I. INTRODUCTION

A. An introduction to horticulture. Lectures will include basic botany, plant classification, plant structures, plant growth processes, plant production, as well as the environmental effects on the plant. Discussions will also include various landscape and ornamental plants, especially those that are native or well adapted to the local area. Laboratory will include hands on experience in all aspects of plant propagation and an introduction to greenhouse production and management.

B. This course is required to meet curriculum requirements for the Central Texas College programs for Associate in Applied Science Degree in Farm and Ranch Management or a certificate in Farm and Ranch Production.

C. This course is occupationally related and serves as preparation for jobs in a Garden Center, Nurseries, Orchards, or Farm Supply Stores.

II. LEARNING OUTCOMES

Upon successful completion of this course, Horticulture, the student will be able to:

A. List the general aspects of plant propagation. C1, C3, C5, C6, C18, C19, F1, F2

B. Describe the practices involved in sexual plant propagation. C3, C5, C6, C7, C18, F1, F2

C. Describe the practices involved in asexual plant propagation. C3, C5, C6, C7, C18, F1, F2

D. Describe the practices involved in propagation of selected plants of most importance in the United States. C1, C2, C3, C5, C6, C7, F1, F2

III. INSTRUCTIONAL MATERIALS

January 2007
I. COURSE REQUIREMENTS

A. **Reading Assignments**: Will be made to coincide with class lectures and activities. Information from the assigned reading will be important material for exams.

B. **Term Report**: Will be assigned in a form that will coincide with coursework, student interest, as well as the practical value of the information to the industry. The report will be graded as a major exam and failure to complete the report will result in a grade of zero.

C. **Class Performance**: Work to be turned in for a grade that is missed due to absence may be made up on the student’s time and at the convenience to the instructor. Work, including exams, missed due to an absence, must be made up before the second class meeting after the student returns to class. Students absent will be responsible to get class notes missed from another student or from the textbook. Any work and exam not made up will be assigned a grade of zero. All makeup work policy is up to the discretion of the instructor.

D. **Daily Class work**: Class work assignments will be made periodically throughout the semester. These will be averaged and counted as an exam grade.

IV. EXAMINATIONS

Three major exams excluding the final will be given. The first is to be given about the fifth week, the second about the tenth week, and the third during the fifteenth week. The exams will be mainly objective type, to be graded by the instructor and returned to the student. A review will be given prior to the final exam. Procedure for taking make-up exams was given in Class Performance above.

V. SEMESTER GRADE COMPUTATIONS

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<thead>
<tr>
<th></th>
<th>150 of semester grade</th>
<th>900 - 1000 = A</th>
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<tbody>
<tr>
<td>First major exam</td>
<td>150</td>
<td>800 - 899 = B</td>
</tr>
<tr>
<td>Second major exam</td>
<td>150</td>
<td>700 - 799 = C</td>
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<tr>
<td>Third major exam</td>
<td>150</td>
<td>600 - 699 = D</td>
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<tr>
<td>Term Report</td>
<td>100</td>
<td>0 - 599 = F</td>
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<tr>
<td>Class Work</td>
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<tr>
<td>Laboratory work</td>
<td>150</td>
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<td>Final Exam</td>
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<td><strong>Total</strong></td>
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VI. NOTES AND ADDITIONAL INSTRUCTIONS FROM COURSE INSTRUCTOR

A. Course Withdrawal: It is the student's responsibility to officially withdraw from a course if circumstances prevent attendance. Any student who desires to, or must, officially withdraw from a course after the first scheduled class meeting must file a Central Texas College Application for Withdrawal (CTC Form 59). The withdrawal form must be signed by the student.

CTC Form 59 will be accepted at anytime prior to Friday of the 12th week of classes during the 16-week fall and spring semesters. The deadline for sessions of other lengths:

- 10-week session: Friday of the 8th week
- 8-week session: Friday of the 6th week
- 5-week session: Friday of the 4th week

The equivalent date (75% of the semester) will be used for sessions of other lengths. The specific last day to withdraw is published each semester in the Schedule Bulletin.

A student who officially withdraws will be awarded the grade of "W", provided the student's attendance and academic performance are satisfactory at the time of official withdrawal. Students must file a withdrawal application with the college before they may be considered for withdrawal.

A student may not withdraw from a class for which the instructor has previously issued the student a grade of "F" or "FN" for nonattendance.

B. Administrative Withdrawal: An administrative withdrawal may be initiated when the student fails to meet College attendance requirements. The instructor will assign the appropriate grade on CTC Form 59 for submission to the registrar.

C. Incomplete Grade: The College catalog states, "An incomplete grade may be given in those cases where the student has completed the majority of the course work but, because of personal illness, death in the immediate family, or military orders, the student is unable to complete the requirements for a course..." Prior approval from the instructor is required before the grade of "I" for Incomplete is recorded. A student who merely fails to show for the final examination will receive a zero for the final and an "F" for the course.

D. Cellular Phones And Beepers: Cellular phones and beepers will be turned off while the student is in the classroom or laboratory.

E. American’s With Disabilities Act (ADA): Disability Support Services provide services to students who have appropriate documentation of a disability. Students
requiring accommodations for class are responsible for contacting the Office of Disability Support Services (DSS) located on the central campus. This service is available to all students, regardless of location. Explore the website at www.ctcd.edu/disability-support for further information. Reasonable accommodations will be given in accordance with the federal and state laws through the DSS office.

F. Instructor Discretion: The instructor reserves the right of final decision in course requirements.

G. Civility: Individuals are expected to be cognizant of what a constructive educational experience is and respectful of those participating in a learning environment. Failure to do so can result in disciplinary action up to and including expulsion.

VII. COURSE OUTLINE

A. Unit One: General Aspects of Plant Propagation

1. Unit Objectives: Upon successful completion of this unit, the student will be able to:
   a. Describe the general anatomy of a plant.
   b. List the plant growth requirements.
   c. List the propagation structures.

2. Learning Activities:

   a. Classroom lecture/discussion
   b. Student homework study
   c. Reading assignment: Chapters 1, 2, and 3

3. Unit Outline:

   a. Plant Structure
   b. Plant Growth Requirements
   c. Facilities

B. Unit Two: Sexual Propagation

1. Unit Objectives: Upon successful completion of this unit, the student will be able to:

   a. Describe the development of fruit and seed.
   b. List the steps in production of genetically pure seed.
c. Describe the principles and techniques involved in propagation by seed.

2. Learning Activities:
   a. Classroom lecture/discussion
   b. Student homework study
   c. Reading assignment: Chapters 3, 4, 6, and 7
   d. Seeds for performing germination test

3. Unit Outline:
   a. Seed Development
   b. Pure Seed
   c. Seed Production

C. Unit Three: Asexual Propagation

1. Unit Objectives: Upon successful completion of this unit, the student will be able to:
   a. Describe the procedure of propagating by cuttings.
   b. Describe the procedure of grafting.
   c. Describe the procedure of budding.
   d. Describe the procedure of layering.

2. Learning Activities:
   a. Classroom lecture/discussion
   b. Student homework study
   c. Reading assignment: Chapters 8, 10, 11, 12, 13, and 14
   d. Budding and grafting supplies

3. Unit Outline:
   a. Cutting
   b. Grafting
   c. Budding
   d. Layering

D. Unit Four: Propagating Selected Plants

1. Unit Objectives: Upon successful completion of this unit, the student will be able to:
a. Demonstrate the proper care and management of fruit and nut trees in Central Texas.
b. Demonstrate the proper care and management of ornamental plants in Central Texas.

2. **Learning Activities:**
   
   a. Classroom lecture/discussion
   b. Student homework study
   c. Reading assignments: Chapter 17, 18, and 19

3. **Unit Outline:**
   
   a. Fruit and nut tree care
   b. Ornamental plant care