65-Course Specification of Transportation Planning

I. Course Identification and General Information:							
1	**Course Title:**	***Transportation Planning***					
2	**Course Code & Number:**	CE411					
3	**Credit hours:**	C.H				**Credit Hours**	
		Th.	Tu.	Pr.	Tr.		
		2				2	
4	**Study level/ semester at which this course is offered:**	5th Level/ 2nd semester					
5	**Pre –requisite (if any):**	Traffic Engineering CE303					
6	**Co –requisite (if any):**						
8	**Program (s) in which the course is offered:**	Civil Engineering					
9	**Language of teaching the course:**	English+ Arabic					
10	**Location of teaching the course:**	Class room					
11	**Prepared By:**	Dr. Abdlslam M Althawr					
12	**Date of Approval**						

II. Course Description:

This course is designed to provide students with information about the Transportation planning process, techniques and models. It includes transportation planning process, transportation planning Models and techniques,

Prepared by	Head of Department	Quality Assurance Unit	Dean of the Faculty	Academic Development Center & Quality Assurance
	Dr. Abdulkareem Yahya Al khattabi	Ass. Prof. Dr. Mohammad Algorafi	Prof. Dr. Mohammed AL-Bukhaiti	Ass. Prof. Dr. Huda Al-Emad

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transportation surveys to collect data, and transportation impacts on environment and society.

III. Course Intended learning outcomes (CILOs) of the course		**Referenced PILOs**
a.1	Define the basic of transportation planning process and techniques	**A1**
a.2	Identify how to select the appropriate standards and codes	**A3**
b.1	Demonstrate in solving present situation and predicted situation	**B1**
b.2	Choose appropriate models to predict the future situation	**B2**
b3	Demonstrate proficiency in the evaluation and integration of information and processes in the data collection surveys	**B3**
c1	Use appropriate models/software to predict the future situation	**C3**
c2	Design the planning framework (objectives, problems, alternatives to solve the problem)	**C2**
C3	Create the alternatives option meeting the desired aims	**C4**
d.1	Write the project design report including calculation and drawing.	**D1**

(A) Alignment Course Intended Learning Outcomes of Knowledge and Understanding to Teaching Strategies and Assessment Strategies:

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
a1- Define the basic of transportation planning process and techniques	-Lectures, Multimedia. - Demonstration & Discussions	-Mid Term and Final Exam. - assignment
a2- Identify how to select the appropriate standards and codes		

(B) Alignment Course Intended Learning Outcomes of Intellectual Skills to Teaching Strategies and Assessment Strategies:		
Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
b1- Demonstrate in solving present situation and predicted situation	-Lectures, Multimedia. - model demonstration -Project method/cases study	- Assignment. - presentation. Project Mid Term and Final Exam
b2- Choose appropriate models to predict the future situation		
b3- Demonstrate proficiency in the evaluation and integration of information and processes in the data collection surveys		

© Alignment Course Intended Learning Outcomes of Professional and Practical Skills to Teaching Strategies and Assessment Strategies:		
Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
c1- Use appropriate models/software to predict the future situation	-Lectures, Multimedia -Model demonstration - cases study	Assignment Report Presentation. Mid Term and Final Exam
c2- Design the planning framework (objectives, problems, alternatives to solve the problem)		
c4- Create the alternatives option meeting the desired aims		

(D) Alignment Course Intended Learning Outcomes of Transferable Skills to Teaching Strategies and Assessment Strategies:		
Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
d1- Write the project design report including calculation and drawing	Case study	**Project**

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IV. Course Content:

A – Theoretical Aspect:

Order	Units/Topics List	Learning Outcomes	Sub Topics List	Number of Weeks	contact hours
1	Introduction to transportation system and transportation planning process	a1	Transportation engineering, components, modes, transportation planning process framework, transportation demands and supplies, land use, transportation technology	2	4
2	Transportation studies and surveys	a1, b2,b3,c3	Present situation assessments Growth rates Future prediction methods	2	4
3	Transportation models	a1, b1,b2,b3, c2,c3	Production and attraction model Transportation distribution models Transportation assignment model modal split model Land use model	3	6
4	Transportation models	a1, b1,b2,b3, c2,c3	Production and attraction model Transportation distribution models Transportation assignment model modal split model Land use model	2	4
5	Transportation impacts on society and environment	a1, a2,b1, c3	Noise Air pollution Safety	2	4
6	Latest technology, softwares	a1,a2	Sustainable transportation system Intelligent transportation system	3	6

Prepared by | Head of Department: Dr. Abdulkareem Yahya Al khattabi | Quality Assurance Unit: Ass. Prof. Dr. Mohammad Algorafi | Dean of the Faculty: Prof. Dr. Mohammed AL-Bukhaiti | Academic Development Center & Quality Assurance: Ass. Prof. Dr. Huda Al-Emad

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			Integrated transportation system Transit and Vissim softwares		
Number of Weeks /and Units Per Semester				**14**	**28**

V. Teaching strategies of the course:

Lecture
Multimedia Presentations
Discussion
Demonstration
model demonstration
-Project method/cases study

VI. Assignments:

No	Assignments	Aligned CILOs(symbols)	Week Due	Mark
1	Data collection survey, transportation process analysis, present situation evaluation	a1, b1,b2, b3, c2,c3 a2,c1	3	2
2	Future situation prediction	a1, b1,b2, b3, c2,c3 a2,c1	5	2
3	Transportation modeling	a1, b1,b2, b3, c2,c3 a2,c1	6, 9,11	4
4	Transportation impacts	A2, b1,c3	12	2

VII. Schedule of Assessment Tasks for Students During the Semester:

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes
1	Assignments	2,5,6,9,12	10	10%	a1, b1,b2, b3, c3,c2 a2,c1
2	Mid Term	7	10	10%	a1,b1,b2,c2,c3
3	Group project	13	10	10%	a1, b1,b2, c2,c3

Prepared by: Head of Department, Dr. Abdulkareem Yahya Al khattabi
Quality Assurance Unit, Ass. Prof. Dr. Mohammad Algorafi
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Academic Development Center & Quality Assurance, Ass. Prof. Dr. Huda Al-Emad

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4	Final Exam	Schedules	70	70%	a1,b1,b2,c2,c3
5	**Total**		**100**	**100%**	

VIII. Learning Resources:

- Written in the following order: (Author - Year of publication – Title – Edition – Place of publication – Publisher).

1- Required Textbook(s) (maximum two).

1- دار الراتب الجامعية تخطيط النقل داخل المدن، د علي عبد المنعم حسن، 1994

2- Transportation Engineering an Introduction, C Jotin Khristy, B Kent Lall, 2010

Essential References.

2- Essential References.

1- Metropolitan transportation planning, J W Dickey, 2002
2- A text book of transportation engineering, 2001. Chadola, S P, India
3- Handbook of transportation engineering, 2011, Myer Kutz, McGraw-hill

3- Electronic Materials and Web Sites etc.

1- AASHTO softwares
2- TRL softwares
3- Vissum /cers
4- Trnsit14

IX. Course Policies:

1	**Class Attendance:** The students should have more than 75 % of attendance according to rules and regulations of the faculty.
2	**Tardy:** The students should respect the timing of attending the lectures. They should attend within 1 minutes from starting of the lecture.
3	**Exam Attendance/Punctuality:** The student should attend the exam on time. The punctuality should be implemented according to rules and regulations of the faculty for midterm exam and final exam.
4	**Assignments & Proects:** The assignment is given to the students after each chapter, the student has to submit all the assignments for checking on time.
5	**Cheating:** If any cheating occurred during the examination, the student is not allowed to continue and he/she has to face the examination committee for enquiries.
6	**Plagiarism:** The student will be terminated from the Faculty, if one student attends the exam on another behalf according to the policy, rules and regulations of the university.
7	**Other policies:** _ All the teaching materials should be kept out the examination hall. _ The mobile phone is not allowed. _There should be a respect between the student and his teacher.

Reviewed By	**Vice Dean for Academic Affairs and Post Graduate Studies** **Dr. Tarek A. Barakat** **Dr. Mohammad Algorafi**
	Deputy Rector for Academic Affairs Dr. Ibrahim AlMutaa **Dr. Ahmed mujahed** **Dr. Munaser Alsubri**

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Course Plan (Syllabus) Of Transportation Planning

I. Information about Faculty Member Responsible for the Course:								
Name of Faculty Member	Dr. Abdlslam Althawr	**Office Hours**						
Location& Telephone No.	+967 770377156	**SAT**	**SUN**	**MON**	**TUE**	**WED**	**THU**
E-mail	aslamalthawr@yahoo.com						8-2

II. Course Identification and General Information:						
1-	**Course Title:**	Transportation Planning				
2-	**Course Number & Code:**	CE411				
3-	**Credit hours:**	**C.H**				**Credit Hours**
		Th.	Tu.	Pr.	Tr.	
		2				2
4-	**Study level/year at which this course is offered:**	5th Level/ 2nd semester				
5-	**Pre –requisite (if any):**	Traffic Engineering				
6-	**Co –requisite (if any):**	----------				
7-	**Program (s) in which the course is offered**	Civil Engineering				
8-	**Language of teaching the course:**	English+ Arabic				
9-	**System of Study:**	Regular				
10-	**Mode of delivery:**	Lectures				
11-	**Location of teaching the course:**	Class				

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III. Course Description:

This course is designed to provide students with information about the transportation planning process, techniques and models. It includes transportation planning process, transportation planning models and techniques, transportation surveys to collect data, and transportation impacts on environment and society.

IV. Intended learning outcomes (ILOs) of the course:

- Brief summary of the knowledge or skill the course is intended to develop**:**

a.1 Define the basic of transportation planning process and techniques A1
a.2 Identify how to select the appropriate standards and codes A3
b.1 Demonstrate in solving present situation and predicted situation B1
b.2 Choose appropriate models to predict the future situation B2
b3 Demonstrate proficiency in the evaluation and integration of information and processes in the data collection surveys B3
c.1 Use appropriate models/software to predict the future situation C3
c.2 Design the planning framework (objectives, problems, alternatives to solve the problen C2
C.3 Create the alternatives option meeting the desired aims C4
d.1 Write the project design report including calculation and drawing. D1

V. Course Content:

- Distribution of Semester Weekly Plan Of course Topics/Items and Activities.

A – Theoretical Aspect:

Order	Topics List	Sub Topics List	Week Due	Contact Hours
1	Introduction to transportation system and transportation planning process	Transportation engineering, components, modes, transportation planning process framework, transportation demands and supplies, land use, transportation technology	1,2	4
2	Transportation studies and surveys	Present situation assessments Growth rates Future prediction methods	3,4	4
3	Transportation models	Production and attraction model Transportation distribution models Transportation assignment model modal split model Land use model	5,6,7	6
4	Midterm Exam		8	2
5	Transportation models	Production and attraction model Transportation distribution models Transportation assignment model modal split model Land use model	9,10	4
6	Transportation impacts on society and environment	Noise Air pollution Safety	11,12	4
7	Latest technology, softwares	Sustainable transportation system Intelligent transportation system Integrated transportation system Transit and Vissim softwares	13,14,15	6
8	Final Exam		16	2
Number of Weeks /and Units Per Semester			**16**	**32**

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VI. Teaching strategies of the course:

Lecture
Multimedia Presentations
Discussion
Demonstration
model demonstration
-Project method/cases study

VII. Assignments:

No	Assignments	Aligned CILOs(symbols)	Week Due	Mark
1	Data collection survey, transportation process analysis, present situation evaluation	a1, b1,b2, b3, c2,c3 a2,c1	3	2
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3	Transportation modeling	a1, b1,b2, b3, c2,c3 a2,c1	6, 9,11	4
4	Transportation impacts	A2, b1,c3	12	2

VIII. Schedule of Assessment Tasks for Students During the Semester:

Assessment	Type of Assessment Tasks	Week Due	Mark	Proportion of Final Assessment
1	Assignments	2,5,6,9,12	10	10%
2	Mid Term	7	10	10%
3	Group project	13	10	10%
4	Final Exam	Schedules	70	70%
5	**Total**		**100**	**100%**

Prepared by — Head of Department: Dr. Abdulkareem Yahya Al khattabi

Quality Assurance Unit: Ass. Prof. Dr. Mohammad Algorafi

Dean of the Faculty: Prof. Dr. Mohammed AL-Bukhaiti

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2- Essential References.

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1- AASHTO softwares
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