6/14/2023 DATE
☑ REQUIRED COURSE
☐ ELECTIVE COURSE

Agriculture DIVISION
☐ NEW COURSE
☐ REVISION

Lake Land College

Course Information Form

COURSE NUMBER:	HRT-062		TITLE: *(30 Characters Max)*		Vegetable Crop Production						
SEM CR HRS:	3	Lecture:	2		Lab:	2				ECH:	4
Course Level:	☐ Gen Ed / IAI ☐ Baccalaureate /Non-IAI		☑ Career/Technical ☐ Dev Ed/ Not in Degree Audit		Clinical Practicum:	0	Work-based Learning	0		WBL ECH:	0
COURSE PCS #	12 - 01. 0304		IAI Code						Contact Hours (Minutes Per Week)		
Repeatable (Y/N):	Y	Pass/Fail (Y/N):	N	Variable Credit (Y/N):	N	Min:		Max:		16 Wks 200	8 Wks 400
Prerequisites:											
Catalog Description: (40 Word Limit)	Prepares students for successfully growing vegetable crops. Course will include each crop's botany, origin, history, and economic importance, optimum production practices, diseases, insect pests and nutritional requirements, plant breeding objectives. Soil health, cover crops, rotation, handling and marketing covered.										

List the Major Course Segments (Units)	Contact Lecture Hours	Contact Lab Hours	Clinical Practicum	Work-based Learning
Vegetable crop industry	1	1		
Root physiology/tillage	2	2		
Cover cropping, green manures, groundcovers, mulching and weed management	4	4		
Specific Crops	14	14		
Improvements and genetics	2	2		
Integrated Pest Management	3	3		
Organic, sustainable, biodynamic and hydroponic production	2	2		
Postharvest handling/storage	1	1		
Marketing opportunities	1	1		
TOTAL	30	30	0	0

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

COURSE MATERIALS		
TITLE:	Midwest Vegetable Production Guide for Commercial Growers	
AUTHOR:	Extension Service –University of Illinois, Purdue, Iowa State, Kansas State, Minnesota, Missouri, Ohio Sate	
PUBLISHER:	Purdue University	
VOLUME/EDITION/URL:	Yearly edition. Online pdf version available at no cost.	
COPYRIGHT DATE:	2017	

MAJOR COURSE SEGMENT	HOURS	LEARNING OUTCOMES
		The student will be able to:
Vegetable crop industry	2	Discuss vegetable classification, production statistics, and current markets.
Root physiology/tillage	4	Summarize the most beneficial tillage methods as it effects root growth and production ability of multiple crops.
Cover cropping, green manures, groundcovers, mulching and weed management	8	Discuss the methods used in the past as well as the latest research on benefits of cover cropping, green manures, groundcovers, mulching. Evaluate the benefits verses the costs as related to weed management, crop production levels and overall soil health.
Specific vegetable crops	28	Identify specific vegetable crops. In addition, students be expected to discuss the botany, center of origin, history and economic importance, optimum production practices for the crop.

Improvements and genetics	4	Recognize horticulturally important traits, describe plant breeding objectives, compare consumer demand for heirloom varieties and evaluate potential applications of biotechnology in specific crops.
Integrated pest management	6	Develop a management program for a farm enterprise. Design an acceptable pest control program for various crops.
Organic, sustainable, biodynamic and hydroponic production	4	Analyze industry approved classifications of vegetable crop farms, including organic, sustainable, biodynamic and hydroponic production as they relate to production costs, crop quality and market opportunities.
Harvesting and postharvest handling/storage	2	Determine the correct harvesting times. Evaluate handling/storage methods for crop quality and business profitability.
Marketing opportunities	2	Demonstrate methods of marketing crops. Apply laws of supply and demand and their impact on a given production system.
	60	

Outcomes*	At the successful completion of this course, students will be able to:
Course Outcome 1	Successfully grow vegetables for commercial vegetable production.
Course Outcome 2	Understand the history, classification, culture, post-harvest handling, and marketing of select vegetables.
Course Outcome 3	Describe the climate and soil requirements needed for raising good quality vegetable crops.
Course Outcome 4	Analyze and interpret data through commercial research reports and through greenhouse and lab experimentation.
Primary Laker Learning Competency	
Secondary Laker Learning Competency	

**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.*