8/28/2025	DATE	AGR	DIVISION
☑	REQUIRED COURSE	☐	NEW COURSE
☐	ELECTIVE COURSE	☑	REVISION

Lake Land College

Course Information Form

COURSE NUMBER:	HRT-201		**TITLE:** *(30 Characters Max)*		Introduction to Horticulture								
SEM CR HRS:	3.0	**Lecture:**	2.0		**Lab:**	2.0	**ICCB Lab:**	2.0	**ECH:**	4.0			
Course Level:	☑ Gen Ed/IAI ☐ Baccalaureate/Non-IAI	☐ Career/Technical ☐ Dev Ed/Not in Degree Audit			**Clinical Practicum:**	0.0	**Work-based Learning:**	0.0	**WBL ECH:**	0.0			
Course PCS & CIP:	11 - 11.1030		**IAI Code:**		AG 905				**Contact Hours (Minutes/Week)**				
Repeatable (Y/N):	N	**Pass/Fail (Y/N):**	N	**Variable Credit (Y/N):**	N	**Min:**		**Max:**		**16 Wks**	200	**8 Wks**	400
Prerequisites:	None												
Corequisites:	None												
Catalog Description: (40 Word Limit)	A study and introduction to the principles and practices involved in the development, production and use of horticultural crops (fruits, vegetables, greenhouse, turf, nursery, floral and landscape). Course will include a broad overview of the green industry, including propagation, production and design.												

List the Major Course Segments (Units)	Contact Lecture Hours	Contact Lab Hours	Clinical Practicum	Work-based Learning
Unit 1	8	8		
Horticulture industry – local and global, careers and opportunities				
Classification and nomenclature				
Plant structures - flowers, stems, leaves, fruits and seeds				
Plant growth - vascular cambium				
Photosynthesis, respiration, nutrient uptake and plant hardiness				
Unit 2	8	8		
Soiless soil - ingredients, qualities and comparisons				
Sexual reproduction - fertilization/pollination, germination and seed viability and parts of seedling				
Asexual reproduction - division/separation - cuttings, layering, grafting and tissue culture				
Unit 3	7	7		
Plant growth and root growth				
Container, bareroot and B&B - American standard for nursery stock				
Tree planting and staking				
Correct plant pruning				
Unit 4	7	7		
Common insect and pests and their control				
Chemical, biological and mechanical control options in IPM				
Pesticide classification and state licenses				
TOTAL	30	30	0	0

EVALUATION							
QUIZZES	☑	**EXAMS**	☑	**ORAL PRES**	☑	**PAPERS**	☐
LAB WORK	☑	**PROJECTS**	☑	**COMP FINAL**	☑	**OTHER**	☐

COURSE MATERIALS		
TITLE:	Horticulture Today	
AUTHOR:	J. Riedel and E. Driscoll	
PUBLISHER:	Goodheart-Willcox Co.	
VOLUME/EDITION/URL:	2nd Edition	
COPYRIGHT DATE:	2023	

MAJOR COURSE SEGMENT	HOURS	LEARNING OUTCOMES
		The student will be able to:
Unit 1: •Horticulture industry - local and global, careers and opportunities •Classification and nomenclature •Plant structures –flowers, stems, leaves, fruits and seeds •Plant growth - vascular cambium •Photosynthesis, respiration, nutrient uptake and plant hardiness Laboratories: tour of greenhouse, adopt-a-plant, flower part ID and stem/leaf part ID	16	1. Describe the horticulture industry through the diversity of job opportunities and the economic importance. 2. Define terminology associated with plant functions, plant structures, plant process and techniques used in the horticulture industry. 3. Demonstrate how photosynthesis and respiration operate in a plant and how they effect plant growth overall.
Unit 2: •Soiless Soil - ingredients, qualities and comparisons •Sexual reproduction •Fertilization/pollination -germination and seed viability - parts of seedling -stratification, scarification •Asexual reproduction -division/separation - cuttings - layering - grafting - tissue culture Laboratories: soil ingredient/soil mix comparison, plant division project, seed viability and germination, cuttings experiment and grafting lab	16	1. Describe the ingrediants in soiless soil and the reason for there use in horticulture production. 2. Decribe what is needed to start plants from seed and generate a plan for starting common plant seeds. 3. Preform plant reproduction techniques using cuttings and grafting methods to create new plants.
Unit 3: •Plant growth, root growth •Container, bare root and B&B -american standard for nursery stock •Tree planting& staking •Correct plant pruning Laboratories: plant growth lab, tree growth-campus walking lab, tree planting demonstration and tree research presentations	14	1. Illustrate how plants grow both branch canopy and root growth. 2. Develop a plan for retail customer to corectly plant and maintain a new tree. 3. Generate a prunning schedule and correctly preform pruning steps on living plant.
Unit 4: •Common insect and pests and their control •Chemical, biological and mechanical control options in IPM •Pesticide classification and state licenses Laboratories: insect ID, disease ID, pesticide label and calculation lab, greenhouse project finish and clean up	14	1. Identify common insects and diseases, then recommend a plan for control options. 2. Explain the state pest licenses system in use.
	60	

Outcomes*	Outcome Title	At the successful completion of this course, students will be able to:
Course Outcome 1	Reg Hortic Ind	Define the scope, importance and career opportunities of the horticulture industry of this region.
Course Outcome 2	Plant Classif Struct	Apply plant classification and plant structure differences to actual living plants outside of the classroom.
Course Outcome 3	Disease Insects	Identify and describe various plant diseases and insects in a typical homeowner landscape.
Primary Laker Learning Competency	Creative Thinking & Problem Solving: Students think creatively to solve problems.	
Secondary Laker Learning Competency	Critical Thinking: Students connect knowledge from various disciplines to formulate logical conclusions.	

**Course and program outcomes will be used in the software for outcomes assessment and should include at least 1 primary and 1 secondary Laker Learning Competency. Limit to 3-5.*