

Minnesota State University Moorhead

CSIS 330: Analysis and Design of Algorithms

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: *.*

Prerequisites:

- MATH 225 - Discrete Mathematics AND CSIS 252 - Introduction to Computers and Programming II

Corequisites: None

MnTC Goals: None

Apriori and aposteriori complexity analysis. Problem solving strategies: Divide and Conquer, Greedy, Dynamic Programming, Backtracking, and Branch-and-Bound. Applications to AI. Problem state spaces and search strategies. Parallel and Distributed Algorithms. Computability and Undecidability. Complexity Classes.

B. COURSE EFFECTIVE DATES: 06/01/1996 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

None

D. LEARNING OUTCOMES (General)

None

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted