3/19/2025	DATE	AGR	DIVISION
☑	REQUIRED COURSE	☐	NEW COURSE
☑	ELECTIVE COURSE	☑	REVISION

Lake Land College

Course Information Form

COURSE NUMBER:	AGR-205	TITLE: *(30 Characters Max)*	Introduction to Soil Science

SEM CR HRS:	4.0	Lecture:	3.0	Lab:	2.0	ICCB Lab:	2.0	ECH:	5.0
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 - 01.1201	IAI Code:	AG904	Contact Hours (Minutes/Week)					
Repeatable (Y/N):	N	Pass/Fail (Y/N):	N	Variable Credit (Y/N): N	Min:	Max:	16 Wks 250	8 Wks	500

Prerequisites:	None
Corequisites:	None
Catalog Description: (40 Word Limit)	Application of the basics in the physical, chemical and biological aspects in soils. Soils of Illinois and Indiana are emphasized along with concepts of fertility, conservation and field descriptions.

List the Major Course Segments (Units)	Contact Lecture Hours	Contact Lab Hours	Clinical Practicum	Work-based Learning
Introduction	2	2		
Physical properties	9	5		
Chemical properties	7	4		
Biological properties	6	3		
Genesis and classification	5	4		
Soil fertility	9	8		
Conservation and management	6	4		
Soil sampling and testing	1	0		
TOTAL	45	30	0	0

EVALUATION

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

COURSE MATERIALS

TITLE:	Soil Science and Management	Introductory Experimental Soil Science (2nd Edition)
AUTHOR:	Edward J. Plaster	
PUBLISHER:	Delmar Learning	
VOLUME/EDITION/URL:	5th Edition	
COPYRIGHT DATE:	2009	

MAJOR COURSE SEGMENT	HOURS	LEARNING OUTCOMES
		The student will be able to:
Introduction	4	1. Define soil and identify its components.
Physical properties	14	1. Determine texture, structure, color and density of various soil types.
Chemical properties	11	1. Differentiate clays, ion exchanges and pH.
Biological properties	9	1. Transform N and S, soil organic matter and C:N ratio.
Genesis and classification	9	1. Assess soil profiles, surveys and legal descriptions, enabling students to identify soil forming factors, distribution and classification system of soils.
Soil fertility	17	1. Recall sixteen essential elements - their sources, deficiency symptoms and toxicities. Fertilizer application, placement and requirements.

Conservation and management	10	1. Discuss drainage, waste management and irrigation systems, erosion mechanisms and control plus strip-mine reclamation.
Soil sampling	1	1. Perform soil sample collections and handling.
	75	

Outcomes*	Outcome Title	At the successful completion of this course, students will be able to:
Course Outcome 1	Soils Terminology	Use important terms when discussing soils.
Course Outcome 2	Soil Physical Prpty	Assess soil's physical properties.
Course Outcome 3	Soil Test Fertility	Inspect soil test results and develop a fertility plan.
Course Outcome 4	Soil Sample Collctn	Perform the correct way to collect soil samples.
Primary Laker Learning Competency	Creative Thinking & Problem Solving: Students think creatively to solve problems.	
Secondary Laker Learning Competency	Scientific Literacy: Students apply the scientific process to real-life situations.	

**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*