## CB525 Special Topics In Construction Eng.

# COURSE INFORMATION

|               | Academic | Year & Level | Теа     |          |                |             |
|---------------|----------|--------------|---------|----------|----------------|-------------|
| Prerequisites | Year     | Semester     | Lecture | Tutorial | Laborator<br>y | Credit Hrs. |
| CB523         | 5        | 9-10         | 2       | 2        | 0              | 3           |

COURSE AIM

The aim of this course is at introducing the student to the knowledge of construction engineering in the area of building construction, bridge construction, and tunnel construction.

## COURSE WEEKLY CONTENTS

- **1** Shoring and reshoring operations.
- 2 Shoring and reshoring operations.
- 3 Design and construction of advanced formwork systems
- 4 Design and construction of advanced formwork systems
- 5 Design and construction of advanced formwork systems
- 6 Advanced systems in building construction
- 7 Advanced systems in building construction + Midterm Exam
- 8 Precast concrete technology
- 9 Bridge construction systems
- **10** Bridge construction systems
- 11 Bridge construction systems
- 12 Tunnel construction
- 13 Tunnel construction
- 14 Blasting rock
- 15 Health and Safety

| Weeks    |    | Exams   | Assign. | Quizzes                  | Reports | Present.                | Lab.          | Total |
|----------|----|---------|---------|--------------------------|---------|-------------------------|---------------|-------|
| 1 to 7   | 20 | Midterm | ←<br>To | 1 ر<br>be freely distril |         | к s<br>possible assessn | →<br>nents    | 30    |
| 8 to 12  | ÷  |         |         | 2 (                      | ) MAF   | RKS                     | $\rightarrow$ | 20    |
| 13 to 15 | ÷  |         |         | 1 (                      | ) MAF   | RKS                     | $\rightarrow$ | 10    |
| 16 or 17 | 40 | Final   |         |                          |         |                         |               | 40    |
| Total    | l  | Exams   | Assign. | Quizzes                  | Reports | Present.                | Lab.          | 100   |

#### STUDENT GRADING & ASSESSMENT

# REFERENCES

| Textbook | Construction Planning, Equipment, and Methods, Robert Peurifoy, Clifford<br>Schexnayder, Robert Schmitt and Aviad Shapira, McGraw Hill, 9th Edition,<br>2018                                                                                                                                                                                                    |  |  |  |  |  |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| Other    | Modern Construction and Ground Engineering Equipment and Methods,<br>Harris, F., Longman Group Co., U.K., Latest Edition.<br>Construction Methods and Management, Nunnaly, S.W. Publisher: Prentice                                                                                                                                                             |  |  |  |  |  |
|          | <ul> <li>Hall, New Jersey, Latest Edition.</li> <li>Construction Planning, Equipment, and Methods by Peurifoy, R.L., Ledbetter,</li> <li>W.B., and Schexnayder, G.J., McGraw Hill Co., New York, Latest Edition.</li> <li>Formwork for Concrete Structures, Peurifoy, R.L., and Oberlender, G.D.</li> <li>McGraw Hill Co., New York, Latest Edition.</li> </ul> |  |  |  |  |  |
|          | Construction Methods and Planning, Illingworth, J.R., E and FN SPON,<br>London, Latest Edition.                                                                                                                                                                                                                                                                 |  |  |  |  |  |