

## 2023-24 Plant Science B.Sc. Course Checklist

### California State University, Fresno

[For planning purposes only - Consult the official University Catalog for all degree requirements advising notes, prerequisites, etc.]

<http://fresnostate.edu/catalog/subjects/plant-science/plant-sci.html>

Student Name: \_\_\_\_\_ Email Address: \_\_\_\_\_ @mail.fresnostate.edu

Transfer Student? \_\_\_\_\_ Catalog Year: 20\_\_\_\_ Projected Graduation Semester/Year: \_\_\_\_\_

Planned Semester	Course	Semester Offered*	Semester Completed	Units
1st	GE A1 - Oral Communication	Fall/Spring		3
1st	GE A2 - Written Communication	Fall/Spring		3
1st	GE B4 - MATH 11 Elementary Statistics	Fall/Spring		3
1st	GE A3 - CSM 10 The Scientific Method	Fall/Spring		3
1st	Lower Division Elective _____	Fall/Spring		3
2nd	GE B2 - BIOL 11 Plant Biology†	Fall/Spring		3
2nd	GE B3 - Laboratory Component	Fall/Spring		-
2nd	GE C1 - Arts	Fall/Spring		3
2nd	GE C2 - Humanities	Fall/Spring		3
2nd	GE E - CSM 15 Evidence Based Decision Making	Fall/Spring		3
2nd	MEAG XX or XXX (based on field of study)	Fall/Spring		3
3rd	GE B1 - CHEM 3A Introductory General Chemistry (GE B4 - MATH 11)‡	Fall/Spring		4
3rd	GE C1 or C2 - Arts or Humanities	Fall/Spring		3
3rd	GE D1 - American History	Fall/Spring		3
3rd	PLSI 2 American Government and Institutions	Fall/Spring		3
3rd	Lower Division Elective _____	Fall/Spring		3
4th	GE D2 - AGBS 1 Agricultural Business	Fall/Spring		3
4th	GE F - Ethnic Studies	Fall/Spring		3
4th	CHEM 8 Intro Org Chem or CHEM 3B Elem Org/Biochem (CHEM 3A)	Fall/Spring		3
4th	PLANT 99 Intro to Biometrics (MATH 11 or any Intro/Elem Statistics course)§	Fall/Spring		3
4th	Lower/Upper Division Elective _____	Fall/Spring		3
5th	PLANT 71 Agricultural Water	Fall/Spring		3
5th	PLANT 100 Aspects of Crop Productivity (BIOL 11)	Fall/Spring		3
5th	PLANT 162 Economic Entomology (BIOL 11)	Fall/Spring		3
5th	PLANT 172 Soils (CHEM 3A)	Fall		3
5th	PLANT 172L Soils Lab (PLANT 172 (may be concurrent))	Fall		1
5th	Upper Division Elective _____	Fall/Spring		3
6th	CHEM 150 General Biochemistry (CHEM 3A and 3B or 8)	Fall/Spring/Summer		3
6th	PLANT 101 Crop Nutrition (PLANT 172)	Spring		3
6th	PLANT 160 Weeds (BIOL 11 & CHEM 3A) or PLANT 163 IPM (PLANT 162)	Fall/Spring		3
6th	GE IB - PLANT 105 Food Soc and Envir or GE ID AGBS 155 Envir Nat Res Policy¶	Fall/Spring		3
6th	UD Writing Skills Requirement - PLANT 110W Dimensions in Agriculture	Fall/Spring/Summer		-
6th	Upper Division Elective _____	Fall/Spring		3
7th	PLANT 161 Plant Pathology (BIOL 11)	Fall		3
7th	GE IC - Arts and Humanities	Fall/Spring		3
7th	PLANT 107 Plant Propagation or PLANT 108 Microprop. (BIOL 11, CHEM 3A)	Fall/Spring		3
7th	PLANT 150 Crop Improvement (BIOL 11)	Fall/Spring		3
7th	Upper Division Elective _____	Fall/Spring		3
8th	PLANT 160 Weeds (BIOL 11 & CHEM 3A) or PLANT 163 IPM (PLANT 162)	Fall/Spring		3
8th	GE IB - PLANT 105 Food, Soc and Envir or GE ID AGBS 155 Envir Nat Res Policy	Fall/Spring		3
8th	PLANT 180, 190, 194I, 196 Senior Experience	Fall/Spring		1
8th	Upper Division Elective _____	Fall/Spring		3
8th	Upper Division Elective _____	Fall/Spring		3
			<b>Total</b>	<b>120</b>

#### Notes:

\* Semester offered is subject to change, summer courses are not always offered. Consider completing as early in schedule as possible

† An "Introductory/Elementary/Fundamental Biology" combined with an "Introduction to Plant Science" course may be substituted for BIOL 11 - Plant Biology (Requires department approval and a permission number for any courses requiring BIOL 11)

‡ Prerequisite or co-requisite: G.E. Foundation B4 (MATH 11). No credit for CHEM 3A after CHEM 1A.

§ Prerequisites in parentheses/Must obtain a "C" or higher in all major course prerequisites

¶ PLANT 105/AGBS 155 can double count as GE IB/ID and an UD Elective provided a minimum of 120 total units will be completed

# Plant Science, B.S.

## DEPARTMENT

MS in Plant Science, M.S.  
MN in Plant Science, Minor  
BS in Plant Science, B.S.

## REQUIREMENTS

Department of Plant Science

### **Bachelor of Science Degree Requirements** **Plant Science Major**

This Bachelor of Science degree is designed to provide graduates with an academic background deeply rooted in field-based experiences in the broad array of disciplines within the Plant Sciences.

#### **1. Major Requirements (78 units)**

##### *Core Courses (38 units)*

PLANT 71, 99, 100, 101, 107 or 108, 150, 160, 161, 162, 163, 172, and 172L

Select three (3) units from MEAG

Select one (1) unit from PLANT 180, 190, 194I, or 196 in consultation with a faculty adviser.

##### *Electives (24 units)*

Select twenty-four (24) units of electives that best meet your career objectives. A maximum of nine (9) units may be lower division, including any department-approved transfer courses. Note: Electives cannot double count in the required core.

- MEAG 3, MEAG 20, or MEAG 50
- PLANT 1, PLANT 20, PLANT 30, PLANT 40, PLANT 41, or PLANT 60
- MEAG 103, MEAG 112, MEAG 113, MEAG 114, or MEAG 120
- PLANT 105, PLANT 120, PLANT 121, PLANT 122, PLANT 123E, PLANT 124E, PLANT 130, PLANT 132, PLANT 133, PLANT 140, PLANT 141, PLANT 142, PLANT 143, PLANT 164, PLANT 165, PLANT 166, PLANT 167, PLANT 168, PLANT 170T, PLANT 174, or PLANT 175

Of the twenty four (24) units of electives required you may select one (1) to three (3) courses from outside of the major from the courses listed below. Additional prerequisites may be required for some courses. Other electives outside the major not listed below may be considered, but will require prior department chair approval and may have additional prerequisites.

- AGBS 1, AGBS 28, AGBS 31, AGBS 100, AGBS 109, AGBS 110, AGBS 117, AGBS 120, AGBS 130, AGBS 140, AGBS 150, AGBS 155, AGBS 160, AGBS 162, AGBS 163, or AGBS 164
- BIOL 124, BIOL 125, BIOL 132, BIOL 140, BIOL 150, BIOL 156, or BIOL 171
- CHEM 105
- EES 185 or EES 186
- IT 186
- VIT 1, VIT 101, VIT 102, VIT 103, VIT 105, VIT 106, VIT 160, or VIT 165

#### **Additional Requirements (16 units)\***

CHEM 3A (Area B1), BIOL 11(Area B2), MATH 11 (Area B4), CHEM 8 or CHEM 3B, CHEM 150

#### **2. General Education requirements (49 units)**

#### **3. Other requirements (9 units)**

American Government and Institutions (PLSI 2), Multicultural and International (MI), and Upper-division writing. Note: Plant Science majors are exempt from the MI requirement.

#### **4. Sufficient elective units to meet required total units (varies)**

#### **5. Total units (120)\*\***

\* Ten (10) units of additional requirements (CHEM 3A, BIOL 11, and MATH 11) are also being used to fulfill (10) units of the G.E. requirement.

#### **Advising Notes**

1. Consult with the Jordan College Advising and Career Development Center (JCACDC) adviser and/or faculty adviser each semester.
2. One semester prior to graduation, contact your JCACDC adviser to prepare and file any necessary course substitutions.
3. CR/NC grading is only permitted for PLANT 194I.
4. All prerequisites require a grade of C or higher.
5. The upper-division writing skills requirement is met by passing an approved upper-division writing skills course (i.e. PLANT 110W) to be taken no sooner than the term in which 60 units are completed.
6. Units earned for Community College courses may not count toward upper-division units in the major.
7. Students interested in professional certifications or licensures (Crop Adviser, Pest Control Adviser, Professional Soil Scientist, Certified Horticulturist, etc.) should consult with their faculty adviser, and/or the Jordan College Advising and Career Development Center.

## **FACULTY**

The faculty members hold advanced degrees in their fields of specialization from leading agricultural institutions and universities in the United States. They are well-qualified teachers who, through extensive research and interaction with major agricultural industries, bring a wealth of basic and practical information into the classroom. A faculty academic adviser is assigned to work with each student to plan and design an individualized program of study to meet the student's educational and career objectives.

Many of the faculty members are involved in one or more of the Centers of the California Agricultural Technology Institute (Center for Irrigation Technology and the Viticulture and Enology Research Center) and the San Joaquin Experimental Range. These centers offer excellent opportunities to undergraduate and graduate students to participate in applied research projects that address and help solve problems faced by California's agricultural industry.

For faculty phone numbers and e-mail, see the campus directory.

For more on the faculty, see the faculty pages.

The faculty pages are updated by the department or program.