

CB575 Special Topics In Transp. Eng.

COURSE INFORMATION

Prerequisites	Academic Year & Level		Teaching Methods			Credit Hrs.
	Year	Semester	Lecture	Tutorial	Laborator y	
CB474	5	9 – 10	2	2	0	3

COURSE AIM

The course aims at introducing the student to the fundamentals of Airport Railway planning and design and their relation to the field of transportation. Through using; communication technologies and skills, engineering technologies, data collection and interpretation, and writing technical reports referring to the relevant literature.

COURSE WEEKLY CONTENTS

- 1 Airport Classification and Site Selection, Wind Analysis and Wind Rose Construction (1,2).
- 2 Airport Classification and Site Selection, Wind Analysis and Wind Rose Construction (1,2).
- 3 Determination of runway basic length and corrections.
- 4 Aircraft Classification and Characteristics, Components of Airport system and Services (1,2).
- 5 Aircraft Classification and Characteristics, Components of Airport system and Services (1,2).
- 6 Overall Airport Site I, runway, taxiway, terminal Bldg.
- 7 Overall Airport Site II, Apron gate, Parking lots, strips, Runways and holding aprons configurations (1,2). + Midterm Exam
- 8 Overall Airport Site II, Apron gate, Parking lots, strips, Runways and holding aprons configurations (1,2).
- 9 Classification of Airport Soils.
- 10 Design of Airport Flexible Pavements.
- 11 Railway Engineering, Definition, components of railway systems.
- 12 Railway alignment, track elements, cross section, basic of design.
- 13 Railway platforms, length, switching, signaling.
- 14 TMS, Transportation Management System, components, flowchart of analysis.
- 15 Review of Commercial Transportation, Highway, Airport, Railway Software.

STUDENT GRADING & ASSESSMENT

Weeks	Exams	Assign.	Quizzes	Reports	Present.	Lab.	Total
1 to 7	20 Midterm	←	10	MARKS		→	30
To be freely distributed among possible assessments							
8 to 12	←		20	MARKS		→	20
13 to 15	←		10	MARKS		→	10
16 or 17	40 Final						40
Total	Exams	Assign.	Quizzes	Reports	Present.	Lab.	100

REFERENCES

Textbook The Planning and Design of Airports, R.Horonejeff, McGraw-Hill, 4th Edition, 1994.

Other Standard Handbook for Civil Engineers, F.S.Merritt, McGraw Hill, Latest Edition.
Pavement Management for Airports, Roads and Parking Lots, M.Y.Shahin, Chapman and Hall, New York, Latest Edition.
The Planning and Design of Airports, R.Horonejeff, McGraw-Hill., Latest Edition.
Standard Handbook for Civil Engineers, F.S.Merritt, McGraw Hill, Latest Edition.
Egyptian Code for Highways by Ministry of Urban Planning, Latest Edition.