

Princess Nora University
Faculty of Computer & Information Systems



ARTIFICIAL INTELLIGENCE

(CS 370D)

Computer Science
Department



Course

2

- Title: Artificial Intelligence
- Code : CS 370D
- Pre-requisites: CS 220D + CS 111 D
- Credits: (lecture 3 + 1 lab.)= 3



Dr. Abeer Mahmoud
(course coordinator)



Topics

3

- This course will introduce you to the field of Artificial Intelligence
- Main topics which will be covered:
 - Introduction to AI.
 - Intelligent Agents
 - Searching(Uninformed search , informed search)
 - Constraint Satisfaction Problems(CSP)
 - Introduction to game theory
 - First order logic (Syntax and semantics)
 - Knowledge representation
 - Forms of learning (Inductive, deductive)
 - Programming in logic PROLOG
 - Graph representation
 - Robotics (overview)





Course Aims

4

1. Give you an understanding of what AI is
 - Aims, abilities, methodologies, applications, ...
2. Equip you with techniques for solving problems
 - By writing/building intelligent software/machines



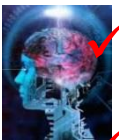


Goals

5

□ By the end of the course the students should be able to:

- ✓ Understand the fundamental concepts of Artificial Intelligence
- ✓ Understand different methods of search and optimization in AI
- ✓ Able to develop small application using heuristic functions to solve any search problem in AI
- ✓ Understand the learning strategies
- ✓ Understand and implement searching techniques
- ✓ Understand the fundamental concept of logic in AI
- ✓ Understand the knowledge areas
- ✓ Learn **PROLOG** language





Books and references:

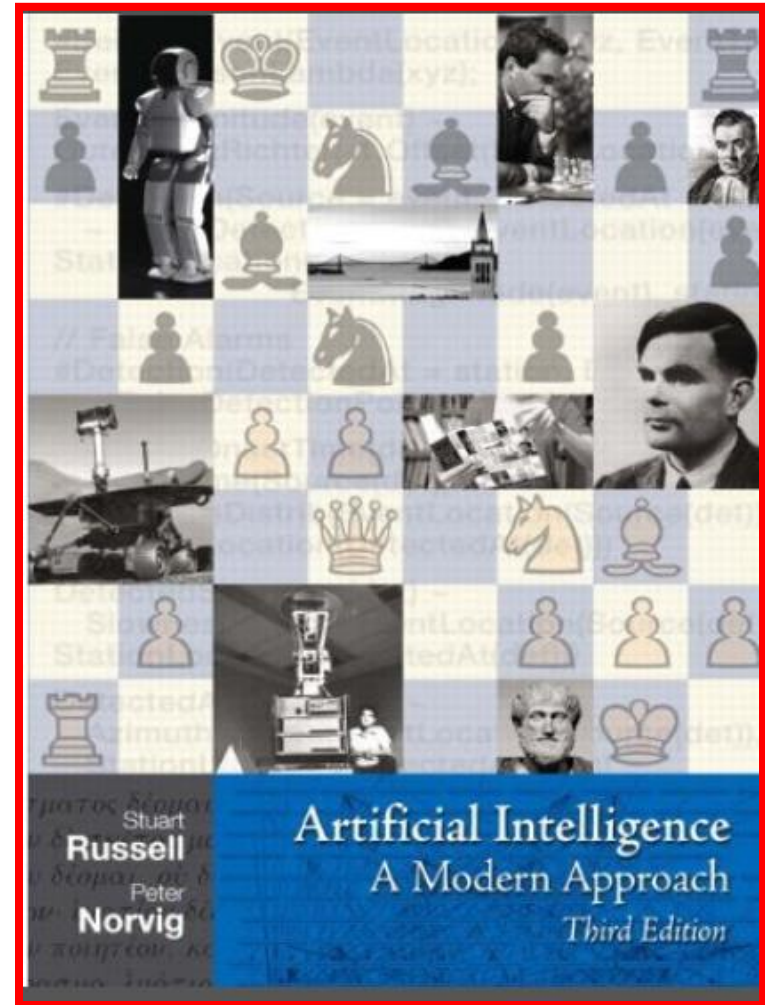
6

□ Main Text Books:

“Artificial Intelligence – A Modern Approach”, Stuart Russel and Peter Norvig: 3rd Edition Pearson

Ivan Bratko :**PROLOG Programming** 2nd Ed.,
Pearson Education

- **“Artificial Intelligence “**, Elaine Rich and Kevin Knight: 2nd Ed , Tata McGraw Hill



(course coordinator)



Resources

7

□ Course :

<http://www.>



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Assissments

8

Assessment method (Write an essay - test - a collective project - a final test ...)	Assessment Week	Grade	Percentage from overall grade
1 st Med Term	8 th week	15	15%
2 nd Med Term	12 th week	15	15%
quiz	5 th week	10	10%
(Lab)	2 quiz	5	5%
	exam	15	15%
Final exam (Theory) "Two academic hours".	After 15	40	40
Total		100	100

Exams will be held Sunday and Monday only
No student is allowed to take exams with other sections



- Marks distribution is not final and is subject to change.

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Course Policy

9

- ❑ **NO bonus**
- ❑ **NO** makeup quizzes.
- ❑ **NO** midterm makeup exams unless:

You must bring a medical excuses from
a government hospital.

+ agree on the excuse from department

+ agree on the excuse from course coordinator



Then the makeup exam will be in the whole course contents

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(course coordinator)





Course Policy (cont..)

10

- Assignments must be completed *individually* unless specified otherwise.

- ▣ If groups are permitted, each student should team up with students from the same tutorial section.
- ▣ Cheating is forbidden. Both parties will be penalized in Minus.





Course Policy (cont..)

11

- **Email Communication:**
 - Anonymous emails will be ignored.
 - When you send an email, you should use your **PNU account**
 - make sure to put “**AI 370D or AI 461D**” in the subject line and
 - **identify yourself with your group code and Student ID** in the email message (body).



- **Late** submissions of any course material is **not allowed**.



- **It is your responsibility** to check the course's website

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(course coordinator)



Thank you



Enjoy the Course
& never forget to smile 😊

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(course coordinator)

