Courses
AB 120 Agricultural Biology--Freshman Orientation Credit: 1 (1-0-0)
Course Description: Introduction to information and skills necessary to succeed in the agricultural biology major.
Prerequisite: None.
Restriction: Must be a: Undergraduate.
Registration Information: This is a partial semester course.
Term Offered: Fall.
Grade Mode: Traditional.
Special Course Fee: No.

AB 130 Working with Agricultural Biology Data Credit: 1 (1-0-0)
Course Description: Introduction to the scientific method and systems thinking in terms of agricultural biology. Develop a hypothesis based on field observations, collect and analyze data to determine if findings align with the hypothesis. Results are communicated in a written report, and oral presentation.
Prerequisite: AB 120, may be taken concurrently.
Restriction: Must be a: Undergraduate.
Registration Information: This is a partial semester course.
Term Offered: Spring.
Grade Mode: Traditional.
Special Course Fee: No.

AB 230 Becoming an Agricultural Biology Professional Credit: 1 (1-0-0)
Course Description: Design professional resumes, and develop interpersonal skills to succeed in a professional environment. Develop criteria to write a report from internships, and develop skills in interpretation of qualitative and quantitative agricultural biology data.
Prerequisite: AB 130.
Registration Information: Agricultural biology majors only. This is a partial semester course. Credit not allowed for both AB 230 and AB 270.
Term Offered: Spring.
Grade Mode: Traditional.
Special Course Fee: No.

AB 270 Agri. Biology Orientation for Transfers Credit: 2 (2-0-0)
Course Description: Introduction to the scientific method and systems thinking in terms of agricultural biology. Develop a hypothesis based on field observations, collect and analyze data. Prepare to become agricultural biology professionals by designing resumes and practicing skills to succeed in a professional environment.
Prerequisite: None.
Restriction: Written consent of instructor. Credit not allowed for both AB 230 and AB 270.
Registration Information: This is a partial semester course.
Term Offered: Fall.
Grade Mode: Traditional.
Special Course Fee: No.

AB 310 Understanding Pesticides Credit: 3 (3-0-0)
Course Description: Identification, properties, use, labeling, environmental interactions, and application of major classes of pesticides.
Prerequisite: BZ 100 to 199 · at least 3 credits or CHEM 100 to 199 · at least 3 credits.
Restriction: Junior standing. Sections may be offered: Online. Credit not allowed for both AB 310 and BSPM 310.
Term Offered: Spring.
Grade Mode: Traditional.
Special Course Fee: No.

AB 330 Applications in Agricultural Biology I Credit: 2 (2-0-0)
Course Description: Knowledge, skills, and abilities to propose sustainable solutions to biological problems in natural or managed ecosystems. Collectively discuss a diverse set of case studies that incorporate systems approach in solving agricultural biology issues. Hone career plans and professional skills.
Prerequisite: (AB 230 or AB 270) and (BSPM 302).
Restriction: Must be a: Undergraduate.
Registration Information: Agricultural biology majors only.
Term Offered: Fall.
Grade Mode: Traditional.
Special Course Fee: No.

AB 340 Insect Biotechnology Credit: 3 (3-0-0)
Course Description: Introduction to concepts, terminology, and applications of molecular biology techniques as it relates to the entomology. Learn about the use of whole insects, as well as their cells, tissues, and associated bacteria in medical, pharmaceutical, and agricultural applications.
Prerequisite: None.
Restriction: This is a partial semester course.
Registration Information: Credit not allowed for both AB 340 and BSPM 280A1.
Term Offered: Spring.
Grade Mode: Traditional.
Special Course Fee: No.

AB 511 Microbiome of Plant Systems Credit: 3 (3-0-0)
Course Description: Emphasizes interdisciplinary and cross curricular education with training in disciplines that support an increased understanding of plant associated microbiome and their optimization.
Prerequisite: None.
Restriction: Must be a: Graduate.
Registration Information: Graduate standing.
Term Offered: Fall.
Grade Mode: Traditional.
Special Course Fee: No.

AB 509 Herbicide Selectivity and Action Credit: 3 (3-0-0)
Course Description: Explores the physicochemical properties of herbicides, their selectivity (through placement and metabolism), their mechanism of action, uses in weed management, visual symptoms of herbicide treatment, how plants can evolve resistance to these compounds, and controversial topics related to the use of herbicides.
Prerequisite: None.
Restriction: This is a partial semester course.
Registration Information: Sections may be offered: Online.
Term Offered: Fall (even years).
Grade Mode: Traditional.
Special Course Fee: No.

AB 280A1 Agricultural Biology--Freshman Orientation Credit: 1 (1-0-0)
Course Description: Introduction to information and skills necessary to succeed in the agricultural biology major.
Prerequisite: None.
Restriction: Must be a: Undergraduate.
Registration Information: This is a partial semester course.
Term Offered: Fall.
Grade Mode: Traditional.
Special Course Fee: No.

AB 130 Developing a Capstone Project Credit: 2 (2-0-0)
Course Description: Design professional resumes, and develop interpersonal skills to succeed in a professional environment. Develop criteria to write a report from internships, and develop skills in interpretation of qualitative and quantitative agricultural biology data.
Prerequisite: AB 230, may be taken concurrently.
Restriction: Must be a: Undergraduate.
Registration Information: This is a partial semester course.
Term Offered: Spring.
Grade Mode: Traditional.
Special Course Fee: No.

AB 270 Agri. Biology Orientation for Transfers Credit: 2 (2-0-0)
Course Description: Introduction to the scientific method and systems thinking in terms of agricultural biology. Develop a hypothesis based on field observations, collect and analyze data. Prepare to become agricultural biology professionals by designing resumes and practicing skills to succeed in a professional environment.
Prerequisite: None.
Restriction: Written consent of instructor. Credit not allowed for both AB 230 and AB 270.
Registration Information: This is a partial semester course.
Term Offered: Fall.
Grade Mode: Traditional.
Special Course Fee: No.
AB 515  Plant Biochemistry in Agriculture  Credits: 3 (3-0-0)
Course Description: Experiential learning environment leading to mastery of principles of protein homology modeling, metabolic network analysis, and important plant biochemical pathways. Structure and function of enzymes in metabolic pathways and the contributions of these pathways to plant growth and development.
Prerequisite: HORT 576.
Restriction: Must be a Graduate.
Registration Information: Graduate standing. Sections may be offered: Online. Credit allowed for only one of the following: AB 515, BSPM 515 or BSPM 581A2.
Term Offered: Fall (odd years).
Grade Mode: Traditional.
Special Course Fee: No.

AB 529  Pesticide Resistance Evolution and Management  Credits: 3 (3-0-0)
Course Description: Examines pesticide resistance, including principles of resistance evolution; resistance mechanisms in arthropods, weeds, and plant pathogens; management approaches; communication strategies; and new developments in technology for pest management, including RNAi and gene drive.
Prerequisite: (LIFE 102 or LIFE 103) and (BZ 346 or SOCR 330).
Registration Information: Sections may be offered: Online. Credit not allowed for both AB 529 and BSPM 580A4.
Term Offered: Spring (even years).
Grade Mode: Traditional.
Special Course Fee: No.