics practices and content to support college and career pathways.

This concentration is aligned to the California Commission on Teacher Credentialing requirements for a Supplementary Authorization in Mathematics that can be added to your future credential. See a concentration advisor for more information.

English

Offered at: San Luis Obispo Campus

The English language as a discipline is structured around concepts of rhetoric and grammar as they are used to express creative thought orally and in writing. Knowledge in these areas is generated by a study of current and historical rules of rhetoric, grammar and of current and historical works of literature. The term "creative thought" includes poetry, theater, narration and exposition in both oral and written form.

This concentration is aligned to the California Commission on Teacher Credentialing requirements for a Supplementary Authorization in English that can be added to your future credential. See a concentration advisor for more information.

Science

Offered at: San Luis Obispo Campus

The discipline of science is structured around the understanding of patterns and relationships in the natural world through evidence-based reasoning. This concentration includes courses in *all general sciences*, with some flexibility for choosing specific topics of interest. Courses will help the student engage with scientific knowledge and the methods scientists use to attain that knowledge.

Students are required to complete a one-year sequence of courses in at least one of the following sciences: chemistry, geosciences, or physics. This requirement may include an extension of major courses, such as the physical science series.

This concentration is aligned to the California Commission on Teacher Credentialing requirements for a Supplementary Authorization in Science that can be added to your future credential. See a concentration advisor for more information.

Social Science

Offered at: San Luis Obispo Campus

The Social Sciences are a variety of academic fields that center around the study of human beings, both as individuals and as members of groups. In this concentration, students use ethnic studies, history, sociology, political science, and geography to develop an in-depth and sophisticated understanding of human society and behavior.

This concentration is aligned to the California Commission on Teacher Credentialing requirements for a Supplementary Authorization in Social Science that can be added to your future credential. See a concentration advisor for more information.

Teaching English to Speakers of Other Languages

Offered at: San Luis Obispo Campus

The knowledge and ability to effectively teach a second language is dependent on Linguistics, the scientific study of a language. Coursework in this concentration covers theoretical, methodological and pedagogical issues in second language teaching and learning. A variety of concepts within both theoretical and applied linguistics are developed. Additional coursework is required for certification and students are encouraged to begin taking courses early in their Junior year. Meet with the Teaching English to Speakers of Other Languages (TESOL) program advisor for more information.

Individualized Course of Study

Offered at: San Luis Obispo Campus and Cuesta College

With department chair approval, students may select one of the minors listed below or pursue a course of study which meets their individual needs and interests; this must be initiated early and all courses must be pre-approved. An individualized course of study consists of 12-14 units with at least one course at the 3000-4000 (upper-division) level. Courses are selected by the student in consultation with an advising faculty member. The list of courses is a contract between the student and the Department.

Program Learning Objectives

1. Examine the importance of the physical, social and cognitive development of children and their application to learning.
2. Demonstrate subject matter competency in the following domains: Reading, Language and Literacy, History and Social Science, Mathematics, Science, Visual and Performing Arts, Physical Education and Human Development.
3. Examine and reflect on how knowledge is developed and organized through best teaching and learning practices specific to each domain, with a focus on metacognition.
4. Demonstrate effective oral, written and interpersonal communication skills in a variety of contexts including the use of appropriate technology.
5. Integrate the content of one discipline into another through the development of projects across subject matter areas.
6. Synthesize information and integrate experiences that promote personal and professional growth in the field of education.
7. Demonstrate ability to self-reflect, engage with diverse populations, demonstrate cultural humility, practice inclusion, and advance principles of social justice, equity and ethical practice.

Degree Requirements and Curriculum

In addition to the program requirements listed on this page, students must also satisfy requirements outlined in more detail in the Minimum Requirements for Graduation (<https://catalog.calpoly.edu/academic-standards-policies/general-requirements-bachelors-degree/#generaleducationtext>) section of this catalog, including:

- 40 units of upper-division courses
- 2.0 GPA

- Graduation Writing Requirement (GWR)
- U.S. Cultural Pluralism (USCP)

Note: Up to 4 units of credit/no credit grading may be selected for courses in Major, Support, or Concentration. In addition, no more than 12 units of cooperative or internship courses can count towards your degree requirements.

Code	Title	Units
MAJOR COURSES		
LS 1201	Orientation to Liberal Studies	1
LS 2230	Field Experience in the Elementary Classroom I	2
LS 3250	Field Experience in the Elementary Classroom II	2
LS 2255	Children's Literature in a Diverse Society (3B) ¹	3
LS 2370	Performing Arts for Children: Theory and Practice (3A) ¹	3
LS 3211	Arts in the Elementary Classroom	3
LS 3214	Constitutional Issues and Social/Historical Foundations of U.S. and California Education	4
LS 3301	Liberal Studies Career Preparation	1
LS 3310	Storytelling: Modern Applications of Traditional Narrative	3
Select from the following:		3
LS 4411	Advanced History/Social Sciences Integration for the K-8 Classroom	
LS 4412	Advanced Arts Integration for the K-8 Classroom	
LS 4413	Advanced Science/Engineering Integration for the K-8 Classroom	
LS 4461	Senior Project Seminar	3
or LS 4462	Senior Project Research	
Concentration or Individualized Course of Study		
(See list of Concentrations and Individualized Course of Study below)		12-14
SUPPORT COURSES		
BIO 3210	Biology of Plants and Animals for Future Teachers	4
EDUC/CD 2207	Children's Learning and Development in Educational Settings	3
EDUC 4427	Culturally Responsive Methods and Inquiry for Teaching Emergent Bilinguals	3
EDUC 4440	Educating Individuals with Exceptional Needs	3
ENGL 3391	Applied Linguistics	3
HIST 2201	United States History to 1877 (4A) ¹	3
HIST 2210	World History to 1800 (4B) ¹	3
KINE 3310	Concepts and Applications in Elementary Physical Education	3
MATH 3481	Mathematics for Elementary Teaching I	4
MATH 3482	Mathematics for Elementary Teaching II	4
MATH 3483	Mathematics for Elementary Teaching III	3
PHIL 2230	Philosophical Classics: Knowledge and Reality	3
or PHIL 2231	Philosophical Classics: Ethics and Political Philosophy	
PSC 1101	Physical Science for Elementary Educators I (5A & 5C) ¹	4
PSC 1102	Physical Science for Elementary Educators II	4
PSY 2201	Introductory Psychology	3
Select from the following: (2) ¹		3
STAT 1000	Statistical and Data Literacy	
STAT 1110	Applied Statistical Concepts and Methods	
GENERAL EDUCATION (GE)		
(See GE program requirements below)		24
FREE ELECTIVES		
Free Electives		1-3
Total Units		120

¹ Required in Major or Support; also satisfies General Education (GE) requirement.

² If a General Education (GE) course is used to satisfy a Major or Support requirement, additional units of Free Electives may be needed to complete the total units required for the degree.

Concentrations

Environmental Education

Code	Title	Units
REQUIRED COURSES		
Cultural and Social		
Select from the following: ¹		3-4
BOT 3311	Plants, People and Civilization	
ERSC/GEOG 3325	Climate and Humanity	
ES 3360	Indigeneity and the Land	
GEOG 1150	Human Geography	
GEOG/SCM 3350	The Global Environment	
GEOG 3370	Geography of Latin America	
GEOG 3380	Geography of the Caribbean	
HIST 3311	Comparative World Environmental History and Sustainability	
PHIL 3340	Environmental Ethics	
PSC 3320	Energy, Society, and the Environment	
Ecological and Environmental		
Select from the following: ¹		3-4
BIO 1114	Plant Diversity and Ecology	
BIO 2217	Wildlife Conservation Biology	
BOT 3326	Plant Ecology	
NR 3310	Global Climate Change	
PSC 2201	Physical Oceanography	
Education and Communication		
Select from the following:		3
COMS 3390	Environmental Communication	
LS 3380	Education Apprenticeship Needs to be taken for 3 units	
LS 4411	Advanced History/Social Sciences Integration for the K-8 Classroom	
LS 4412	Advanced Arts Integration for the K-8 Classroom	
LS 4413	Advanced Science/Engineering Integration for the K-8 Classroom LS 4412 or LS 4411 or LS 4412 also required in major	
MSCI 4440	Communicating Ocean Sciences to Informal Audiences	
NR/EIM 3328	Environmental Leadership and Community Engagement	
UNIV/SCM/AG/ISLA 3330	Cal Poly Land: Nature, Technology, and Society	
Capstone		
Select from the following:		3
SCM/NR 3316	Environmental Literacy: An Integrative STEM Approach	
SCM 3360	Selected Environmental Issues of California's Central Coast	
Total Units		12

¹ Units in excess of total will be applied towards major's free electives.

Human Development

Code	Title	Units
REQUIRED COURSES		
Applications to Education and Advocacy		
Select from the following: ¹		3-4
CD 3350	Developmental Science in Education	
CD 3351	Learning in Out-of-School Time	

CD/PSY 3356	Child and Adolescent Mental Health	
CD/PSY 4460	Child Abuse and Neglect	
PSY 3318	Psychology of Aging	
PSY 3320	Health Psychology	
PSY 3325	Introduction to Positive Psychology	
PSY 3350	Teamwork	
PSY 3357	Cognition	
Child Development and Growth		
Select from the following:		4
CD 3304	Infant and Toddler Development	
CD 3305	Early and Middle Childhood Development	
CD/PSY 3306	Adolescence	
PSY/WGQS 3324	Psychology of Gender	
Social Context and Relationships		
Select from the following: ¹		3-4
CD 2254	Child, Family, and Community	
CD/PSY 4417	Interpersonal Relationships in Childhood and Adolescence	
CD 4424	Children's Development in Diverse Cultures	
LS 3350	Identity and Equity in American Schools	
PSY 2205	Personality	
PSY 2240	Biopsychology	
Child Development		
Select any CD course		2
Total Units		12

¹ Units in excess of total will be applied towards major's free electives.

Mathematics

Code	Title	Units
REQUIRED COURSES		
MATH 1261	Calculus I	4
MATH 1262	Calculus II	4
MATH 2031	Transition to Advanced Mathematics	3
Select from the following:		3
MATH 1151	Linear Algebra	
MATH 3011	History of Mathematics	
MATH 3051	Combinatorics I	
MATH 3055	Graph Theory	
MATH 3111	Number Theory	
MATH 3511	Euclidean Geometry	
MATH 3971	Technology in Mathematics Education	
STAT 3710	Teaching Statistics: Pedagogy, Content, Technology, and Assessment	
Total Units		14

English

Code	Title	Units
REQUIRED COURSES		
ENGL 3311	Writing With Style	3
ENGL 3392	Reading Instruction for the Teaching of Young Adult Literature	4
ENGL 3393	Theory and Practice of Tutoring Writing	4
or ENGL 4424	Teaching English Language Arts in Secondary Schools	

Approved Electives

Select from the following: 3

American Literature

ENGL 3340	Intermediate U.S. Literature: Beginnings to 1865
ENGL 3341	U.S. Literature: 1865 to 1914
ENGL 3342	U.S. Literature: 1914 to 1956
ENGL 3343	U.S. Literature: 1956 to Present
ENGL 3345	Women Writers of the Twentieth and Twenty-First Centuries
ENGL 3346	Multiethnic Literature of the U.S.
ENGL 3347	African American Literature

British Literature

ENGL 3330	British Literature: Beginnings to 1485
ENGL 3331	British Literature: 1485 to 1660
ENGL 3332	British Literature: 1660 to 1798
ENGL 3333	British Literature: 1798 to 1832
ENGL 3334	British Literature: 1832 to 1914
ENGL 3335	British Literature: 1914 to Present
ENGL 3339	Introduction to Shakespeare

Modern English

ENGL 3350	The Modern Novel
ENGL 3351	Modern Poetry

Total Units 14

Science

Code	Title	Units
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REQUIRED COURSES

Select from the following: ^{1, 2} 7-8

Chemistry

CHEM 1110	World of Chemistry
CHEM 1112	Chemistry in Context
CHEM 1120	Fundamentals of Chemical Structure and Properties
CHEM 1122	Fundamentals of Chemical Reactivity
CHEM 2240	Organic Chemistry: Fundamentals and Applications

Physics

PHYS 1111	Contemporary Physics for Nonscientists
PHYS 1121	College Physics I
PHYS 1123	College Physics II
PHYS 1141	General Physics I

Approved Electives

Select from the following: ^{2, 3} 4-6

ASTR 1101	Introduction to the Solar System
ASTR 1102	Introduction to Stars and Galaxies
ASTR 3324	Longitude, Navigation, and Timekeeping
BIO 1114	Plant Diversity and Ecology
BIO 2231	Human Anatomy and Physiology I
BIO 2232	Human Anatomy and Physiology II
BIO 3312	Human Genetics
BIO 3315	Biology of Cancer
BIO 3318	Genetic Engineering Technology
BIO/PSC 4424	Teaching Science in Secondary Schools
BOT 1121	General Botany
BOT 3311	Plants, People and Civilization
BOT 3326	Plant Ecology

CHEM 1120	Fundamentals of Chemical Structure and Properties
CHEM 1122	Fundamentals of Chemical Reactivity
CHEM 2240	Organic Chemistry: Fundamentals and Applications
GEOL 2203	The Geologic Record: Fossils and the History of Life
GEOL 2240	Physical Geology
LS 3305	Project Based Learning in STEM Education
MCRO 2221	Introduction to Microbiology
MCRO 3342	Public Health Microbiology
MCRO 4421	Food Microbiology
MSCI 1111	The Oceans
MSCI 4440	Communicating Ocean Sciences to Informal Audiences
NR 3306	Natural Resource Ecology and Habitat Management
PHYS 1111	Contemporary Physics for Nonscientists
PHYS 1121	College Physics I
PHYS 1123	College Physics II
PHYS 1141	General Physics I
PHYS 3330	Teaching Physics
PSC 2201	Physical Oceanography
PSC 3320	Energy, Society, and the Environment
PSC 3391	Engaging in Sustainable Global Development
SCM/ENGR 3302	The Learn By Doing Lab Teaching Practicum
SCM/NR 3316	Environmental Literacy: An Integrative STEM Approach
SCM 3360	Selected Environmental Issues of California's Central Coast
SCM 3368	Theory and Practice of STEM Tutoring

Total Units
12

- ¹ A minimum of 3 units in CHEM is required. A two-course sequence in Chemistry fulfills the authorization requirement; a Physics course is not needed if this sequence is completed.
- ² Courses can only be used once for major degree credit.
- ³ Units in excess of total will be applied towards major's free electives.

Social Science

Code	Title	Units
REQUIRED COURSES		
California History		
HIST 2208	Survey of California History	3
U.S. Government		
Select from the following:		3
POLS 1112	U.S. and California Government	
POLS 3310	Politics of Race, Class, Gender, and Sexuality in the U.S.	
POLS 3315	The U.S. Presidency	
POLS 3319	U.S. Congress	
POLS 3348	Early U.S. Political Thought	
POLS 3349	Contemporary U.S. Political Thought	
Geography		
GEOG 1150	Human Geography	3
or GEOG 3308	Global Geography	
Ethnic Studies, History, Sociology, Women, Gender & Queer Studies Electives		
Select from the following: ¹		3-4
ES 2253	Introduction to American Indian Studies	
ES 2254	Introduction to African American Studies	
ES 2255	Introduction to Latina/o/x Studies	
ES 2256	Introduction to Asian American Studies	

ES 3310	Hip-Hop, Poetics, and Politics
ES 3311	Beyonce: Race, Feminism, and Politics
ES 3312	Race and Media Studies
ES 3350	Gender, Race, Culture, Science, and Technology
ES 3380	Critical Race Theory
ES 3381	Social Constructions of Whiteness
HIST 3307	Modern European Thought and Culture
HIST 3310	East Asian Cultures and Civilizations
HIST 3322	Modern United States History
HIST 3313	Modern Middle East
HIST 3316	Modern East Asia
HIST 3319	A Cultural History of Southeast Asia
HIST 3334	Modern Europe: 1789-1914
HIST 3335	Modern Europe since 1914
HIST 3338	Modern Latin America
LS 3350	Identity and Equity in American Schools
SOC 3315	Global Race and Ethnic Relations

Total Units **12**

¹ Units in excess of total will be applied towards major's free electives.

Teaching English to Speakers of Other Languages

Code	Title	Units
REQUIRED COURSES		
COMS 3316	Intercultural Communication	3
ENGL 2290	Introduction to Linguistics	3
or ENGL 3390	The Linguistic Structure of Modern English	
ENGL 4497	Theories of Language Learning and Teaching	3
ENGL 4498	Approaches to Teaching English to Speakers of Other Languages	3
ENGL 4499	Practicum in Teaching English to Speakers of Other Languages	1
Total Units		13

Individualized Course of Study

Offered at: San Luis Obispo Campus and Cuesta College

With department chair approval, students may select one of the minors listed below or pursue a course of study which meets their individual needs and interests; this must be initiated early and all courses must be pre-approved. An individualized course of study consists of 12-14 units with at least one course at the 3000-4000 (upper-division) level. Courses are selected by the student in consultation with an advising faculty member. The list of courses is a contract between the student and the Department.

General Education (GE) Requirements

- 43 units required, 19 of which are specified in Major and/or Support.
- If any of the remaining 24 Units is used to satisfy a Major or Support requirement, additional units of Free Electives may be needed to complete the total units required for the degree.
- See the complete GE course listing (<https://catalog.calpoly.edu/academic-standards-policies/general-requirements-bachelors-degree/#generaleducationtext>).
- A grade of C- or better is required in one course in each of the following GE Areas: 1A (English Composition), 1B (Critical Thinking), 1C (Oral Communication), and 2 (Mathematics and Quantitative Reasoning).

Lower-Division General Education

Area 1	English Communication and Critical Thinking	
1A	Written Communication	3
1B	Critical Thinking	3
1C	Oral Communication	3

Area 2	Mathematics and Quantitative Reasoning	
2	Mathematics and Quantitative Reasoning (3 units in Support) ¹	0
Area 3	Arts and Humanities	
3A	Arts (3 units in Major) ¹	0
3B	Humanities: Literature, Philosophy, Languages other than English (3 units in Major) ¹	0
Area 4	Social and Behavioral Sciences (Area 4 courses must come from at least two different course prefixes.)	
4A	American Institutions (Title 5, Section 40404 Requirement) (3 units in Support) ¹	0
4B	Social and Behavioral Sciences (3 units in Support) ¹	0
Area 5	Physical and Life Sciences	
5A	Physical Sciences (3 units in Support) ¹	0
5B	Life Sciences ²	3
5C	Laboratory (may be embedded in a 5A or 5B course) (1 units in Support) ¹	0
Area 6	Ethnic Studies	
6	Ethnic Studies	3
Upper-Division General Education		
Upper-Division 2/5	Mathematics and Quantitative Reasoning or Physical and Life Sciences	3
Upper-Division 3	Arts and Humanities	3
Upper-Division 4	Social and Behavioral Sciences (Area 4 courses must come from at least two different course prefixes.)	3
Total Units		24

¹ Required in Major or Support; also satisfies General Education (GE) requirement.

² BIO 1111 is recommended to prepare you for BIO 3210, however those pursuing the science concentration should consider BOT 1121.

Coming soon