Wharton County Junior College

Administrative Master Syllabus

Course Information

Course Title	Horticulture
Course Prefix, Num. and Title	AGRI 1415
Division	Life Sciences
Department	Agriculture
Course Type	Academic General Education Course (from ACGM, but not WCJC Core)
Course Catalog Description	Structure, growth, and development of horticultural plants. Examination of environmental effects, basic principles of reproduction, methods ranging from outdoor to controlled climates, nutrition, and pest management. Laboratory activities will reinforce the structure, growth, and development of horticultural plants.
Pre-Requisites	None
Co-Requisites	None

Semester Credit Hours

Total Semester Credit Hours (SCH): Lecture Hours: Lab/Other Hours	4:3:2
Equated Pay Hours	4
Lab/Other Hours Breakdown: Lab Hours	2
Lab/Other Hours Breakdown: Clinical Hours	Enter Clinical Hours Here.
Lab/Other Hours Breakdown: Practicum Hours	Enter Practicum Hours Here.
Other Hours Breakdown	List Total Lab/Other Hours Here.

Approval Signatures

Title	Signature	Date
Prepared by:	Sean Amestoy	
Department Head:	Sean Amestoy	
Division Chair:	Kevin Dees Digitally signed by Kevin Dees DN: cn=Kevin Dees, o=WCJC, ou=Life Sciences, email=kevind@wcjc.edu, c=US Date: 2020.08.03 13:02:55 -05'00'	8/3/2020
Dean/VPI:	Leigh Ann collins Digitally signed by Leigh Ann collins DN: cn=Leigh Ann collins, o=WCJC, ou=VPI, email=lacollins@wcjc.edu, c=US Date: 2020.08.07 07:47:02 -05'00'	
Approved by CIR:	Paul J. Quinn Digitally signed by Paul J. Quinn Date: 2020.08.10 10:26:40 -05'00'	

Additional Course Information

Topical Outline: Each offering of this course must include the following topics (be sure to include information regarding lab

Topical Outline	Dedicated Instructional Time
Horticultural Industry-Overview	One week
Vascular Plant Structure: Roots, Stems, Leaves Flowers, Fruit	Two weeks
Seed Germination	One week
Care and Maintenance of Seedlings	One week
Asexual Propagation	Two weeks
Media-Soils, compost, growing mixtures	Two weeks
Ornamental Plants	Two weeks
Garden Vegetable Care and Maintenance	Two weeks
Orchard Management/Care and Maintenance	Two weeks
Plant Growing Structures: Greenhouses, etc.	One week

Laboratory:

1. Field Trip – Greenleaf Nursery
2. Seed establishment
3. Plug establishment
4. Composting
5. Greenhouse structures and plant containers
6. Soil and organic media
7. Asexual Propagation (may be any or all of the following)
   A. Cuttings
   B. Layerings
   C. Grafting
   D. Budding
   E. Bulbs/Corms
8. Orchard field trip
9. Power point presentations

Course Learning Outcomes:

Learning Outcomes – Upon successful completion of this course, students will:

Upon successful completion of this course, students will:

1. Identify the various horticultural industries and their roles in our society.
2. Describe the fundamentals of plant science.
3. Assess the interactions of soils, water, and fertility in plant science.
4. Contrast the methods of plant reproduction and propagation.
5. Explain the impacts and production methods and technologies on plant science.
6. Contrast methods of pest management in plant science.
7. Investigate methods of environmental manipulation (e.g. greenhouse controls, frost management methods, hot caps, etc.)
8. Apply scientific reasoning to investigate questions and utilize scientific and horticultural tools to collect and analyze data and demonstrate methods.
9. Use critical thinking and scientific problem-solving to make informed decisions.

10. Communicate effectively the results of scientific investigations.
11. Identify the various horticultural industries and their roles in our society.
12. Describe the fundamentals of plant science.
13. Assess the interactions of soils, water, and fertility in plant science.
14. Contrast the methods of pest management in plant science.
15. Investigate methods of environmental manipulation (e.g. greenhouse controls, frost management methods, hot caps).

Methods of Assessment:

Methods of assessment will be based on exams, lab activities, and assignments.

Required text(s), optional text(s) and/or materials to be supplied by the student:

Practical Horticulture, Current Edition, L.W. Rice and R.P. Rice. Prentice Hall, Upper Saddle River, NJ 07458. ISBN 0130946346

Suggested Course Maximum: 24

List any specific or physical requirements beyond a typical classroom required to teach the course.

The lecture room should include sufficient dry erase (or chalk) board for notes and illustrations, a computer with internet access and overhead computer projector (for instructor's use) and a traditional overhead projector. Laboratory classroom required.

Course Requirements/Grading System:

Students are required to read the textbook chapters assigned to them. Throughout the semester, the students have 4 major lecture exams, attendance/participation, and assignments.

Lecture grade makes up 2/3 of the final grade.
Lab grade makes up 1/3 of the final grade.
Lecture grade is determined by 4 major exams and class attendance/participation, each counting for 1/5 of the total lecture grade.
Lab average is calculated as follows:
Hands on participation of activities: 40%
Power point presentations and assignments: 30%
Quizzes: 30%

The grade classifications as outlined in the College Catalog are employed:
A – 90 – 100% Excellent
B – 80 – 89% Good
C – 70 – 79% Average
D – 60 – 69% Poor
F – Below 60% Failure
W – Withdrawn

Curriculum Checklist:

☒**Administrative General Education Course** (from ACGM, but not in WCJC Core) – No additional documents needed.

☐**Administrative WCJC Core Course**. Attach the Core Curriculum Review Forms

- ☐Critical Thinking
- ☐Communication
- ☐Empirical & Quantitative Skills
- ☐Teamwork
- ☐Social Responsibility
- ☐Personal Responsibility

☐**WECM Course** -If needed, revise the Program SCANS Matrix and Competencies Checklist