2/16/2023 DATE

☐ REQUIRED COURSE

☐ ELECTIVE COURSE

Technology DIVISION

☐ NEW COURSE

☑ REVISION

Lake Land College

Course Information Form

COURSE NUMBER:	CET-029		TITLE: *(30 Characters Max)*		Level I Hot Mix Asphalt						
SEM CR HRS:	2	Lecture:	1.5	Lab:	1				ECH:	2.5	
Course Level:	☐ Gen Ed / IAI ☐ Baccalaureate /Non-IAI	☐ Career/Technical ☑ Dev Ed/ Not in Degree Audit		Clinical Practicum:	0	SOE/ Internship:	0	SOE ECH:	0		
COURSE PCS #	16 - 46.0403		IAI Code					Contact Hours (Minutes Per Week)			
Repeatable (Y/N):	N	Pass/Fail (Y/N):	N	Variable Credit (Y/N):		Min:		Max:		16 Wks	125	8 wks	250
Prerequisites:	CET 020 or CET 021										
Catalog Description: (40 Word Limit)	Laboratory testing of HMA using Superpave technology and information on the production of HMA is covered in this course. Successful completion permits a person to do testing associated with contracts let under the QC/QA program.										

List the Major Course Segments (Units)	Contact Lecture Hours	Contact Lab Hours	Clinical Practicum	Non-Clinical Internship/ SOE
General Information on QC/QA and its application in HMA	6			
Extractions	2			
Gyratory Compaction, Bulk Specific Gravity, T.S.R.	5	5		
Core Density	1.5			
Asphalt Content, Nuclear Gauge and Ignition Oven	2	2		
Maximum Specific Gravity and Sample Reduction	2	2		
Control Charts	4			
Lab Evaluations		6		
TOTAL	22.5	15	0	0

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

COURSE MATERIALS		
TITLE:	I.D.O.T. Hot Mix Level I Manual	
AUTHOR:	I.D.O.T.	
PUBLISHER:		
VOLUME/EDITION/URL:		
COPYRIGHT DATE:		

MAJOR COURSE SEGMENT	HOURS	LEARNING OUTCOMES
		The student will be able to:
General Information and Special Provisions of QC/QA HMA	6	Summarize specifications & special provisions as associated with plant production and laboratory testing.
Extractions	2	Demonstrate extractions.
Gyratory Compaction, Bulk Specific Gravity and TSR	10	Demonstrate using the gyratory and run bulk specific gravity and TSR tests.
Core Densities	1.5	Calculate density of pavement core.
Asphalt Content	4	Complete a nuclear gauge and Ignition oven calibration and run tests.
Maximum Specific Gravity and Sample Reduction	4	Demonstrate reduction of samples to proper size and run maximum specific gravity of mix.
Control Charts	4	Illustrate and evaluate control charts of mix criteria.
Lab Evaluations	6	Evaluate lab tests.

	37.50	

COURSE OUTCOMES*	At the successful completion of this course, students will be able to:
	• List applicable IDOT specifications that apply to IDOT QC/QA Inspectors and which relate to the production and placement of Hot Mix Asphalt.
	• Demonstrate the proper methods of testing Hot Mix Asphalt.
	• Demonstrate how to complete the required calculations and paperwork for controlling and testing of Hot Mix Asphalt.
	• Demonstrate how to create and interpret Hot Mix Asphalt control charts.

** Course Outcomes will be used in the Assessment Software for Outcomes Assessment. Limit to 3 - 5.*