# HEALTH SCIENCE Environmental/Occupational Health and Safety Option, B.S. (120 Units) Valid for Catalog Years: 2025/2026 to Current

Health Science Core Program Requirements	15 Units 🗆
PH 92: Public Health Statistics (3) (GE Area 2 – Catalog Year 2022 and After)	
PH 109: Epidemiology of Disease (3) ( <i>Pre-Requisite:</i> PH 92, MATH 11, PSYCH 42, or DS 73)	
PH 135: Introduction to Human Disease (3)	<del></del>
PH 161: Environment and Human Health (3) (GE Area UD2/5)	
PH 163: Public Health Administration (3)	
Environmental/Occupational Health and Safety Option Requirements	12 Units 🗆
Environmental/Occupational Teath and Safety Option Requirements	12 Ontis 🗆
PH 143: Occupational Safety (3)	
PH 160: Principles of Toxicology (3)	
PH 162: Environmental Health Concepts (3) ( <i>Pre-Requisite</i> : PH 161) (FALL ONLY)	
PH 168A: Occupational Health Concepts (3) (FALL ONLY)	
111 TOOT. Occupational Toulan Concepts (5) (TTEE OTTET)	
Environmental/Occupational Health and Safety Additional Requirements	38-42 Units □
BIOL 1A: Introductory Biology (4) (GE Area 5B)	
BIOL 1B/1BL: Introductory Biology + Laboratory (4)	
OR BIOL 33: Introductory Human Anatomy and Physiology (5)	
BIOL 20: Introductory Microbiology (4)	
OR BIOL 120: Microbiology (4)	
CHEM 1A/1AL: General Chemistry 1A + Laboratory (5) (GE Area 5A)	
CHEM 1B/1BL: General Chemistry 1B + Laboratory (4)	
CHEM 8: Elementary Organic Chemistry (3)	
OR CHEM 128A: Organic Chemistry (3)	
MATH 70: Calculus for Life Sciences (4)	
OR MATH 75: Calculus 1 (4) (GE Area 2) (Pre-Requisite: Calculus Placement Required)	
PHYS 2A: General Physics (4) (GE Area 5A) (Pre-Requisite: MATH 6 or DS 71 or MATH 75 or MATH 70)	
PHYS 2B: General Physics (4) (Pre-Requisite: PHYS 2A)	
PH 175I: Environmental Internship (4) ( <i>Pre-Requisite</i> : Completion of 21 units in Core and Environmental Option Courses)	
Environmental/Occupational Health and Safety Option Elective Requirements	9 Units □
Select a minimum of three courses (9 units)	
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PH 105: Risk Assessment and Analysis (3) (FALL ONLY)	
PH 145: Occupational and Environmental Systems Management (3) PH 151: Health Law and Legislation (3) (FALL ONLY)	
PH 164: Vector Control (3)	
PH 166T: Topics in Environmental Health (3)	
PH 167: Public Health Laboratory Techniques (3)	
PH 168B: Occupational Health Evaluation (3) (SPRING ONLY)	
PH 170: Air Pollution and Health (3)	

**Total Units Required in Major Total Units Required in General Education Electives needed** 

74-78 units 49 units 0-9 units



Development Center

Student Name:

**HEALTH SCIENCE** 

**Environmental/Occupational Health and Safety Option, B.S. (120 Units)**Valid for Catalog Years: 2021/2022 to Current

Student ID: \_\_\_\_\_

For assistance or to schedule an advising appointment, please contact the CHHS Advising and **Career Development Center:** 559-278-5027, McLane Hall 194

Catalog Year:

	Year 1 (Freshman)		Year 2 (Sophomore)		Year 3 (Junior)		Year 4 (Senior)	
	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
Major	GE Area 2 MATH 70 or 75 (4 Units)	GE Area 2 PH 92 (3 Units)	GE Area 5A CHEM 1A/1AL (5 Units)	PH 109 (3 Units)	CHEM 8 or CHEM 128A (3 Units)	BIOL 20 or BIOL 120 (3-4 Units)	PHYS 2A (4 Units)	PHYS 2B (4 Units)
	GE Area 5B BIOL 1A (4 Units)	BIOL 1B/L or BIOL 33 (4-5 Units)		CHEM 1B/1BL	GE Area UD2/5 PH 161 (3 Units)	PH 160 (3 Units)	PH 143 (3 Units)	PH 175 (1-4 Units)
	Lower Division GE	Lower Division GE	Lower Division GE	(5 Units)	Upper Division GE	PH 163 (3 Units)	PH 135 (3 Units)	PH Elective
	Lower Division GE	Lower Division GE	Lower Division GE	Lower Division GE	UDWS (W Course or Exam)	PH Elective	PH 162 (3 Units)	PH Elective
	Lower Division GE	American Government	Lower Division GE	Lower Division GE	Multicultural International (MI)	Upper Division GE	PH 168A (3 Units)	General Elective
Milestones		PH 92 Completed			Additional Requirements Completed		Completion of Core Courses	

<b>Elective Options:</b>	
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	Elective Options:

#### **Biology Minor Requirements**

#### **Required Courses (22 Units)**

- □ BIOL 1A Introductory Biology (4 units)
- ☐ BIOL 1B and 1BL Introductory Biology/Laboratory (4 units)
- □ BIOL 101 General Ecology (4 units)
- □ BIOL 102 Genetics (3 units)
- □ BIOL 103 Cellular Biology (3 units)
- □ BIOL 104 Genetics and Cell Biology Lab (1 unit)
- □ BIOL 105 Evolution (3 units)

#### Chemistry Minor Requirements

#### Required Courses (11-12 Units)

- □ CHEM 1A & 1AL General Chemistry and Laboratory (5 units)
- ☐ CHEM 8 Elementary Organic Chemistry (3 units)
- ☐ CHEM 105 Quantitative Analysis Laboratory (4 units)

**Additional Upper Division Chemistry** Courses (9-10 Units)

#### **Advising Notes**

- A minimum grade of C is required in all Health Science core courses and all core option courses.
- CR/NC grading is not permitted in courses for the Health Science major, except in those courses which are designated CR/NC grading only.
- Courses taken within the Public Health major may be used toward general education requirements, a minor (see departmental minors) or a supplemental credential. Consult the appropriate department advisor for further information.

## 2025-2026 GENERAL EDUCATION (G.E.) REQUIREMENTS

NOTES: A minimum of 43 G.E. unit; are required. All classes are three or more semester units. Engineering and Liberal Studies majors complete a different G.E. Pattern—consult department advisor. GE courses may change annually. It is recommended to run your Degree

Progress Report (DPR) before and after you register to ensure courses you are registered for satisfy the intended GE Area(s).  ◆ FOUNDATION	
Four courses: One in 1A, one in 2A, one in 3A, & one in Area 2 for a minimum of 12 units.  FOUNDATION courses must be satisfied with a minimum of "C" grade.  Area 1&2 - English Communication & Mathematical Concepts/Quantitative Reasoning	Course/ <u>Units/Grade</u>
[1A] English Composition: (Pre-Requisite for English 5B is Passing 5A) English 5B, 5BML, 10, 10ML	1A
[1B] Critical Thinking: Africana Studies 20; Agricultural Science 10, Anthropology 30; Asian American Studies 88; Chicano & Latin American Studies 30; Child and Family Sciences 3, College of Science and Math 10; Communication 5; Computer Science 1, Geography 25; Interdisciplinary 50; Natural Science 4; Philosophy25, 45;	1B
Sociology 3, 3S; Women's, Gender, & Sexuality Studies 12  [1C] Oral Communication: Communication 3, 7, 8  [2] Mathematical Concepts & Quantitative Reasoning: (Co-Requisite or Pre-Requisite Math Courses May Be Required; Check with an Advisor)	1C2
Criminology 50; Decision Science 71, 72; Mathematics 6, 10A, 10AL, 11, 11L, 45, 45L, 70, 75A; Psychology 42; Public Health 92	
♦ BREADTH	_
Area 3 - Arts and Humanities	
Two Courses: One in 3A, one in 3B	3A
[3A] Arts: Armenian Studies 20; Art 1, 20, 40, 50; Art History 10, 11, 12; Chicano & Latin American Studies 9; Drama 22, 62; English 41, 43, 44; Italian 15; Media, Communications & Journalism 9; Music 9 (not for music majors), 9A, 74, 75	ЗВ
[3B] Humanities: Arabic 1A, 1B; Armenian 1A, 1B, 2A; Chinese 1A, 1B; Communicative Sciences & Deaf Studies 90, 92; English 20, 30; French 1B, 2A, 2B; German 1B, 2A, 2B; Greek 1A, 1B; Hebrew 1A; Hmong 1A, 1B; Humanities 10, 11, 15, 20; Italian 1A, 1B, 2A, 2B; Japanese 1A, 1B; Latin 1A, 1B; Linguistics 10, Persian 1A, 1B; Philosophy 1, 2, 10, 20; Portuguese 1A, 1B; Spanish 1B, 2A, 2B, 3, 4A, 4B	
Area 4 – Social and Behavioral Sciences One course in each sub-area	]
[4A] American History: History 11, 12	4A
[4B] Social Science: Africana Studies 36; Agricultural Business 1; American Indian Studies 50; Anthropology 2, 3; Armenian Studies 10; Asian American Studies 7, 166; Child & Family Science 31; City & Regional Planning 80; Communicative Sciences & Deaf Studies 98; Criminology 10;	4B
Economics 25, 40, 50; Geography 2, 4; History 20, 21; Industrial Technology 20; Italian 20; Jewish Studies 10; Media, Communications & Journalism 1; Middle East Studies 10; Political Science 1; Psychology 10; Sociology 1 or 1S; Women's, Gender, & Sexuality Studies 10, 11, 166	
Area 5 - Physical and Biological Sciences	5A
Two Courses for minimum <u>7 Units</u> : One in 5A and one in 5B; Lab may be embedded within 5A/5B course  [5A] Physical Sciences: (Pre-Requisite: Completion of Area 2) Chemistry 1A, 3A, 10; Earth & Environmental Sciences 1, 1V, 4, 5; Geography 5*, 7*;	5B
Physical Science 21; Physics 2A, 4A & 4AL, 10	5C
[5B] Biological Sciences: Biology 1A, 10, 11, 12, Earth & Environmental Sciences 6	
[5C] Physical or Biological Laboratory B1 or B2 must have a lab (*Courses do not have a lab component)	J
Area 6 - Ethnic Studies One course  Africana Studies 10, 15, 27, 40, 68; American Indian Studies 5, 10, 103; Anthropology 120, 175; Asian American Studies 10, 15, 20, 50, 108, 120, 143, 175, 185;  Chieses 8 Letin American Studies 10, 15, 20, 50, 108, 120, 143, 175, 185;	6
Chicano & Latin American Studies 3, 5, 120, 128, 163; English 143; Media, Communications, & Journalism 6; Philosophy 108	]
UPPER DIVISION "INTEGRATION" G.E. CONSISTS OF 9 UNITS  UD2/UD5, UD 3, & UD 4 courses can be taken no sooner than the term in which 60 units of coursework are completed.	
◆ INTEGRATION Three Upper Division – One in Each Area	-
I2/I5 - Mathematical Concepts & Quantitative Reasoning/ Physical & Biological Sciences  (Pre-Requisite: Completion of FOUNDATION and Area 5)	
Anthropology 161, 165; Chemistry 170; Civil Engineering 121; Computer Science 100, 100N; Earth & Environmental Science 102S, 112, 167, 168; Geography 115, 128, 129; Liberal Studies 121; Mathematics 123; Natural Science 115, 120, 121, 125; Physical Science 131, 168; Physics 100; Plant Science 105; Public Health 161; Sociology 158	12/
13 - Arts & Humanities: (Pre-Requisite: Completion of FOUNDATION and Area 3)	15
Africana Studies 129; Architectural Studies 145; Armenian 148; Art 102; Art History 140; Arts & Humanities 105; Asian American Studies 148; Chicano & Latin American Studies 130; Dance 171; Drama 163; English 101, 102, 103, 112, 113, 114, 174; French 109, 124, 125, 149; Humanities 104, 108, 110, 118, 120, 129;	13

Interdisciplinary Art Studies 108; Italian 110, 130; Jewish Studies 108; Linguistics 115, 130, 138; Media, Communications, & Journalism 183; Music 170A, 171, 187; Philosophy 120, 150, 151; Portuguese 101, 102, 103; Spanish 125, 129; Women's, Gender, & Sexuality Studies 110, 111

#### 14 - Social and Behavioral Sciences: (Pre-Requisite: Completion of FOUNDATION, Area 4, and PLSI 2)

Africana Studies 144; Agricultural Business 155; Anthropology 116W, 145; Art History 143; Asian American Studies 111, 121, 122, 155; Chicano & Latin American Studies 114, 115; City & Regional Planning 125; Civil Engineering 161; Construction Management 124; Criminology 101, 120, 1205; Curriculum & Instruction 152; Earth and Environmental Sciences 115S; Economics 146, 167, 176, 183; Electrical & Computer Engineering 118; Forensic Behavioral Science 153; Geography 133, 173; Gerontology 100; History 101, 154; Jewish Studies 122; 154; Kinesiology 111; Media, Communications & Journalism 101, 175, 178, 180; Peace & Conflict Studies 100, Social Science 110; Sociology 131, 143, 163; Women's, Gender, & Sexuality Studies 101, 124, 149, 155

- Foundation courses must be completed with a grade of C or better to satisfy the General Education requirement.
- A maximum of two General Education courses from one department or program may be applied to satisfy Breadth requirements.
- Subject Area 4 shall be completed in at least two different disciplines among the nine units required in Area 4, and Area UD 4.

Total Units:	

# **Graduation Requirements**

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	BACHELOR'S DEGREE REQUIREMENTS	
	lent must complete the following requirements in order to earn a Bachelor of Arts, Bachelor of Science, Bachelor of	Fine
	or a Bachelor of Music degree:	
	A minimum of 120 semester units, comprised of:	
	43 General Education Units	
	<ul> <li>Academic Major Requirements</li> <li>Specific course/skill requirements: (a) English Composition; (b) United States History; (c) United States a</li> </ul>	nd
	California Constitution (PLSI 2 or equivalent); (d) Upper division writing skills	na -
	Additional University Graduation Requirements: (a) Arts/Humanities; (b) Lifelong-Understanding and Se	lf-
	Development; Multicultural/International; requirements may vary by major	
	A minimum of 30 residence units, of which 24 must be upper division, 12 in the major, and 9 in General Educatio	n
	A minimum of a C average [2.0] for units in the major, all California State University, Fresno units, and total units	
	fic Course/Skill Requirements: ed by all degrees; may be completed in general education or by exam credit:	
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	English Composition (Area 1A – ENGL 5A/5B, 10, or equivalent)	
	United States History (Area 4A – HIST 11 or 12, or equivalent)	
	US and California Government:	
	Courses: Political Science 2, 101, or equivalent course	
	Upper Division Writing Skills (UDWS):	
	Courses: Africana Studies 104W; Agricultural Business 170WS; American Indian Studies 105WS; Anthropology 105W, 116W, 126W; Asian American Studies 151V Aerospace Studies 105AW*, 105BW; Biology 118W; Business Administration 105W; Chemistry 161W*; Chicano & Latin American Studies 102W; Economics 102W Environmental Sciences 104W, 135W; English 106W, 115W, 117W*, 160W, 170W; Engineering 105W*; Health & Human Services 116W; History 100W*; Industrial 198W; Jewish Studies 100W; Literacy & Early Education 180W; Linguistics 110W*, 111W; Media, Communications & Journalism 102W*, 114W*, 155SW, 158WS; Pl 125W, 133W; Plant Science 110W; Political Science 100W; Sociology 130W, 130WS; Women's, Gender, & Sexuality Studies 118W	N; Earth & Technology
	Note: Majors may require a specific "W" course; see catalog requirements for your major *Enrollment may be restricted or have additional pre-requisites. Check the course description in the catalog or class search	
Addit	ional University Graduation Requirements (AUGR):	
	Note: Major programs may be exempt from part or all Additional University Graduation Requirements; if a major is exempt from only part of the	ese
	ements students may select which area(s) to fulfill this requirement in either Arts/Humanities, Lifelong Understanding and Self-Development, or ultural/International; please consult the Fresno State catalog or your major advisor for your specific program requirements.	
	Arts/Humanities (A/H):	N/A □
	Courses: See catalog for course requirements.	
	Lifelong-Understanding and Self-Development (L/S):	N/A □
	Courses: Agricultural Science 15; Animal Science 67; Art 13; Asian American Studies 8; Child & Family Sciences 38, 39; College of Science and Math 15; Dance 1 Drama 32; Finance 30; Gerontology 10S, 18, 111; Kinesiology 32 & Concurrent Enrollment in any KAC; Linguistics 30; Nutrition 53; Peace and Conflict Studies 110; Psychology 61; Public Health 90, 91, 110; Recreation Administration 80; University 1; Women's, Gender, & Sexuality Studies 18	
	Multicultural/International (M/I):	N/A □
	Courses: Africana Studies 143, 150, 164; Anthropology 105W, 120, 123, 125; Art History 141, 142; Asian American Studies 110, 110S, 138, 140; Business Administration Capstone 177, 188S; Chicano & Latin American Studies 160, 170; Communication 164; Child & Family Science 134; Communicative Disorders & Deaf Studies 139, 181; Geography 167, 174; Gerontology 161; History 186; Humanities 105, 140; Italian 100; Jewish Studies 143; Linguistics 147; Media, Communications & Journalism	n 104; ; Economics

### **Degree Application**

To receive the degree, a student files an online application for graduation via the Student Center by one of the published deadlines. After paying the fee online, your application is submitted to Undergraduate Degree Evaluations. Honors are awarded as follows, based in the campus GPA earned: Summa Cum Laude (highest honors) 3.90 to 4.00; Magna Cum Laude (high honors) 3.70 to 3.89; Cum Laude (honors) 3.50 to 3.69

Marketing 100S; Music 171A; Nursing 141, 141LS; Public Health 104, 128S; Philosophy 131, 132; Political Science 120; Recreation Administration 130;

Social Sciences 180; Sociology 111, 142; Social Work 136; Women's, Gender, & Sexuality Studies 120, 122, 135, 138