



# Artificial Intelligence Theories CES 510



Benha University

Computer Systems Engineering  
Electrical Engineering Department

Faculty of Engineering  
(at Shoubra)

**Course Title:** Artificial Intelligence Theories  
**Course Code:** CES 510  
**Course Page:** <http://bu.edu eg/staff/islam.elshaarawy-courses/14155>  
**Instructor:** Dr. Islam ElShaarawy (<http://www.bu.edu eg/staff/islam.elshaarawy>)  
**Main Textbook:** Stuart Russell and Peter Norvig, *Artificial Intelligence: A Modern Approach*. 3<sup>rd</sup> Edition, Pearson Education, Inc., 2009, ISBN 978-0136042594.

**Online Resources:**

 <http://aima.cs.berkeley.edu/>

**Course Contents:**

1. Introduction to AI
2. Intelligent Agents
3. Solving Problems by Searching
4. Beyond Classical Search
5. Adversarial Search
6. Constraint Satisfaction Problems
7. Logical Agents
8. First-Order Logic
9. Inference in First-Order Logic
10. Classical Planning
11. Planning and Acting in the Real World
12. Knowledge Representation

**Course Policy:**

1. Attendance is compulsory.
2. **Reading the relevant chapter(s) ahead of lectures is essential.**
3. Keeping track of whatever happens during the lectures is the student responsibility regardless of attendance.
4. Side talking, cellphones, laptops, food/drinks, and walking<sup>1</sup> are not allowed.



5. **Leaked solution manual as well as any other resources (unless otherwise specified) should never be used for solving the assignments.**

**Grading System:**

<b>Attendance<sup>2</sup>:</b>	000
<b>Assignments:</b>	010
<b>Quizzes:</b>	010
<b>Midterm Exam:</b>	010
<b>Project:</b>	010
<b>Final Exam:</b>	060
<b>Total</b>	100

<sup>1</sup> If you are late for the lecture, then you are allowed to walk into the lecture hall but quietly.

<sup>2</sup> Attendance will be taken anyway.