Appendix 4b – MS Advising Sheet

PROPOSED HCS MS Course Program 2022

Department of Horticulture and Crop Science

Date Program approved by SAC: ________________

Date Received by HCS GSC: ________________

☑ MS Thesis  ☐ MS Non-thesis

Student: ____________________________  Advisor: ____________________________

Inst. & Major of BS: ____________________________
Inst. & Major of MS: ____________________________

Student Advisory Committee: ____________________________

Use this form in combination with the PhD degree description

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>CREDIT</th>
<th>Completion by student:</th>
<th>Term</th>
<th>Grade</th>
<th>TOTAL</th>
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**TAKE ONE CLASS IN 2 OF THE 3 FOCUS AREAS:**

**FOCUS 1 - PLANT BIOCHEMISTRY/PHYSIOLOGY/METABOLOMICS (select one course)**

- HCS 5621  Physiology of Cultivated Plants – 3 credits (Prereq-grad standing)  AU
- HCS 5622  Plant Biochemistry – 3 credits (Prereq-grad standing)  SP
- HCS 7821  Environmental Physiology of Managed Plant Systems – 3 credits (Prereq HCS 5621) every other year  SP

Petition:

**FOCUS 2 - PLANT GENETICS/BIOTECHNOLOGY/BREEDING (select one course)**

- HCS 5325  Plant Genetics – 3 credits (Prereq-grad standing)  AU
- HCS 5625  Applied Plant Biotechnology – 2 credits (Prereq HCS 4325 or 5325)  SP
- HCS 5825  Plant Breeding – 2 credits (Prereq HCS 4325 or 5325)  SP
- HCS 8825  Advanced Plant Breeding – 3 credits (Prereq HCS 7625 or Perm. of Inst.)  SP

Petition:

**FOCUS 3 – PLANT SYSTEMS/PRODUCTION/ECOLOGY (select one course)**

- HCS 5100  Advanced Cropping Systems – 3 credits (Prereq-grad standing)  SP
- HCS 5200  Advanced Horticultural Principles and Practices – 3 credits (Prereq-grad standing)  SP
- HCS 5306  Sustain. Veg. Prod. Pract.: Planning, Growing and Marketing – 3 credits (Prereq-Perm. of instructor)  SP
- HCS 5411  Grain, Oilseed, and Fiber Crops – 3 credits (Prereq-Perm. of instructor)  SP
- HCS 5412  Agroecology of Grasslands and Prairies – 3 credits (Prereq-grad standing)  SP
- HCS 5420  Environmental impacts of Crop-Livestock Systems – 3 credits (Prereq-grad standing)  SP
- HCS 5422  Principles of Weed Ecology and Management – 3 credits (Prereq-grad standing)  SP
- HCS 5450  Vegetable Crop Production and Physiology – 3 credits (Prereq-grad standing)  SP
- HCS 5460  Fruit Crop Physiology and Production – 3 credits (Prereq-grad standing)  SP
- HCS 5625  Ecology of Agriculture – 3 credits (Prereq-grad standing)  SP
- HCS 5670  Golf Courses and the Environment – 2 credits (Prereq-grad standing)  SP

Petition:

**ADDITIONAL REQUIRED COURSES:**

**EXPERIMENTAL DESIGN**

- HCS 5887  Introduction to Experimental Design (Prereq-grad standing)  AU  3

**PROFESSIONAL DEVELOPMENT**

- HCS 7001  Graduate Student Professional Development  AU/SP  1

**SEMINAR (enroll twice)**

- HCS 7890  Colloquium presentation  AU/SP  1
- HCS 7890  2nd enrollment (non-presenting)  AU/SP  1
<table>
<thead>
<tr>
<th>CURRENT TOPICS</th>
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<tbody>
<tr>
<td>HCS 8830</td>
<td>Current Topics</td>
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<tr>
<th>ELECTIVES (minimum of 6 credits of HCS graduate courses) – see elective list suggestions</th>
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<tbody>
<tr>
<td>HCS/Other</td>
<td>Graduate Courses – NOT counting courses fulfilling above requirements</td>
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|  |
|-------------------------------|---|
| **Total Required Course Hours (all courses listed above)** | 17-19 |

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<thead>
<tr>
<th>RESEARCH HOURS</th>
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<tbody>
<tr>
<td>HCS 7999</td>
<td>MS Research (1-18) – multiple terms/hrs.</td>
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<th>Coursework required by SAC (not listed above)</th>
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<tr>
<td>HCS/other</td>
<td>Var.</td>
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| TOTAL GRADUATE HOURS COMPLETED (REQUIRED MINIMUM): | (80) |

HCS-GSC Form 8-2022