



**Sharif University of Technology
School of Civil Engineering**

Design of Reinforced Concrete Structures I

Instructor: Kiarash M. Dolatshahi

email: dolatshahi@sharif.edu

Office: Room 521

<http://sharif.edu/~dolatshahi/ConcreteDesignI.html>

Schedule: Lectures: Saturday, Monday; 9:00-10:30
Office Hours: Saturday;12:30-13:00

Grading: Homework 15%
Mid-term exam 35%
Final exam 50%

Exam dates: Mid-term: 1393/09/8 - 9:00-12:00
Final: 1393/10/20 - 15:00-18:00

Lecture Topics:

- Materials
- Flexural analysis and design of beams
- Design of one-way slabs
- Shear and diagonal tension in beams
- Bond, anchorage, and development length
- Short columns
- Serviceability

Texts:

- 1- Nilson, Arthur. *Design of concrete structures*. 14th Edition. 2010.
- 2- ACI Committee, American Concrete Institute, and International Organization for Standardization. "*Building Code Requirements for Structural Concrete (ACI 318-11) and Commentary*." American Concrete Institute, 2011.

Class Policies:

- Homework will be due one week after being assigned. A penalty of 20% will be applied to the homework submitted until the next session. Late assignments, submitted after three sessions, will not be accepted.
- Attendance policy -- Students are expected to attend all lectures.
- Academic Integrity -- The student conduct is governed by the rules of the University and students are expected to know and abide by the University policies on academic honesty and integrity. It is the responsibility of the student to refrain from infractions of academic integrity which include cheating, fabrication and plagiarism. Any homework, exam, and project handed in by an individual must represent their own original work. Violation of the University rules will result in a failing grade in the course, suspension, and dismissal.