

**Agricultural Education:**  
**Greenhouse Management**

School Year \_\_\_\_\_

Course Code #  5117 or  5167 Term: \_\_\_ Fall \_\_\_ Spring  
**1 Credit** \_\_\_\_\_ **2 Credits** \_\_\_\_\_

Competencies denoted by 1 must be taught if the course is offered for 1 credit.  
 All competencies must be taught if the course is taught for 2 credits.

Student:	Grade:
Teacher:	School:
Number of Competencies in Course: <u>1 credit 22</u> <u>2 credit 44</u>	
Number of Competencies Mastered:	
Percent of Competencies Mastered:	

**Standard 1.0 The student will research and discuss job opportunities in the horticulture field.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
1.1	Explore job opportunities available in the area of greenhouse management.	<b>1</b>		
1.2	Evaluate local job opportunities in greenhouse management.	<b>1</b>		
1.3	Determine skills necessary for success in the greenhouse industry.	<b>1</b>		
1.4	Evaluate the importance of greenhouse crop production to feeding a growing population.	<b>2</b>		

**Standard 2.0 The student will demonstrate correct procedures for handling pesticides and utilize general safety practices in the greenhouse.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
2.1	Follow industry safety standards in the greenhouse and work area.	<b>1</b>		
2.2	Evaluate proper chemical/pesticide safety standards.	<b>1</b>		
2.3	Assess the purpose of worker protection standards.	<b>1</b>		
2.4	Compare the uses and types of chemicals used in greenhouse production.	<b>2</b>		

**Standard 3.0 The student will evaluate the properties of different types of soil media.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
3.1	Describe the major functions of growing media.	<b>1</b>		
3.2	Analyze attributes of growing media.	<b>1</b>		
3.3	Determine cost effectiveness of premix or personal mix.	<b>2</b>		

**Standard 4.0 The student will evaluate the different structures and functions of plants.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
4.1	Evaluate the importance of plant structures.	<b>2</b>		
4.2	Specify the functions of plant structures.	<b>1</b>		

**Standard 5.0 The student will describe proper methods of asexual and sexual plant propagation.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
5.1	Explain methods of plant propagation.	<b>1</b>		
5.2	Compare the benefits of asexual versus sexual reproduction.	<b>2</b>		
5.3	Evaluate the techniques of sexual and asexual reproduction of plants.	<b>2</b>		

**Standard 6.0 The student will describe proper nutrition and watering techniques with greenhouse crops.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
6.1	Evaluate the benefits of proper watering of plants.	<b>1</b>		
6.2	Evaluate the benefits of proper nutrition of plants.	<b>1</b>		
6.3	Examine how water pH interacts with plant growth.	<b>2</b>		

**Standard 7.0 The student will select greenhouse crops and identify common plants in greenhouse production.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
7.1	Evaluate the use of different greenhouse crop species for production.	<b>1</b>		
7.2	Compare the advantages and disadvantages of common plants grown in greenhouses.	<b>1</b>		
7.3	Distinguish between annual and perennial plants.	<b>1</b>		

**Standard 8.0 The student will develop organizational skills and work ethics necessary in greenhouse production.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
8.1	Develop skills to manage the completion of production schedules.	<b>2</b>		
8.2	Evaluate work habits needed to create a positive atmosphere.	<b>2</b>		
8.3	Evaluate the importance of record keeping.	<b>2</b>		

**Standard 9.0 The student will demonstrate the control of common greenhouse diseases and pests using integrated pest.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
9.1	Evaluate the effects of common diseases in greenhouse production.	<b>2</b>		
9.2	Evaluate the effects of common pests in greenhouse production.	<b>2</b>		
9.3	Assess common methods of control of greenhouse pests and diseases.	<b>2</b>		
9.4	Evaluate the use of integrated pest management (IPM) for controlling greenhouse pests and diseases.	<b>2</b>		

**Standard 10.0 The student will integrate academic competencies with greenhouse management concepts.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
10.1	Use current technology to research data on greenhouse operations.	<b>2</b>		
10.2	Prepare a presentation on using a greenhouse for food production.	<b>1</b>		
10.3	Demonstrate proper grammar usage in completing technical forms and reports for the greenhouse.	<b>1</b>		
10.4	Use basic algebraic equations to determine materials needed in the greenhouse.	<b>2</b>		
10.5	Use basic mathematics computations to calculate nutrient and fertilizer requirements.	<b>2</b>		
10.6	Demonstrate English/Metric conversions.	<b>2</b>		
10.7	Use geometric measurements to determine space requirements and structural designs.	<b>2</b>		
10.8	Demonstrate how basic biological principles of plants affect growth.	<b>1</b>		
10.9	Assess chemical properties of elements and media mixtures on plant growth.	<b>1</b>		
10.10	Apply basic laws of physics to greenhouse structures.	<b>2</b>		
10.11	Apply principles of Earth science to plant growth and nutrient sources.	<b>2</b>		

**Standard 11.0 The student will develop premier leadership and personal growth needed in a greenhouse management career.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
11.1	Discuss how the FFA has changed as agriculture has changed.	<b>1</b>		
11.2	Develop public speaking skills needed in the greenhouse industry.	<b>2</b>		
11.3	Conduct meetings use approved parliamentary law.	<b>1</b>		
11.4	Develop an SAEP, supervised agricultural experience program, for a greenhouse enterprise.	<b>1</b>		

Additional comments: \_\_\_\_\_

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