

Module (Course Syllabus) Catalogue 2023-2024

College/ Institute	Erbil Technical Engineering College	
Department	Highway Engineering Techniques	
Module Name	Highway Inspection and Safety	
Module Code	HIS805	
Degree	Technical Diploma <input type="checkbox"/>	Bachelor <input checked="" type="checkbox"/>
	High Diploma <input type="checkbox"/>	Master <input type="checkbox"/> PhD <input type="checkbox"/>
Semester	8th	
Qualification	MSc. Geotechnical Engineering	
Scientific Title	Assistant Lecturer	
ECTS (Credits)	3	
Module type	Prerequisite <input type="checkbox"/>	Core <input checked="" type="checkbox"/> Assist. <input type="checkbox"/>
Weekly hours	2	
Weekly hours (Theory)	(2)hr Class	(81) Total hrs Workload
Weekly hours (Practical)	()hr Class	()Total hrs Workload
Number of Weeks	12,	
Lecturer (Theory)	Ahmed Suad Ali	
E-Mail & Mobile NO.	Ahmed.ali@epu.edu.iq	
Lecturer (Practical)		
E-Mail & Mobile NO.		
Websites		

Course Book

<p>Course Description</p>	<p>Increase student knowledge and learn more about safety elements and the way of inspection, regarding crash elements how to predict the crashes, elements of crash, elements of roads and highway, bridges, pavements, road marking and signs, defects of pavement, as well as maintenance</p>
<p>Course objectives</p>	<ul style="list-style-type: none"> • Understand the basics of highway safety and inspection • Main elements of roads, pavement and bridges • Highway audit and safety inspection • Road marks and signs. • Bridge inspection and audit. • Pavement defects and inspection • Safety elements. • Investigation, survey and planning for such projects • The risk that encloses such field •
<p>Student's obligation</p>	<ul style="list-style-type: none"> • To attend the classes regularly with minimum absence. • To participate actively in the class discussion and Q&A session • Study on daily basis to digest the class material • To write note off-handouts • Prepared for sudden Quizzes • Vet through the references provided by the lecturer and to solve as much as possible of homework and exercises for the subjective materials. • Prepare the assignment and the seminar as instructed by the lecturer. •
<p>Required Learning Materials</p>	<p>Basically, a handout shall be given to the students at the beginning of the academic year as well as soft copy will appear at Moodle. The page-by-page read shall be performed by the lecturer and to illustrate the points with aide of white board whenever necessary. The video clips that illustrate further the subject material shall be illustrated with the aid of overhead projector.</p> <p>Some seminars will be held and a case study will be a case of discuss during the study year</p> <p>If applicable some site visits will be arranged according to the situations.</p>

Evaluation	Task		Weight (Marks)	Due Week	Relevant Learning Outcome
	Paper Review				
	Assignments	Homework	10%		
		Class Activity	2%		
		Report	16%		
		Seminar			
		Essay			
		Project			
	Quiz		8%		
	Lab.				
	Midterm Exam		24%		
	Final Exam		40%		
Total		100%			
Specific learning outcome:	By the end of the current course, the student shall be able to learn the major activities related to the basics and standardized highway safety and inspection engineering. The student will be capable to identify safety elements for transportation and bridge projects, have a clue about the defects of pavements. Learn maintenance and highway audit as well.				
Course References:	<ul style="list-style-type: none"> ▪ Highway Safety Manual 2010 ▪ Highway Safety Design and Operations Guide, 1997 ▪ Handbook of Highway Safety Design and Operating Practices, 1978 ▪ Bridge Inspection and Rehabilitation: A Practical Guide, 1993 <p>The hand book of highway engineering, 2005</p>				
Course topics (Theory)		Week	Learning Outcome		
INTRODUCTION TO HIGHWAY SAFETY ENGINEERING AND CRASH INVESTIGATION		2	basic terms, general description of highway safety and crash investigation		
HIGHWAY AUDIT & SAFETY INSPECTIONS		2	including general idea about audit and safety inspection of roads and highways		
HIGHWAY/ ROAD MARKINGS & SIGNS INSPECTIONS		2	Main elements and standards of road marking and signs		

Pavement defects and inspection	2	including general description about the main defects of pavement and inspection
Bridge AUDIT & SAFETY INSPECTIONS	2	including general idea about audit and safety inspection of bridges
Safety elements of transportation engineering	1	General standardizing of safety elements
maintenance of highway and bridges elements	1	types of scheduled maintains and monitoring
Practical Topics	Week	Learning Outcome
NON		
Questions Example Design:		
Extra notes: In spite of the fact that, the topics applied previously sounds rich but the subject it self has a link of the previous study years subjects such as traffic engineering, geometric design, construction methods, bridge engineering and pavement engineering, so the student should get a full info through these subjects in order to maintain a good link to the subject regarding the safety, as for the subject itself a chapter might be added based on the need of students. A site vist might be establish to measure marking and safety elements of roads.		

External Evaluator

The syllabus listed earlier are scientifically and logically demonstrates the highway safety and inspection subject based on subject matter and are satisfactory.

Rizgar ALi

Assistant Professor Dr. Rizgar Ali Hummadi