

B.S. Agricultural & Food Systems  
Organic & Sustainable Agriculture Major  
Advising Sheet 2021-2022

**University Common Requirements (UCORE):**

34 credit minimum required, with no more than three, three-credit courses within the major.

First Year Experience (3 credits) [ROOT]	Credits	Term	Grade	Offered
HISTORY 105: Roots of Contemporary Issues	3			F, S, SS
Foundational Competencies (9 credits minimum)	Credits	Term	Grade	Offered
<i>Written Communication (3) [WRTG]</i>				
ENGLISH 101: Introductory Writing	3			F, S, SS
<i>Communication (3) [COMM] [WRTG]</i>				
H_D 205: Dev. Effective Com. or COM 102: Com. in Info. Soc.	3 - 4			F, S, SS
<i>Quantitative Reasoning (3) [QUAN]</i>				
STAT 212: Intro to Stat Methods	4			F, S, SS
Ways of Knowing (16 credits minimum)	Credits	Term	Grade	Offered
<i>Inquiry in the Social Sciences (3) [SSCI]</i>				
ECON 101: Fundamental Microeconomics	3			F, S, SS
<i>Inquiry in the Humanities (3) [HUM]</i>				
Elective	3			F, S, SS
<i>Inquiry in the Creative and Professional Arts (3) [ARTS]</i>				
Elective	3			F, S, SS
<i>Inquiry in the Natural Sciences (7 minimum) [BSCI] [PSCI] [SCI]</i>				
Major requirements:				
BIOLOGY 107: Intro to Cell Bio & Genetics	4			F, S, SS
CHEM 101: Intro to Chem or CHEM 105: Prin. of Chem I	4			F, S, SS
Integrative and Applied Learning (6 credits minimum)	Credits	Term	Grade	Offered
<i>Diversity (3) [DIVR]</i>				
Elective	3			F, S, SS
<i>Integrative Capstone (3) [CAPS]</i>				
AFS 401: Adv. Systems Analysis & Design in AFS	3			S

**Agricultural & Food Systems Core Requirements:**

Course	Credits	Term	Grade	Offered
BIOLOGY 106: Intro to Organismal or BIOLOGY 120: Intro to Botany	4			BIO106: F, S, SS BIO 120: F
CHEM 102: Chem Related to Life Sciences or CHEM 106: Princ. Of Chem II	4			CHEM 102: S, SS CHEM 106: F, S, SS
AFS 201: System Skills Development for AFS	3			S
ANIM_SCI 101: Introduction to Animal Science, or FS 110: Introduction to Food Science	3			F, S
CROP_SCI/HORT 102: Cultivated Plants	3			F, S online
SOIL_SCI 201: Soil: A Living System	3			F, S
CROP_SCI 360: World Agricultural Systems	3			F, S online
ECON 350: Intro to Farm & Ranch Mgmt. or ECON 352: Business Mgmt. Economics	3			ECON 350: F ECON 352: S
<i>Three credits from the following systems based courses:</i>				
AGTM 305: Ag Precision Systems (3)(F); AGTM 310: Small Engine Maintenance & Repair (3)(F); ANIM_SCI 464: Companion Animal Mgmt [M] (3)(F); ANIM_SCI 472: Dairy Cattle Production (3)(F); ANIM_SCI 474: Beef Cattle Production (3)(S); BIOLOGY 372: Gen Ecol (4)(F,S); CROP_SCI 302: Forage Crops (3)(S odd); ECON 351: Intro Food/Ag Mktg (3)(F); HORT 320: Olericulture (3)(F odd); SOE 300: Nat Res Ecol (3)(F,S); SOIL_SCI 368: Into ArcGIS (3)(F) or other systems courses approved by your advisor	3			

**Organic & Sustainable Agriculture Major Requirements:**

Course	Credits	Term	Grade	Offered
SOIL_SCI 101: Organic Farming	3			F, S
CROP_SCI/HORT 202: Crop Growth & Development	4			S
CROP_SCI 305: Ecol./Mgmt. of Weeds	3			F
CROP_SCI 403: Adv. Cropping Systems	3			F
ENTOM 351: Ecological & Integrated Pest Management	3			S
PL_P 429: General Plant Pathology or PL_P 501: Biology & Control of Plant Diseases	3			F
AFS 336: Ag. Env. & Community	3			F
AFS 445: Field Analysis of Sustainable Food Systems	3			S
AFS/SOIL_SCI 302: [M] Intro to Agroecology	3			S
SOIL_SCI 441: Soil Fertility	3			S
SOIL_SCI 443: [M] Soil Mgmt Sustainable and Org Farming Sys	3			F odd
SOIL_SCI 478: Advanced Organic Farming & Gardening	2			S
SOIL_SCI 479: Organic Farm & Garden Field Management	2			S, F online
SOIL_SCI 480: Practicum in Organic Ag.	2			F, S, SS
SOIL_SCI 498: Professional Internship	3			F, S, SS
Horticulture Production Elective (see list below)	3			
<i>Select one course not used for the systems based course above:</i>				
HORT 310: Pomology (3)(F); HORT 313: Viticulture (3)(F); HORT 357: Greenhouse Management and Crop Production (3)(S); HORT 490: Potato Science (3)(F even-UI)				

**Open Electives:**

Course**	Credits	Term	Grade	Offered
	5			

**CHECK LIST FOR THIS MAJOR:**

Writing in the Major (2 [M] courses)	
Writing Portfolio	
40 Upper Division Electives	
UCORE	36-37 credits
AFS Core	29 credits
Organic & Sustainable Agriculture Major	46 credits
Open Electives	8-9 credits
Total (at least 120 credits)	

**NOTES:**

*Students may be admitted to the Organic & Sustainable Agriculture major upon making their intention known to the department.*

*\*Electives are chosen by the student and are needed to reach the minimum 120 credits to graduate.*

*Electives can be used towards a minor. Contact an advisor or the department for more information on courses for your minor interest. Suggested minors could be Business Administration, Economics, Agribusiness Economics, Environmental and Resource Economics, Sustainable Development, Communications, Animal Sciences, Crop Science, Horticulture, Natural Resources, Soil Science, Political Science, Global Politics, a foreign language, etc.*

## FOUR-YEAR PLAN

	Fall Semester	Hours	Spring Semester	Hours
<b>First Year</b>	ANIM_SCI 101 of FS 110 CHEM 101 or CHEM 105 <b>[PSCI]</b> CROP_SCI/HORT 102 ENGLISH 101 <b>[WRTG]</b> ECONS 101 <b>[SSCI]</b>	3 4 3 3 3	SOIL_SCI 101 CHEM 102 or CHEM 106 CROP_SCI/HORT 202 HISTORY 105 <b>[ROOT]</b>	3 4 4 3
<b>Second Year</b>	AFS 201 BIOLOGY 106 or BIOLOGY 120 <b>[BSCI]</b> Humanities <b>[HUM]</b> STAT 212 <b>[QUAN]</b>	3 4 3 4	BIOLOGY 107 H_D 205 or COM 102 <b>[COMM]</b> SOIL_SCI 201 Creative and Professional Arts <b>[ARTS]</b> Diversity <b>[DIVR]</b>  <b>Complete Writing Portfolio</b>	4 3 or 4 3 3 3
<b>Third Year</b>	CROP_SCI 305 CROP_SCI 360 PI_P 429 <sup>1</sup> SOIL_SCI 443 [M] Horticulture Production Elective <sup>2</sup>	3 3 3 3 3	ECONS 352 <sup>3</sup> AFS 445 SOIL_SCI 302 <b>[M]</b> SOIL_SCI 478 ENTOM 351	3 3 3 3 3
<b>Summer Session</b>	SOIL_SCI 498 Professional Internship (Summer, Fall, or Spring)	3		
<b>Fourth Year</b>	AFS 336 CROP_SCI 403 AFS Core Systems Elective <sup>4</sup> SOIL_SCI 479 Elective	3 3 3 2 4	AFS 401 <b>[CAPS]</b> SOIL_SCI 441 SOIL_SCI 498 SOIL_SCI 480 Elective	3 3 3 2 4

### Footnotes

<sup>1</sup> PL\_P 501, which is only offered in the spring, may be used as an alternative for PL\_P 429.

<sup>2</sup> Horticulture Production Electives: HORT 310, HORT 313, HORT 357 (spring), or as approved by advisor.

<sup>3</sup> ECONS 350, which is only offered in the fall, may be used as an alternative for ECONS 352.

<sup>4</sup> AFS Core Systems Electives: AGTM 310, ANIM SCI 464 [M], 472 [M], 474 [M], BIOLOGY 372 [M], CROP SCI 302, ECONS 351, HORT 320, SOE 300, SOIL SCI 368, or other systems courses approved by your advisor.