Title	**Artificial Intelligence**
Code	**CMP-460**
Credit Hours	3
Category	Computing
Prerequisite	None
Co-Requisite	None
Follow-up	None
Course Description	**Topics:** Introduction: What's AI, types of problems addressed, Symbolic AI: the physical symbol system hypothesis, Search: exhaustive & heuristic search techniques. Logic programming: knowledge representation & search in the context of logic programming, reasoning in logic programming: unification, horn clause logic, and resolution, Prolog as example logic programming formalism, Knowledge Representation Schemas: Logic, frames, semantic nets, scripts; problems in knowledge representation. Expert systems. Selected Topics in AI: Game playing, Genetic algorithms, Introduction to Machine Learning for AI, Decision Trees, Bayesian classification, Artificial Neural Networks, Computer Vision, Natural language processing
Text Book(s)	George F. Luger, Artificial Intelligence - Structures and Strategies for Complex Problem Solving, 6th Edition, Pearson, 2008, ISBN-13: 978-0321545893
Reference Material	1. Stuart Russell, Peter Norvig, Artificial Intelligence: A Modern Approach, 3rd Edition, Pearson, 2009, ISBN-13: 978-0136042594 2. Ivan Bratko, Prolog: Programming for Artificial Intelligence, 4th Edition, Pearson, 2011, ISBN-13: 978-0321417466 3. P. Winston, Artificial Intelligence, 3rd Edition, Pearson, 1992, ISBN-13: 978-0201533774