Pathways to General Education (44-47 credits) Concept 1 – Discourse (9 credit hours)

1F – Foundational
___(3) ENGL 1105 First-Year Writing – F, S
___(3) ENGL 1106 First-Year Writing – F, S, SI, SII
1A – Advanced/Applied
___(3) – F, S, W, SI, SII

Concept 2 – Critical Thinking in the Humanities (6 credits)
___(3) – F, S, W, SI, SII
___(3) – F, S, W, SI, SII

Concept 3 – Reasoning in the Social Sciences (6 credits)
_____ (3) AAEC 1005 Econ Food Fiber Sys or ECON 2005 Principles of Economics – F, S
_____ (3) – F, S, W, SI, SII

Concept 4 – Reasoning in the Natural Sciences (6 credits)
____(3) CHEM 1035: General Chemistry* – F, S, SI, SII
____(3) CHEM 1036: General Chemistry* – F, S, SI, SII

Concept 5 – Quantitative and Computational Thinking (11 credits)
5f – Foundational (8 credits)
_____ (3) MATH 1025: Elementary Calculus – F, S, SI, SII
_____ (3) MATH 1026: Elementary Calculus – F, S, SI, SII

5a – Advanced/Applied (3 credits)
_____ (3) STAT 3615 Biological Statistics* – F, S

Concept 6 – Critique and Practice in Design and the Arts (6 credits)
6d – Design
____(3) – F, S, W, SI, SII

6a – Arts
____(3) – F, S, W, SI, SII

Concept 7 – Critical Analysis of Identity and Equity in the United States (3 credits) (may be double-counted with another Pathways concept)
_____ (3) – F, S, W, SI, SII

Plant Science Degree Core Requirements (25 credits)
____(1) ALS 1234: CALS First Year Seminar – F
____(3) ALCE 3634: Comm Ag & Life Sci in Speaking – F, S
               or ALCE 3624: Comm Agriculture in Writing – F, S
____(3) BIOL 1105: Principles of Biology – F, W, SI
____(3) BIOL 1106: Principles of Biology – F, W, SI
____(3) ENSC 1015: Found Environmental Sci – F
____(3) HORT/BIOL 2304: Plant Biology* – F
____(3) PPWS 2104: Plants, Genes, and People*- F
____(4) PPWS 4104: Plant Pathology – F
____(2) SPES 4864: Plant Science Capstone* - TBD

Plant Science Major Requirements (minimum 24-26 credits)
___(3 or 4) BCHM 3114 Biochem for Biotech* - F
               or ___ BCHM 4115: General Biochemistry* - F
___(1) CHEM 1045: General Chemistry Laboratory* – F, S, SI, SII
___(1) CHEM 1046: General Chemistry Laboratory* – S, SI, SII
___(3) CHEM 2535: Organic Chemistry* – F, S, SII
___(1) CHEM 2545: Organic Chemistry Laboratory* – F, S
___(3) CHEM 2536: Organic Chemistry* - F, S
___(1) CHEM 2546: Organic Chemistry Laboratory* - S
___(2 or 3) CSES 2444: Agronomic Crops -F
              or HORT 2224: Horticulture Science & Industr - F
___(3) CSES 4144 Plant Breeding and Genetics - S
___(3) CSES 4344 Crop Physiology and Ecology - S

*Prerequisites: Some courses listed on this checksheet may have pre-/co-requisites; please consult the University Course Catalog or check with your advisor.

Key:
F – Fall
S – Spring
W – Winter
SI – Summer, Part I
SII – Summer, Part II
## College of Agriculture and Life Sciences
### School of Plant and Environmental Sciences
### Bachelor of Science in Plant Science
#### Major in Plant Science
For students entering under UG catalog 2021-2022

### Plant Science Major Restricted Electives (Choose 15 credits from list below)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALS 3404</td>
<td>Ecological Agriculture: Theory and Practice</td>
<td></td>
</tr>
<tr>
<td>BCHM 2114</td>
<td>Biochemical Calculations* - S</td>
<td>S</td>
</tr>
<tr>
<td>BCHM/APSC 4054</td>
<td>Genomics* - F</td>
<td>F</td>
</tr>
<tr>
<td>BCHM 4116</td>
<td>General Biochemistry* - S</td>
<td>S</td>
</tr>
<tr>
<td>BIOL 2004</td>
<td>Genetics* – F, S</td>
<td>S</td>
</tr>
<tr>
<td>BIOL 2104</td>
<td>Cell and Molecular Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 2134</td>
<td>Cell Function Differentiation* – F, S</td>
<td>F, S</td>
</tr>
<tr>
<td>BIOL 4134</td>
<td>Evolutionary Genetics *- S</td>
<td></td>
</tr>
<tr>
<td>BIOL 4334</td>
<td>Chemical Ecology* - S</td>
<td>S</td>
</tr>
<tr>
<td>CSES/ENSC 3134</td>
<td>Soils in the Landscape* - S</td>
<td>S</td>
</tr>
<tr>
<td>CSES/HORT 3444</td>
<td>World Crops &amp; Systems* – S</td>
<td>S</td>
</tr>
<tr>
<td>CSES/FREC 4334</td>
<td>Agroforestry - F</td>
<td>F</td>
</tr>
<tr>
<td>CSES 4544</td>
<td>Forage Crop Ecology - S</td>
<td>S</td>
</tr>
<tr>
<td>HORT 2184</td>
<td>Plants Places Culture Globally – S</td>
<td>S</td>
</tr>
<tr>
<td>HORT 2234</td>
<td>Envir Factors in Hort - S</td>
<td>S</td>
</tr>
<tr>
<td>HORT 4064</td>
<td>Soil Microbiology* - F</td>
<td>F</td>
</tr>
<tr>
<td>HORT 4794</td>
<td>Medicinal Plants and Herbs* - F</td>
<td>F</td>
</tr>
<tr>
<td>PPWS 2004</td>
<td>Mysterious Mushrooms &amp; Molds - S</td>
<td>S</td>
</tr>
<tr>
<td>PPWS 2754</td>
<td>Weeds that Shape Our World - F</td>
<td>F</td>
</tr>
<tr>
<td>PPWS 4154</td>
<td>Plant Problem Diagnosis* - F</td>
<td>F</td>
</tr>
<tr>
<td>PPWS 4604</td>
<td>Biological Invasions* - F</td>
<td>F</td>
</tr>
<tr>
<td>(1-3) PPWS 4994</td>
<td>Undergraduate Research – F, S</td>
<td>F, S</td>
</tr>
</tbody>
</table>

### Free Electives (to reach 120 Total Credit Hours)

- (_1_)

---

**Note:**

- Total Hours Required: 120

*Prerequisites: Some courses listed on this checksheet may have pre-/co-requisites; please consult the University Course Catalog or check with your advisor.

**Satisfactory Progress:**

By the end of the academic year in which the student has attempted 60 credits (including transfer, advanced placement, advanced standing and credit by examination), "satisfactory progress" toward a BS PLSC degree will include:

- At least 24 credits that apply to the Pathways to General Education
- CHEM 1035 and 1036
- ALS 1234
- 6 credits of Math

**GPA Requirements:**

- Overall GPA: 2.0 (each semester in order to be in good academic standing)
- In-major GPA: 2.0 (by the time the student graduates)
  - Includes classes in: CSES, HORT, and PPWS

**Language Study Requirement** - Students who do not complete two years of a single foreign or classical language or American Sign Language in high school, may do so by taking six credits of college-level foreign or classical language or American Sign Language. The six credits used to meet this requirement may not be used to satisfy the minimum number of credits required for graduation.

---

**Key:**

- F – Fall
- S – Spring
- W – Winter
- SI – Summer, Part I
- SII – Summer, Part II