# CpE 310: Numerical Analysis for Engineers

## Spring 2017

| | | | |
|---|---|---|---|
| **Instructor:** | Ahmed Tamrawi | **Time - 1:** | MW 9:30 – 11:00 |
| | | **Time - 5:** | SnTTh 13:00 – 14:00 |
| **Email:** | atamrawi@yu.edu.jo | **Places:** | Hijjawi Bldg. Hall 401, 200 |

**Course Site:** http://elearning.yu.edu.jo

**Office Hours & Questions:** After class, by appointment, or simply send me an email. (Please include CPE-310 in the subject line of your emails to me)

**Textbook:** We will follow the textbook from C.F. Gerald and P.O. Wheatley's *"Applied Numerical Analysis"* $5^{th}$ Edition.

---

**Course Overview:** Numerical analysis is a way to do higher mathematics problems on a computer, a technique widely used by scientists and engineers to solve their problems. Numerical analysis involves the study of methods for computing numerical data and solving mathematical and engineering problems like: Solving nonlinear equations, Sets of equations, Interpolation and curve fitting, Numerical differentiation and integration and Finite difference techniques and Numerical solution of ordinary differential equations.

---

**Evaluation Form** is available on the website for your to assist how easy it was for you to comprehend the presented material and if you have any feedback good or bad towards enhancing the experience and learning in next lectures.

---

**Assignments:** There will be 4 to 5 assigments. Assignments will set the par for exams as exams expected to have the same nature as assignments.

---

**Exams:** There will be three exams during the semester:

- **Exam 1** (March $11^{th}$, 2017 at 11:00 A.M.)
- **Exam 2** (April $15^{th}$, 2017 at 11:00 A.M.)
- **Final Exam,** (TBD)

Exams are closed books. Students who did not attend the first/second exam due to exceptional situations (for e.g., medical emergency) will be given a makeup exam

---

**Plagiarism** Student caught cheating will be awarded a 0 in the exam and may be subject to university disciplinary actions.

**Grading:** The grading breakup will be tentaively as follows:

| | |
|---|---|
| Assignments & Quizes | 10% |
| Exam #1 | 20% |
| Exam #2 | 20% |
| Final Exam | 50% |

**Tentative Course Outline:**