BIOLOGICAL SCIENCE MAJOR: BOTANY CONCENTRATION

GRADUATION REQUIREMENTS
1. Complete all AUCC, Botany Core, Physical Sciences/Math, and Major Elective Requirements.
2. Minimum of 120 total credits.
3. Minimum of 42 upper division credits (300 level or above).
   *30 upper division credits must be in-residence at CSU
4. Minimum of 2.0 CUMULATIVE GPA.

ALL UNIVERSITY CORE CURRICULUM (AUCC)
Must earn at least a 2.0 cumulative GPA in the AUCC courses.

Category 1
1A Written Communication: CO 150 (3 credits) ________________
1C Diversity, Equity, and Inclusion (3 credits) ________________

Category 2
2 Additional Communication (3 credits)
Advanced Writing ________________________________

Category 3
3B Arts/Humanities (6) ________________
3C Social/Behavioral (3) ________________
3D Historical Perspectives (3) ________________

Category 4: Depth and Integration
BZ 350 and BZ 450 (see CORE Requirements below)

GRADE REQUIREMENTS
Must earn at least a C- in all the Botany Core, Major Electives, and Physical Sciences/Math courses. This also applies to courses taken as substitutions for these requirements.

BOTANY CORE REQUIREMENTS
LIFE 102 Attributes of Living Systems (4) ________________
LIFE 103 Biology of Organisms (4) ________________
BZ 220 Introduction to Evolution (3) __________________________
BZ 310 Cell Biology (4) ________________
BZ 350 Molecular & General Genetics (4) __________________________
BZ 325 Plant Systematics (4) ________________
BZ 331 Plant Anatomy (4) ________________
BZ 440 Plant Physiology (3) ________________
BZ 441 Plant Physiology Lab (2) ________________
BZ 450 Plant Ecology (4) ________________

*With approval of the Curriculum Committee, up to 3 credits of the following can be applied toward a student's major electives:
*BZ 384 Supervised College Teaching
*BZ 487 Internship
*BZ 495 Independent Study
*BZ 498 Laboratory or Field Research

Criteria
- Cumulative GPA: 2.5 GPA in major: 3.0
- Junior standing or higher.

MAJOR ELECTIVES
Must complete a minimum of 12 credits from the following:
ATS 350 (2) Introduction to Weather & Climate
BSPM 308 (3) Ecology & Management of Weeds
BSPM 361 (3) Elements of Plant Pathology
BSPM 365 (4) Integrated Tree Health Management
BSPM 450 (3) Molecular Plant-Microbe Interaction
BZ 223 (3) Plant Identification (online)
BZ 333 (4) Introductory Mycology (summer only)
BZ 342 (3) Exploring Range Shifts in a Changing World
BZ 360 (3) Bioinformatics & Genomics
BZ 415 (4) Marine Biology
BZ 460 (4) Genome Evolution
BZ 476 (3) Genetics of Model Organisms
BZ 477 (2) Genome Editing
BZ 492 A-G Seminar (topic dependent on instructor)
BZ 540 (2) Translocation in Plants
BZ 561 (3) Landscape Ecology
BZ 570 (3) Molecular Aspects of Plant Development
BZ 572 (3) Phytoremediation
F 310 (3) Forest & Rangeland Ecology
F 311 (3) Forest Ecology
F 312 (2) Dendrology
F 324 (3) Fire Effects & Adaptations
F 510 (3) Ecophysiology of Trees
GR 348 (3) Biogeography
HORT 401 (3) Medicinal & Value-Added Uses of Plants
HORT 476 (3) Environmental Plant Stress Physiology
RS 331 (3) Wildland Plants & Plant Communities
RS 351 (3) Wildland Ecosystems in a Changing World
RS 378 (2) Disturbance Ecology
RS 420 (3) Grass Taxonomy
SOCR 440 (4) Pedology

PHYSICAL SCIENCES/MATH

CHEMISTRY
CHEM 111 (4) _______ CHEM 112 (1) _______
AND
CHEM 113 (3) _______ CHEM 114 (1) _______

ORGANIC CHEMISTRY
CHEM 245 (4) _______ CHEM 246 (1) _______
OR
CHEM 341 (3) _______ CHEM 343 (3) _______ CHEM 344 (2) _______

BIOCHEMISTRY
BC 351 (4) _______
OR
BC 401 (3) ______ BC 403 (3) ______

PHYSICS
PH 121 (5) _______ PH 122 (5) _______
OR
PH 141 (5) _______ PH 142 (5) _______

CALCULUS
MATH 155 (4) _______ OR MATH 160 (4) _______

STATISTICS
STAT 301 (3) _______ OR STAT 307 (3) _______
TRACK 1 HONORS PROGRAM STUDENTS ARE REQUIRED TO TAKE THE FOLLOWING COURSES TO FULFILL THE AUCC CURRICULUM

Category 1: Basic Competencies
HONR 192 First Year Seminar (4) __________________________
HONR 193 Seminar (3) ________________________________

Category 2: Additional Communication
Advanced Writing (3) ________________________________

Category 3B: Arts/Humanities
HONR 292 Seminar (3) ________________________________ (For students entering Fall 2015 and later)
OR
Additional Arts/Humanities (3) __________________________ (For students entering before Fall 2015)
HONR 392 Seminar (3) ________________________________

Category 3C: Social/Behavioral
HONR 492 Senior Seminar (3) __________________________

Category 3D: Historical Perspectives and 1C: Diversity, Equity, and Inclusion
HONR 399 Pre-Thesis (1) ______________________________
HONR 499 Thesis (3) ________________________________