

2009-2010 CURRICULUM CHECK SHEET is a guide to the requirements of this major. **It is NOT necessary to take these courses in the order given.** Please consult the online Bulletin for specific details (<http://www.lasierra.edu/academics/bulletin>).

		FALL	WINTER	SPRING
FIRST YEAR	* General Chemistry (CHEM 111, 112, 113 & Labs)(15 units) <i>Meets Theme IVB</i>	_____	_____	_____
	** Calculus I, II (MATH 131, 132)(8 units) <i>Calculus prerequisite satisfies Math Foundational Studies requirement</i>	_____	_____	_____
	First Year Seminar (UNST 101/100)(2-6 units)	_____	_____	_____
	College Writing (ENGL 111, 112, 113)(9 units) OR (ENGL 124)(4 units)	_____	_____	_____
	Lifetime Fitness (PEAC 120)(2 units)	_____	_____	_____
	Theme IA/B: Understanding Human Beings OR National and Global Citizenship(4 units)	_____	_____	_____
	Theme IC: Globalization, Identity, & Citizenship. <i>Choose 1 course from:</i> SSCI 104, 105, 106, 107 (4 units)	_____	_____	_____
	Theme IIA: History & Appreciation of Arts (4 units)	_____	_____	_____
	Theme III: Religious Beliefs and Practice (4 units)	_____	_____	_____
	SUMMER	* Organic Chemistry I, II, III (CHEM 371, 372, 373 & Labs)(12 units)	_____	_____
SECOND YEAR	* Chemistry Seminar (CHEM 205)(.5 units)(2 units total)	_____	_____	_____
	* Analytical Chemistry (CHEM 224)(4 units)	_____	_____	_____
	* Advanced Organic Laboratory (CHEM 375)(1 unit)	_____	_____	_____
	* General Physics (PHYS 231, 232, 233 & Labs)(15 units)	_____	_____	_____
	* Astronomy (PHYS 304)(4 units)	_____	_____	_____
	** General Biology (BIOL 111, 112, 113 & Labs)(15 units) <i>Meets Theme IVA</i>	_____	_____	_____
	# Teaching in the Multicultural Classroom (EDCI 204)(3 units)	_____	_____	_____
	# Dimensions of Health (HLED 214)(4 units)	_____	_____	_____
	# The Construction of American Political Life (HPSC 274)(4 units)	_____	_____	_____
	# Psychological Foundations of Education (EDFO 305)(4 units)	_____	_____	_____
	World Language Foundational Requirement (<i>Proficiency through 153</i>)	_____	_____	_____
	Theme IIC: Exploring American Culture. <i>Choose 1 course from:</i> HUMN 204, 205 (4 units)	_____	_____	_____
Theme III: Religious Beliefs and Practice (4 units) Apply to Teacher Education Program	_____	_____	_____	
THIRD YEAR	* Chemistry Seminar (CHEM 205)(.5 units)(2 units total)	_____	_____	_____
	* Physical Chemistry (CHEM 351, 352 & Labs)(8 units)	_____	_____	_____
	* Earth Science (GEOL 314)(4 units) <i>Meets Theme IV</i>	_____	_____	_____
	# Classroom Management (EDCI 410)(4 units)	_____	_____	_____
	# Language and Literacy K-12 (EDCI 416)(4 units)	_____	_____	_____
	# Culture, Society, Religion, & Ethics (EDCI 417)(4 units)	_____	_____	_____
	# Reading in the Content Area (EDCI 419)(5 units)	_____	_____	_____
	# Secondary Theory and Practice (EDCI 430)(4 units)	_____	_____	_____
	World Language Foundational Requirement (<i>Proficiency through 153</i>)	_____	_____	_____
	Theme III: Religious Beliefs and Practice. <i>Choose 1 course from:</i> RLGN 304, 305 (4 units)	_____	_____	_____
FOURTH YEAR	* Senior Seminar (CHEM 405)(1 unit)	_____	_____	_____
	* Introduction to Research (CHEM 408)(1 unit)	_____	_____	_____
	* Chemistry of the Periodic Table (CHEM 417)(4 units)	_____	_____	_____
	* Physical Chemistry: Quantum Mechanics (CHEM 353 & Lab) OR Topics in Inorganic Chemistry (CHEM 415) OR Instrumental Analysis (CHEM 424 & Lab OR 425 & Lab OR 426 & Lab)(4 units)	_____	_____	_____
	* Chemistry Electives to complete 72.5 units (6 units)	_____	_____	_____
	# Teacher Performance Assessment Seminar (EDCI 498)(1 unit)	_____	_____	_____
	# Middle School Theory (EDCI 429 & Lab)(3 units)	_____	_____	_____
	# Secondary Teaching in the Multicultural Classroom (EDCI 429)(2 units)	_____	_____	_____
	# Student Teaching Secondary (EDCI 457)(18 units)	_____	_____	_____
	Theme III: Religious Beliefs and Practice (4 units) <i>Must be in Scripture, Theme IIIC, unless previously taken</i>	_____	_____	_____
	Theme IVC: Scientific Foundations: <i>Choose 1 course from the following:</i> NSCI 404, 405, 406, 407 (4 units)	_____	_____	_____
	Upper Division Rhetorical Course met by: CHEM 405, 408, and 1 from CHEM 424, 425, or 426)(4 units)	_____	_____	_____
	Theme V: Religious, Moral & Social Aspects of Physical Science (UNST 404D)(4 units)	_____	_____	_____
	* Major Requirements (72.5 units)			
	** Cognate Requirements			
# Required for secondary teaching credentials				
Apply for Teacher Education Program after completing EDCI 204, HLED 214, HPCS 274, EDFO 305 SDA Credential requires RELT 245, RELB 2 courses, RELH 483, EDFO 404, EDPC 460, EDCI 464				

PHYSICAL SCIENCE

B.S. Degree

With Secondary Teaching Credentials

CAREER OPPORTUNITIES AND RELATED OCCUPATION: This program is primarily to prepare students to teach on the secondary through the junior college level and offers a broader, less specialized, background than the Chemistry or Biochemistry major. It may also be used as a basis for Pre-Chemical Engineering, Pre-Medicine, Pre-Dentistry or other health-related occupations, i.e. laboratory technician, manufacturing industries, occupational safety/health workers, agricultural scientist, biological scientist and chemical technician.

EDUCATIONAL QUALIFICATIONS: For teaching at the high school level a state credential is required. Once employed as a teacher, you may advance to the Master's program in the School of Education. For entry into health-related occupations, choices of additional science electives are recommended. Training beyond the B.S. level is eventually required for access to many higher level jobs.

DENOMINATIONAL OPPORTUNITIES: Science teachers are in demand in Seventh-day Adventist academies.

JOB OUTLOOK: Job opportunities for teachers over the next 10 years will vary from good to excellent, depending on the locality, grade level, and subject taught. Currently, many school districts have difficulty hiring qualified teachers in some subject areas-most often mathematics, and science, especially chemistry and physics.

ENTERING SALARY: The Pacific Union Conference entering wage level for credentialed teachers in 2008 ranges from **\$39,748** to **\$49,175** depending on the area of employment.

In 2009, the average entering salaries for credentialed teachers in the Inland Empire begin at **\$39,618**. Those with a Master's degree and more experience an average of about **\$70,000** a year.

SOURCES OF ADDITIONAL INFORMATION

Websites:

La Sierra University

<http://www.lasierra.edu/>

Department Contacts:

Chairperson:

Marvin Payne, Ph.D.

Advisors:

Nate Brandstater, Ph.D.

Marvin Payne, Ph.D.

Location:

Palmer Hall Room 230

951-785-2148

*Professional Organizations & Career
Information:*

National Science Teacher's
Association (NSTA)

1742 Connecticut Avenue, NW
Washington, D.C. 20009

American Chemical Society (ACS)
Career Services

1155 16th Street, NW
Washington, D.C. 20036

The Science Teacher
Journal of Chemical Education
Science Journal
Chemical and Engineering News

**Academic Advising
Center for Student Academic Success
Sierra Vista Hall, Room 114
(951) 785-2452**

**LA SIERRA
UNIVERSITY**