Course Syllabus

First Semester – 2013/2014

General Information

Course name	Course code	Credits	Contact hours
Artificial Intelligence	BMTS593	2 lecture+1 lab	2 lecture+2 lab

Instructors/ Coordinators

	Instructor	Coordinator
Name	Mr. Vinoth Kumar	Prof. Tarek Haweel
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Text Book

Title	Artificial Intelligence-A Modern Approach
Author/Year	Stewart Russel and Peter Norvig / 2003

Supplemental materials

Recommended Textbooks and Reference Material	
Title	Introduction to Artificial Intelligence
Author/Year	Eugene Charniak and Drew Mc Dermott / 1998
Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)	
Web sites	http://www.learnartificialneuralnetworks.com/

Specific Course Information

a. Brief description of the content of the course (Catalog Description)
This course introduces representations, techniques, and architectures used to build applied systems and to account for intelligence from a computational point of view. This course also explores applications of rule chaining, heuristic search, logic, constraint propagation, constrained search, and other problem-solving paradigms. In addition, it covers applications of decision trees, neural nets, Genetic Algorithm, and other learning paradigms.
b. Prerequisites (P) or Co-requisites (C)
None
c. Course type (Mandatory or Elective)
Elective

Specific Goals

a. Specific outcomes of instruction
By the end of this course, the student should be able to: - Comprehend the basic concept of AI and its technique. (a) - Discuss the importance of Neural Network. (a) - Describe the importance Problem Solving Paradigms. (b) - Develop various algorithms for AI System using Genetic Algorithm. (d) - Apply AI concepts for solving some biomedical applications. (f)

b. Student outcomes addressed by the course

a	b	c	d	e	f	g	h	i	j	k
✓	✓		✓		✓					

Brief list of topics to be covered

Topics	No of Weeks	Contact hours
Representations, techniques of AI	1	2
Architectures for Artificial Intelligent System	1	2
Building an AI system	1	2
Applications of Rule Chaining	1	2
Heuristic Search	1	2
Propagation search (constraint based)	1	2
Problem solving Paradigms	1	2
Expert system	1	2
Knowledge base system	1	2
Decision trees	1	2
Neural Networks	1	2
Genetic Algorithms	1	2
Learning Paradigms	1	2
Applications using AI	1	2