This document refers to and is a companion to the full curriculum.

Degree planning for the College of Ag and Life Sciences’ Agricultural Sciences Major requires two parts: CALS requirements and major requirements. There are three broad categories of CALS requirements (pg. 1) and two categories of Ag Sciences requirements: core and concentration coursework (pgs. 2-3).

### AGRICULTURAL SCIENCES MAJOR CURRICULUM CHECKLIST

#### 1. LIFE SCIENCES CORE FOR CALS AND AG SCIENCES

Minimum 6 credits of life sciences biology required. Students with AP biology credit or those planning for undergrad research or graduate school should discuss options with advisor.

- **Foundations of Biology** (BIOG 1140 recommended), *fall, 4 credits*
- **Biology options, variable semesters and credit** (select at least ONE course below if beginning with BIOG 1140)
  - BIOAP 1100 Domestic Animal Biology, *fall 4 credits* *Fall MWF 9:05*
  - BIOEE 1610 Ecology and the Environment, *fall, spring, 3-4 credits*
  - BIOEE 1780 Evolutionary Biology and Diversity, *fall, spring, 4-5 credits*
  - BIOG 1440 or BIOG 1445 Comparative Physiology, *fall, spring, summer, 3-4 credits*
  - BIOG 1500 Investigative Biology Laboratory, *fall, spring, summer, 2 credits*
  - BIOMG 1350 Cell and Developmental Biology, *fall, spring, 3 credits*
  - PLBIO 2410 Introductory Plant Biodiversity and Evolution, *fall, 3 credits*
  - PLHRT 1115 The Nature of Plants, *spring, 3 credits*

- **Chemistry, minimum of one life sciences course required** (1560 recommended, if not planning graduate school), *fall, 4 credits* (see full curriculum guide for more options).

- **Statistics, minimum of one course required** (see full curriculum guide for options)

#### 2. SOCIAL SCIENCES AND HUMANITIES

Four courses of three or more credits each. Courses must be from at least three different categories. One course category must be human diversity (D). To search and verify that course selections meet these categories, refer to the CALS system, DUST.

- Cultural Analysis (CA)
- Foreign Language (FL)
- Historical Analysis (HA)
- Human Diversity (D)
- Knowledge, Cognition, and Moral Reasoning (KCM)
- Literature and the Arts (LA)
- Social and Behavioral Analysis (SBA)

#### 3. WRITTEN AND ORAL EXPRESSION 9 credits total (can take all 9 cr. as written)

- Minimum 6 credits written expression
- 3 credits oral expression
4. **CORE REQUIRED COURSES FOR MAJOR** *(13 courses, 6 have choices)*

Core requirements are strongly encouraged to be completed for letter grade. **If you want to change your grading option to S-U, you must request approval by notifying your advisor and the Ag Sciences director beforehand.** A core course **may not also be double-counted** as a concentration course for Ag Sciences Major graduation requirements. Courses below are listed by common planning time. This is a suggestion, not a firm expectation. Consult advisor, coordinator, and peers for course planning support.

**Courses commonly taken in the first year:**

1. ☐ AGSCI/PLSCS 1125 Guided Explorations: Growing You and Your Path in the Agricultural Sciences, *fall, 1 credit*, Required for fall freshmen and transfers. Other transfers (internal, intra-CALS, double majors, January-entry students) should consult director or coordinator on requirement.
2. ☐ PLSCI 1101 Plant Science and Systems, *fall, 4 credits*
3. ☐ PLSCS 1900 Sustainable Agriculture: Food, Farming, and the Future, *fall, 3 credits*

**Courses commonly taken in the second year:**

4. ☐ Choose ONE Food Science course from list *(2-3 credits)*
5. ☐ PLSCS 2600 Soil Science, *fall, 4 credits* *(Fall MWF 9:05)*
6. ☐ PLSCS 2110 Field Crop Systems, *fall, 4 credits*
7. ☐ Choose ONE Communication or Education course from list *(3 credits)*
8. ☐ Choose ONE Introductory Business Management course from list *(3-4 credits)*
9. ☐ Choose ONE Genetics course from list *(3-5 credits)*

**Courses commonly taken in the third and fourth years:**

10. ☐ AGSCI 4960 Internship Experience *(1-3 credits)*
11. ☐ Choose ONE Animal Science course from list *(3-4 credits)*
12. ☐ Choose ONE International Agriculture course from list *(2-4 credits)*
13. ☐ ENTOM/PLSCS 4440 Integrated Pest Management, *spring, 4 credits*

5. **CONCENTRATIONS** *(12 credit minimum)*

Students must choose **at least one** of the five concentrations below: Animal Science, Business Management and Policy, Education and Society, Organic Agriculture, or Sustainable Cropping Systems Management. **Note: In 2018-19 Sustainable Agriculture is phasing out (see pg. 4).**

**Concentration coursework must be taken letter grade, if student-option for course grade provided.** A concentration course **may not also be double-counted** as a core course for Ag Sciences Major graduation requirements.

We recognize student interest in the broad environmental sciences. To accommodate this, **a petition may be submitted to pursue the Climate Change Minor** *(http://www.eas.cornell.edu/academics/undergraduate/climate-change-minor.cfm)* **in substitution for a concentration. This must be initiated by the end of the first semester, junior year.** The minor is 18 credits and the **full minor must be completed** to plan this option. To begin the process, email the Ag Sciences coordinator for petition paperwork.

**CONCENTRATION IN: ANIMAL SCIENCE**

12 credits required; At least **six credits** in each of two lists

| ☐ | Course from list 1 |
| ☐ | Course from list 1 |
| ☐ | Course from list 2 |
| ☐ | Course from list 2 |
CONCENTRATION IN: **BUSINESS MANAGEMENT AND POLICY**
Minimum of 12 credits required. Students choose a track, complete coursework within track. *(Mixing across tracks is not permitted.)* More detail provided in full curriculum.

<table>
<thead>
<tr>
<th>Business Management Track</th>
<th>Policy Track (see full curriculum for choices)</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Accounting</td>
<td>☐ Introductory economics choice</td>
</tr>
<tr>
<td>☐ Marketing</td>
<td>☐ Intermediate economics choice</td>
</tr>
<tr>
<td>☐ Finance</td>
<td>☐ Choice course in agricultural policy (see full curriculum)</td>
</tr>
<tr>
<td>☐ Additional 3 or more credits from choices listed in five categories in full curriculum</td>
<td>☐ Choice course in agricultural policy (see full curriculum)</td>
</tr>
</tbody>
</table>

CONCENTRATION IN: **EDUCATION AND SOCIETY**
Students should work with appropriate faculty advisors in selecting at least 12 credits of coursework to meet individual goals. Students may not mix and match between minors.

☐ Complete Ag Sciences core course requirement Communication or Education from list

☐ Plan minimum of 12 additional credits towards one of the following minors. Completion of the total minor is encouraged.
  - Communication
  - Community Food Systems
  - Creative Writing or English
  - Development Sociology
  - Education
  - Global Health

CONCENTRATION IN: **ORGANIC AGRICULTURE**
Three required courses and one choice course

☐ ENTOM/PLHRT 4730 Ecology of Agricultural Systems, *fall, 3 credits*
☐ PLSCS 3800 Principles and Practices in Certified Organic Agriculture, *spring, 2 credits*
☐ PLSCS 3150 Weed Biology and Management, *fall, 4 credits*

☐ Minimum of 3 credits of coursework from the choice list (see full curriculum for options)

CONCENTRATION IN: **SUSTAINABLE CROPPING SYSTEMS MANAGEMENT**
Select at least **two credits** in each of four areas of study: Field Crops, Horticulture, Pest Management, Soil Science

☐ Course from list in Field Crops category
☐ Course from list in Horticulture category
☐ Course from list in Pest Management category
☐ Course from list in Soil Science category
**CONCENTRATION IN: SUSTAINABLE AGRICULTURE** (This concentration is phased out in the 2018-19 year. Students entering in and prior to fall 2018 may still pursue. Students entering spring 2019 and beyond should review revised options and select another concentration.)

Two required courses and two electives from list:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
<th>Semester</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ DSOC 3400</td>
<td>Agriculture, Food, Sustainability and Social Justice</td>
<td>3 credits</td>
<td>fall</td>
<td>[D, KCM, SBA]</td>
</tr>
<tr>
<td>☐ ENTOM/PLHRT 4730</td>
<td>Ecology of Agricultural Systems</td>
<td>3 credits</td>
<td>fall</td>
<td></td>
</tr>
<tr>
<td>☐</td>
<td>Minimum of 6 credits from choice list (see full curriculum for options)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>