A. Course Description

Credits: 4

Prerequisites: PSYC 100 General Psychology or instructor's permission.

Lab Hours/ Weeks: Corequisites: None

Lecture Hours/ Week :

MnTC Goals: Goal LS - Upper Division Liberal Studies, Goal 05 - Hist/Soc/Behav Sci

This course investigates current and past work in the field of artificial intelligence (AI). Definitions of intelligence are considered and mechanisms and performance of AI application systems are studied. Comparisons are made to human intelligence as the class evaluates achievements in the AI application areas of problem solving, expert systems, neural networks, natural language processing, speech recognition, computer vision, machine learning and robotics. The philosophy of consciousness and the future of AI are also explored. Online videos, computer demos, and discussions are featured. Students can choose to write a critical paper or develop and test a toy AI system. English language competence is required.

B. Course Effective Dates: 08/01/1998 - 09/05/1999 09/06/1999 - 05/06/2002 05/07/2002 - 12/15/2017 12/16/2017 - Present

C. Outline of Major Content Areas:

See Course Description for major content areas.

D. Learning Outcomes (General)

1. Students will know some of the reasons why Artificial Intelligence continues to fall short of human-like performance.
2. Students will learn the scientific process as it applies to Artificial Intelligence.
3. Students will understand some ways in which human and machine information processing are similar and the important ways in which they are different.
4. Students will understand the detailed principles of Artificial Intelligence.

E. Learning Outcomes (MN Transfer Curriculum)

Goal LS - Upper Division Liberal Studies

None

Goal 05 - Hist/Soc/Behav Sci

1. Employ the methods and data that historians and social and behavioral scientists use to investigate the human condition.
2. Develop and communicate alternative explanations or solutions for contemporary social issues.
3. Examine social institutions and processes across a range of historical periods and cultures.

G. Special Information

None