Course Title:	Artificial Intelligence I
Course Code:	AI 320
Course Page:	http://bu.edu.eg/staff/ahmedfares-courses/
Instructor:	Dr. Fares (http://www.bu.edu.eg/staff/ahmedfares)
Main Textbook:	Stuart Russell and Peter Norvig. Artificial Intelligence: A Modern Approach. 3rd Edition, Pearson Education, Inc., 2009, ISBN 978-0136042594.
Other Resources:	http://aima.cs.berkeley.edu

Course Contents:

1. Introduction
2. Uninformed Search
3. Informed Search
4. Constraint Satisfaction Problems_I
5. Constraint Satisfaction Problems_II
6. Adversarial Search
7. Expectimax and Utilities
8. Markov Decision Processes_I
9. Markov Decision Processes_II
10. Reinforcement Learning_I
11. Reinforcement Learning_II
12. Probability
13. Markov Models
14. Hidden Markov Models
15. Particle Filters and Applications of HMMs
16. Bayes'_Nets: Representation
17. Bayes'_Nets: Independence
18. Bayes'_Nets: Inference
19. Bayes Net: Sampling
20. Decision Diagrams and Value of Perfect Information
21. Machine_Learning: Naive Bayes
22. Machine_Learning: Perceptrons
23. Machine_Learning: Kernels and Clustering
24. Advanced_Applications:_NLP, Games, and Robotic Cars
25. Advanced_Applications: Computer Vision and Robotics

Recommended Background:

1. Understanding of:
   a) Probability (such as the likelihood of an event)
   b) Computer system organization (such as binary representations and arithmetic).
2. You should be comfortable with simple calculations and manipulations using scientific notation.
3. CSC 105

Attendance Policy:

1. Attendance is expected.
2. Whether you attend or not, you are responsible for keeping track of whatever happens during the lectures and the tutorials.
3. Side talking, cellphones, laptops, food/drinks, and walking[1] are not allowed.

Grading System:

| Code | Course Name | Attendance | Participation | Midterm 40 | | Final. 50 | |
				Midterm Exam	Quiz	Final (Assignment, Quiz, Project or lab exam)	Final Exam
		5	5	30% written exam	10% Quiz	15% Project	35% written exam

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1   If you are late for the lecture, then you are allowed to walk into the lecture hall but quietly (5 min only).