



(نموذج الخطة الدراسية للمساق)

*Course Plan*

**Course No.:** 506060404

**Course Name:** Highway Geometric Design II

**Time Division:**

2hr Theoretical 1hr. Tutorial

**Course Website:** ---

**Semester & Year:**

First , 2018 / 2019

**Course Description** [ وصف المساق ]

(4 credit hours)

As an extension to the topics that covered in geometric design I. This course will cover the roads types, intersections, interchanges, drainage, lighting, parking lots, traffic signs and markings that integrated with facilities to serve the users safely and efficiently. More over the sustainability requirements will be covered also.

**Course Intended Outcomes** [ المخرجات المتوقعة من المساق ]

*At the end of the course, students are expected to learn:*

- Design different types of roads, intersections, interchange, and parking lots,
- Design the roads integrated features to be more efficient and safe,
- Improve the existing and proposed geometric design to meet the sustainability criteria.

**Course Outline**

Week	
Feb. 3 <sup>rd</sup> W	Local Roads, Street, and Collectors
Feb. 4 <sup>th</sup> W	Rural and urban arterials, freeways
Mar. 1 <sup>st</sup> W	Intersection I (Types, properties)
Mar. 2 <sup>nd</sup> W	Intersection II (Selection considerations)
Mar. 3 <sup>rd</sup> W	Grade separation and Interchanges I (Adoptability of grade separation, Access separation)
Mar. 4 <sup>th</sup> W	Grade separation and Interchanges II (Grade separation structure, Interchanges, Ramps, Other design features)
Apr. 1 <sup>st</sup> W	Mid Exam
Apr. 2 <sup>nd</sup> W	Parking lot (Types, General consideration and design)
Apr. 3 <sup>rd</sup> W	Traffic signs and Marking (characteristics, colors, types)
Apr. 4 <sup>th</sup> W	Drainage I (Urban & Rural roads)
May 1 <sup>st</sup> W	Lighting (Parking, Urban, and Rural roads)
May 2 <sup>nd</sup> W	Sustainability requirements
May 3 <sup>rd</sup> W	Final exam
May 4 <sup>th</sup> W	Review

**Textbooks** [الكتاب المنهجي]

Wolhuter, Keith M. (2015), Geometric Design of Roads Handbook

Wout van Bommel (2015), Road Lighting Fundamentals, Technology and Application

Peter Lowitt and Steve Sadwick (2011), Sustainable Neighborhood Road Design

**Suggested references** [المراجع المساعدة للمنهج]

AASHTO (2011), A Policy on Geometric Design of Highways and Streets may june

**Marking [توزيع الدرجات]**

First Exam	15 marks	Second Exam	15 marks	Final Exam	60 marks
QUIZE	5 marks	QUIZE	5 marks		

**Regulation: [الظوابط والأنظمة]**

1. There will be three term exams given during this semester. The best two out of three will be considered for the First & Second exam. This means there will NO makeup exams. Missing one of the two left exams means a ZERO grade will be given for that exam.
2. There is no markup for quizzes.
3. Attendance is mandatory and University regulations will be enforced.
4. All Cheating incidents will be reported to the chair. The following activities are considered cheating:
  - a. Turning in assignment that includes parts of someone else work.
  - b. Turning in someone else assignment as your own.
  - c. Giving assignment to someone else to turn in as their own.
  - d. Copying answers in a test or quiz.
  - e. Taking a test or quiz for someone else.
  - f. Having someone else take a test or quiz for you.
5. See student handbook for other regulations.

**Assignments and/or Projects [الواجبات والمشاريع]**

Assignment/Project	Description	Due Date	Marking
Quizzes	Two or more quizzes	During the course	5Marks

**Instructor(s) information [معلومات الأستاذ]**

**Section:** 1 **Lecture Room:** 1 **Time:** :

**Instructor's Name:** Dr. Mohammed Zuhair Mohamedmeki **e-mail:** moh7312@gmail.com **Office No.:**  
Lecturer Alaa Saadi **e-mail:** alaa202.eng2004@yahoo.com

**Office Hours:** Other office hours are available by appointment.

**Important:** The content of this syllabus may not be changed during the current semester.

**Lecturer Signature**

**Chair Signature**