

CB271 Construction Surveying I

COURSE INFORMATION

Prerequisites	Academic Year & Level		Teaching Methods			Credit Hrs.
	Year	Semester	Lecture	Tutorial	Laborator y	
BA124	2	4	2	2	0	3

COURSE AIM

To familiarize the student with the engineering applications of surveying instruments and methods in the layout of the construction of engineering projects and setting out techniques. 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 General introduction, Basic principles of surveying and plan scales
- 2 Measurement of distances and linear surveying techniques
- 3 Bearing of surveying lines.
- 4 Rectangular Coordinates Calculation
- 5 Area calculation of closed traverse
- 6 Application of practical surveying problems
- 7 Compass traversing + Midterm Exam
- 8 Theodolite Traversing
- 9 Profile Leveling , Rise and Fall Method
- 10 Profile Leveling, HPC Method
- 11 Contouring, contour lines, contour interval, properties, reading , cross sections.
- 12 Drawing Contour lines, SURFER software, 12th week assesment.
- 13 Volume of earth work, formation levels, calculation based on spot levels, 12th Week exam.
- 14 Volume of Longitudinal Earthwork projects
- 15 Intersection of Earthwork projects with Contour Maps

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

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|-----------------|---|
| Textbook | Surveying for Construction, William Irvine, , McGraw-Hill, 5th Edition, 2006. |
| Other | Surveying for Construction by William Irvine , FRICS Publisher: McGraw-Hill , London, Latest Edition.
Surveying, by A. Bannister and S. Raymond Publisher: Pitman, London, Latest Edition.
Elementary Surveying, by Paul R. Wolf and Russell C. Brinker, Prentice Hall, Inc.. |