

MAJOR REQUIREMENTS (106 UNITS) *Grades of "C" or better required. Courses should be completed in order listed.*

Core Curriculum - (69 Units)	FALL	WINTER	SPRING
BIOL 111 General Biology I (4) & BIOL 111L Laboratory (1) Prerequisite: MATH 121 eligibility; Corequisite: BIOL 111A; Life Science*	_____	_____	_____
BIOL 111A General Biology Seminar (0) Required of all Biology majors planning on taking BIOL 112	_____	_____	_____
BIOL 112 General Biology II (4) & BIOL 112L/114L Laboratory (1) Prerequisite: BIOL 111, 111L, & 111A; Life Science*	_____	_____	_____
BIOL 113 General Biology III (4) & BIOL 113L/115L Laboratory (1) Prerequisite: BIOL 112 & 112L or 114L; Life Science*	_____	_____	_____
BIOL 301 Cell and Molecular Biology (4) & BIOL 301L Laboratory (1) Prerequisite: BIOL 113, 113L or 115L & CHEM 281	_____	_____	_____
PHYS 219 Introduction to Biophysics (1) Prerequisite: ENGL 111, 112, & 113	_____	_____	_____
PHYS 231 General Physics I (4) & 231L Laboratory (1) Physical Science* Prerequisite: For PHYS 231A, MATH 122. For PHYS 231B, MATH 131	_____	_____	_____
PHYS 232 General Physics II (4) & 232L Laboratory (1) Physical Science* Prerequisite: PHYS 231 & 231L	_____	_____	_____
PHYS 233 General Physics III (4) & 233L Laboratory (1) Physical Science* Prerequisite: PHYS 232 & 232L	_____	_____	_____
PHYS 301 Mathematical Physics (4) Prerequisite: MATH 131, 132, & 133; PHYS 231, 232, & 233	_____	_____	_____
PHYS 326 Human Body Mechanics (4) Prerequisite: BIOL 113 & 113L, MATH 133 & PHYS 233 & 233L	_____	_____	_____
PHYS 336 Physics of Biomaterials (4) Prerequisite: BIOL 113 & 113L, MATH 133, PHYS 233 & 233L	_____	_____	_____
PHYS 346 Biomedical Imaging (4) Prerequisite: BIOL 113 & 113L, MATH 133, PYS 233 & 233L	_____	_____	_____
PHYS 356 Cellular Physics (4) Prerequisites: BIOL 113 & 113L, MATH 133, PYS 233 & 233L	_____	_____	_____
PHYS 385 Physics Seminar (1) Students complete seminar twice for a total of 2 units	_____	_____	_____
PHYS 415 Advanced Physics Laboratory (2) Repeatable for additional credit. Prerequisite: PHYS 231, 232 & 233; MATH 231, 232 & 233	_____	_____	_____
PHYS 464 Statistical and Thermal Physics (4) Prerequisite: MATH 131, 132, & 133; PHYS 231, 232, 233, & 301	_____	_____	_____
PHYS 485 Physics Seminar II (1)	_____	_____	_____
Plus, choice of 6 elective units from			
PHYS 308 Computational Physics (2) Prerequisites: MATH 133, PHYS 233, PHYS 301	_____	_____	_____
PHYS 315 Modern Physics (4) Prerequisites: PHYS 233 & PHYS 301	_____	_____	_____
PHYS 475 Radiation Physics (4) Prerequisite: PHYS 233	_____	_____	_____
MATH 461 Biomathematical Modeling I (4) Prerequisites: CPTG 121, MATH 232, BIOL 113 & 113L	_____	_____	_____
MATH 462 Biomathematical Modeling II (4) Prerequisite: MATH 461	_____	_____	_____
BIOL 466 Systems Physiology (4) Prerequisites: BIOL 113, BIOL 113L and BIOL 235	_____	_____	_____
CHEM 431 Biochemistry I (4) Prerequisite: CHEM 282 & 282L	_____	_____	_____
CHEM 432 Biochemistry II (4) Prerequisite: CHEM 431	_____	_____	_____
PHYS 298/498	_____	_____	_____
Any other Biology or Neuroscience course	_____	_____	_____
Required Major Cognates (37 Units)			
CHEM 111 General Chemistry I (4) & CHEM 111L Laboratory (1) Prerequisite: MATH 007 or 121 Concurrently; Physical Science*	_____	_____	_____
CHEM 112 General Chemistry II (4) & CHEM 112L Laboratory (1) Prerequisite: CHEM 111 & 111L; Physical Science*	_____	_____	_____
CHEM 113 General Chemistry III (4) & CHEM 113L Laboratory (1) Prerequisite: MATH 121, CHEM 112 & 112L; Physical Science*	_____	_____	_____
CHEM 281 Organic Chemistry I (4) & CHEM 281L Laboratory (1) Prerequisite: CHEM 113 & 113L	_____	_____	_____
CHEM 282 Organic Chemistry II (4) & CHEM 282L Laboratory (1) Prerequisite: CHEM 281 & 281L	_____	_____	_____
MATH 131 Calculus I (4) Prerequisite: MATH 122 or placement	_____	_____	_____
MATH 132 Calculus II (4) Prerequisite: MATH 131 or placement	_____	_____	_____
MATH 133 Calculus I (4) Prerequisite: MATH 132 or placement	_____	_____	_____

SEE REVERSE FOR UNIVERSITY STUDIES REQUIREMENTS

*A maximum of 4 units from the Major, and 8 units of Cognates required by the Major, may apply to University Studies General Studies requirements (2020-2021 Undergraduate Academic Bulletin)

NOTE: Should a student's general education and major degree program requirements not meet the minimum 190 units required for graduation, the student must complete elective units to make up the deficiency.

UNIVERSITY STUDIES (73-86 UNITS)

Foundational Studies (21-34 units) *Grades of "C" or better required*

FALL WINTER SPRING

I. First Year Seminar	UNST 101A (1), UNST 101B (1), UNST 101C (1)	_____	_____	_____
II. Rhetorical Skills	A. ENGL 111 (3), ENGL 112 (3), ENGL 113 (3) OR ENGL 124 Freshman Seminar (4) B. Upper Division Rhetoric: PHYS 326 (4), PHYS 385 (1), PHYS 389 (0),PHYS 415 (2)	_____	_____	_____
III. Mathematics	MATH 133 required by major	_____	_____	_____
IV. World Languages	Level 3 proficiency (e.g. 153) in one non-English language (4-12)	_____	_____	_____
V. Health and Fitness	HLSC 120 (2)	_____	_____	_____

General Studies (52 units, 16 upper division) *Grades of "D" or better required, unless courses are required by major*

THEME I. Social Sciences (SSCI) 8 units

Globalization, Identity and Citizenship (4 units from SSCI 204, 205, 206, 207, 208 or 209) Prerequisite: ENGL 113 or 124	_____	_____	_____
Social Science Breadth Course (4 units)	_____	_____	_____

THEME II. Arts and Humanities (HUMN) 12 units

Exploring Culture (4 units from HUMN 104, 105, 106, 107, 108 or 109) Prerequisite: ENGL 111 or 124	_____	_____	_____
Arts and Humanities Breadth Course (4 units)	_____	_____	_____
Arts and Humanities Breadth Course (4 units)	_____	_____	_____

THEME III. Religious Beliefs and Practices (RLGN) 16 units

RLGN 304 Adventism in Global Perspective or RLGN 305 Religion in Three Cultures (4 units) Prerequisite: ENGL 113 or 124, Junior Status	_____	_____	_____
A. Spiritual Experience and Expressions (0-4 units)	_____	_____	_____
B. Beliefs and Heritage (4 units)	_____	_____	_____
C. Scripture (4 units)	_____	_____	_____
D. Religion and Society (4 units)	_____	_____	_____

THEME IV. Natural Sciences (NSCI) 12 units

Scientific Foundations (4 units from NSCI 404, 405, 406, 407, 408 or 409 or Senior Status) Prerequisite: ENGL 113 or 124, College-Level Math, Junior	_____	_____	_____
Life Science (4 units) Either life science or physical science must include a lab	_____	_____	_____
Physical Science (4 units) Either life science or physical science must include a lab	_____	_____	_____

THEME V. Senior Seminar (UNST) 4 units

UNST 404N Religion, Values, and Social Responsibility (4)	_____	_____	_____
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Service Learning (3 Courses)
