Assessment: Assessment Plan

Degree Program - CASNR - Horticulture Science (MS)

CIP Code: 01.1103.00
Degree Program Coordinator: Scott Longing
Degree Program Coordinator Email: scott.longing@ttu.edu

Program Purpose Statement: The College of Agriculture and Science and Natural Resources is dedicated to providing programs of excellence in teaching, research and outreach. These educational programs are designed to prepare the student for the dynamic agricultural and renewable natural resources industry - an industry that encompasses five closely related segments: (1) producing agricultural products; (2) supplying agricultural chemical, feed, seed, and other production resources; (3) processing, storing, distributing, and other marketing functions for agricultural products; (4) planning and managing programs for renewable natural resources; and (5) providing technical assistance financing, services, education, research, and communications in all sectors of the food, feed, fiber, and natural resource complex.

Modality: 100% Online, Face-to-Face

Student Learning Outcome: Methodological Research Expertise and Critical Thinking

Students will demonstrate the use of critical thinking to identify problems and derive conclusions in a complex global society.

Outcome Status: Active
Outcome Type: Student Learning
Start Date: 08/25/2014

Assessment Methods

Oral exam - Students will defend their individual project and general knowledge in the field of Horticultural Science at their oral exam. (Active)

Criterion: 95% of students will successfully defend their individual project and general knowledge in the field of Horticultural Science at their oral exam.
Schedule: This will occur at the oral defense. We are in the process of revising our graduate curriculum. We expect this to take about one year to complete. Once completed, we will revise our assessment criterion.

Master's Comprehensive Exam - non-thesis Master Students will present a comprehensive oral exam. (Active)

Criterion: 95% of students will successfully defend their individual project and general knowledge in the field of Horticultural Science at their oral exam.
Schedule: This will occur at the oral defense. We are in the process of revising our graduate curriculum. We expect this to take about one year to complete. Once completed, we will revise our assessment criterion.

Peer Assessments - Students will write scientific peer-review publications and submit abstracts for oral presentation (Active)

Criterion: 95% of students will successfully write peer-review publications and submit abstract for oral presentations
Schedule: We are in the process of revising our graduate curriculum. We expect this to take about one year to complete. Once completed, we will revise our assessment criterion.

Student Learning Outcome: Develop an understanding of both...
theoretical and applied principles of Horticulture Science

Students will develop and demonstrate a theoretical and applied knowledge of Horticulture Science.

**Outcome Status:** Active  
**Outcome Type:** Student Learning  
**Start Date:** 08/25/2014

### Assessment Methods

**Oral exam** - Students will successfully complete their thesis project and successfully defend their applied and theoretical knowledge of Horticultural Science at their oral exam. (Active)

**Criterion:** 95% of all students will successfully complete their thesis research and defend their applied and theoretical knowledge of Horticultural Science at their oral exam.  
**Schedule:** This will occur at the oral defense. We are in the process of revising our graduate curriculum. We expect this to take about one year to complete. Once completed, we will revise our assessment criterion.

**Student Projects** - Develop relevant literature review for the research project (Active)

**Criterion:** 95% of students will successfully develop and present their literature review to their advisor  
**Schedule:** This will occur during the execution of the research project. We are in the process of revising our graduate curriculum. We expect this to take about one year to complete. Once completed, we will revise our assessment criterion.

**Thesis** - Students will write peer-review papers in refereed journals (Active)

**Schedule:** We are in the process of revising our graduate curriculum. We expect this to take about one year to complete. Once completed, we will prepare an assessment criterion.

### Student Learning Outcome: Ability to design experiments and analyze data

Students will demonstrate their ability to design experimental plan for their research and analyze data generated.

**Outcome Status:** Active  
**Outcome Type:** Student Learning  
**Start Date:** 08/25/2014

### Assessment Methods

**Oral exam** - Students will defend their individual project and general knowledge in the field of Horticultural Science at their oral exam. (Active)

**Criterion:** 95% of students will successfully defend their individual project and general knowledge in the field of Horticultural Science at their oral exam.  
**Schedule:** This will occur at the oral defense. We are in the process of revising our graduate curriculum. We expect this to take about one year to complete. Once completed, we will revise our assessment criterion.

**Develop experimental design to conduct research project** (Active)

**Criterion:** 95% of students will successfully develop experimental design to conduct research project  
**Schedule:** We are in the process of revising our graduate curriculum. We expect this to take about one year to complete. Once completed, we will revise our assessment criterion.

**Develop statistical means to analyze data produced in the research project** (Active)

**Criterion:** 95% of students will successfully develop experimental design to conduct research project
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**Schedule:** We are in the process of revising our graduate curriculum. We expect this to take about one year to complete. Once completed, we will revise our assessment criterion.

### Student Learning Outcome: Develop Communication Skills

Students will communicate in oral form appropriate for research level position in horticulture.

**Outcome Status:** Active  
**Outcome Type:** Student Learning  
**Start Date:** 08/25/2014

#### Assessment Methods

<table>
<thead>
<tr>
<th>Course Level Assessment</th>
<th>Students will present their thesis research in PSS 5100 seminar (Active)</th>
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</thead>
<tbody>
<tr>
<td><strong>Criterion:</strong> 95% students will pass PSS 5100 seminar</td>
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<tr>
<td><strong>Schedule:</strong> Students will complete prior to degree completion. We are in the process of revising our graduate curriculum. We expect this to take about one year to complete. Once completed, we will revise our assessment criterion.</td>
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<tr>
<th>Professional Development Activities</th>
<th>Students will present posters and make oral presentation in conference (Active)</th>
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<td><strong>Criterion:</strong> 95% of students will present posters or make oral presentations in conference.</td>
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<td><strong>Schedule:</strong> We are in the process of revising our graduate curriculum. We expect this to take about one year to complete. Once completed, we will revise our assessment criterion.</td>
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<th>Professional Development Activities</th>
<th>Students will participate and present their research in industry field day (Active)</th>
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<td><strong>Criterion:</strong> 75% of students will participate in and present their research in industry field days.</td>
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<td><strong>Schedule:</strong> We are in the process of revising our graduate curriculum. We expect this to take about one year to complete. Once completed, we will revise our assessment criterion.</td>
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<th>Course Level Assessment</th>
<th>Students will successfully defend their thesis (Active)</th>
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<td><strong>Criterion:</strong> 95% of students will successfully defend their thesis</td>
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