

- **Elementary Education Emphasis and Science Focus (58-61 units) Table 1-5 and 7**
or
- **Science Emphasis (60-63 units) Table 1-6**

Table 1: Core Subject Area - Liberal Studies (4 units total)

CODE	COURSE INFORMATION	Term	Grade
Pre-major or Major	Introduction to Liberal Studies (3 units) LS 300 (field experience required) (prerequisite – ED 200)		
Major only	Assessment in Liberal Studies (1 unit) LS 498 (prerequisite: LS 300)		

Table 2: Core Subject Area - Math and Science (10 units total)

CODE	COURSE INFORMATION	Term	Grade
Major only	Statistics and Probability in Elementary (3 units) Math 312 (prerequisite – LS Math Proficiency Assessment)		
Major only	Special Topics in Algebra, Geometry and Problem Solving (3 units) Math 313 (prerequisite – LS Math Proficiency Assessment)		
Major only	Processes and Inquiry in the Physical Sciences (4 units) PHYS 412		

Table 3: Core Subject Area - Social and Behavioral Science (3 units total)

CODE	COURSE INFORMATION	Term	Grade
Pre-major or Major	Linguistics and English (3 units) LING 420		

Table 4: Core Subject Area - Humanities (18 units total)

CODE	COURSE INFORMATION	Term	Grade
Major only	Children's Literature (3 units) ENGL 306A (<i>must</i> be taken concurrently with ENGL 306W)		
Major only	Advanced Composition (3 units – grade of "C" or better satisfies GWAR) ENGL 306W (<i>must</i> be taken concurrently with ENGL 306A)		
Pre-major or Major	United States History for Teachers (3 units) HIST 413 (prerequisite: WPA score of 8 <i>or</i> RWS 280/281 with a "C" or better)		
Major only	World History (3 units) HIST 411		
Pre-major or Major	Visual/Performing Arts or Education - choose <i>one course</i> from the following list: Art 387 or Music 343 or *Education 451/SPED 527 [SPED 527 by petition]:		
Pre-major or Major	Visual/Performing Arts or Education - choose <i>a second course</i> from the following list: Art 387 or Music 343 or *Education 451/SPED 527 [SPED 527 by petition]:		

*only one ED/SPED class, not both, can be used in these areas [NOTE: SPED 500 is pre/co-requisite for SPED 527]

Table 5: Science Focus Classes (17-19 units total)

CODE	COURSE INFORMATION	Term	Grade
Pre-major or Major	Physical Science [Physics & Chemistry] (3 units) Natural Science 100 [NOTE: this class is included in the lower division sequence, not the upper division]	Spring	
Pre-major or Major	Grammar & Usage for Writers [required <i>only</i> for students who score <i>below</i> 8 on the WPA] (3 units) LING 253/RWS 253 (same class cross listed)		
Pre-major or Major	Earth Science: Process and Inquiry (4 units) GEOL 412	Spring	
Pre-major or Major	Field Experience in Science (1 unit) TE 211B	Spring	
Pre-major or Major	Biology – choose (A) or (B) below (3-4 units) A) BIOL 101 & BIOL 101L (preferred) <i>or</i> B) BIOL 319 <i>or</i> BIOL 324 <i>or</i> BIOL 327		
Pre-major or Major	Chemistry or Earth Science (choose <i>one</i> class – 3-4 units) CHEM 100 [required for ISMA] or GEOL 303 [for students NOT pursuing the ISMA]		

Table 6: Option 5. Science Emphasis for Introductory Subject Matter Authorization (ISMA) (7-9 units)

CODE	COURSE INFORMATION	Term	Grade
Pre-major or Major	Physics (3 units) PHYS 180A [recommended prerequisite: PHYS 412]		
Pre-major or Major	Physics (1 unit) PHYS 182A		
Pre-major or Major	Chemistry (3-5 units) CHEM 130 (3 units) or CHEM 200 (5 units) [prerequisite: CHEM 100]		

Table 7: Option 1-4 (6-7 units) See reverse for choices.

	COURSE INFORMATION	Term	Grade

Underlined upper division classes are *not* open to Liberal Studies *pre*-majors. Footnotes in the *Class Schedule* contain information on enrollment restrictions for courses – please read them carefully when searching for classes.

Table 7: Suggested Upper Division Course Sequence - Junior Year

Junior Semester I	Units	Junior Semester II	Units
Intro. to Liberal Studies: LS 300 (field experience)	3	Topics in Elementary Math: Math 313	3
World History for Teachers: HIST 411	3	Option Class [See below]	1-5
*Visual/Performing Arts or Education	3	Introduction to Linguistics: LING 420	3
CHEM 100 or GEOL 303	3-4	Earth Science: GEOL 412 (spring only)	4
Grammar/Usage: LING/RWS 253 (if required)	0-3	Science Field Experience: TE 211B (spring)	1
or		Natural Science 100 (if not completed)	3
*Biology (if LING/RWS 253 is waived)	0-4	***remember international experience***	
	15-17		15-19

*See reverse for choices.

Table 8: Suggested Upper Division Course Sequence - Senior Year

Senior Semester I	Units	Senior Semester II	Units
Senior Assessment: LS 498 (CR/NC only)	1	American History for Teachers: History 413	3
Statistics & Probability: Math 312	3	*Visual/Performing Arts or Education	3
Children's Literature: English 306A	3	Physics: PHYS 180A and 182A	4
and		Option Class [See below]	3-5
Advanced Composition: English 306W	3	*Biology (if not completed earlier)	0-3
Process and Inquiry in Physics: PHYS 412	4	or	
Option Class [See below]	1-5	Option Class [See below]	1-5
	15-19		16-18

*See reverse for choices.

Options within the Science Focus (6-9 units each)

Option 1: Linguistics (leads to TESL certificate) 6 units

LING 550 (3) and LING 555 **or** LING 556 (3). Offered alternative semesters.

Option 2: Bilingual credential preparation- 7 units

DLE 415 (4) and SPAN 302 **or** 381 (for heritage Spanish speakers) or 382

Option 3: Special education credential preparation- 7 units

SPED 500 (3) and SPED 501 (3) and SPED 501 (1)

Option 4: Performing Arts- 6 units.

THEA 310/315 (3) and AFRAS 385 (3) **or** CCS 310 (3) **or** MUSIC 351 (3)

Option 5: Additional Science for Introductory Subject Matter Authorization (ISMA) and Switch to Science Emphasis- (7-9 units).

PHYS 180A (3) and PHYS 182A (1) **and**
CHEM 130 (3) **or** CHEM 200 (5)

Use your discretion when choosing the timing to take these classes. See [option class] above.

Must earn a "C" or better in each course for the ISMA in science.

Science classes taken during study abroad cannot be used for the ISMA.

Credential Program Testing Requirements and Prerequisite Courses

- All multiple subject credential programs in California require both CBEST and CSET.
- SDSU's credential programs have additional course prerequisites. Please see credential advisers in EBA-259.