Helwan University
Faculty of Computers and Information

# Course Syllabus

Department of Computer Science
ElectiveIV

**Office Hours:** See webpage.

**Text:** The main two texts are:

- Gonzalez, R. C. and Woods, R. E. (2002), *Digital image processing*, Upper Saddle River, N.J.: Prentice Hall, 2nd ed., rafael C. Gonzalez, Richard E. Woods. ill. ; 25 cm
- Gonzalez, R. C., Woods, R. E., and Eddins, S. L. (2004), *Digital Image processing using MATLAB*, Upper Saddle River, NJ: Pearson/Prentice Hall, rafael C. Gonzalez, Richard E. Woods, Steven L. Eddins. ill., charts ; 25 cm

A unique reference in image science but requires a strong mathematical background is:
Barrett, H. H. and Myers, K. J. (2003), *Foundations of image science*, Wiley series in pure and applied optics, Hoboken, NJ: Wiley

**Course Syllabus:** The course will follow the textbook. We will try to cover the first four chapters before the midterm. After the midterm we will select parts from each remaining chapter.

**Assignments:** Assignments will include both, problems and computer exercises. Matlab is very recommended for solving the computer exercises. **No late assignments please**.

**Grading Policy:** 70% of the grade will be on the final exam, 10% on homeworks, and 20% on midterm. Solving assignments, in both formats the paper-and-pencil and computer exercises, is crucial for acquiring the skills to solve the exam and understand the course.

**General Info:**

- All handouts, grades, and assignments will be posted on the course webpage.
- Final exam will be in the form of Multiple Choice Questions (MCQ). Every question will have five answers, one of them is correct. Every four wrong answers cancel one correct answer. Exam will be open book. So, focus in your course on learning and understanding **NOT** on memorizing.