**DRAFT CSCE 5323 Computer Security**

**Catalog Description**: This course covers study of a broad selection of contemporary issues in computer security. Topics include security concepts and mechanisms, access control, security policies, authentication methods, basic cryptography, secure system design, and information assurance.

**Prerequisites**: Knowledge of file systems

**Textbook/required material**: “Introduction to Computer Security”, 5th Edition, by Matt Bishop, Publisher: Pearson Education

**Goals**: The goal of this course is to study a broad selection of contemporary issues in computer security. This course is designed to provide a good theoretical knowledge of security in digital world and how security issues relate to various other fields of computer science.

**Learning Outcomes:** By completing this course, students will gain significant knowledge of computer security policies, various types of threats to computer systems and the corresponding mitigation processes, basic encryption and decryption mechanisms, user authentication and authorization methods, fundamentals of malicious logics, file system security procedures, etc.

**Assignments:** Several homework assignments will be given and each one will be due a week after it is assigned.

**Tests:**  There will be three tests throughout the duration of the course.

**Research:** Students will be required to investigate a current research area in computer security and write a short paper presenting their findings.

**Grading Policy**: The final grades will be determined based on the following policy.

Assignments: 40%

Tests: 40%

Research: 20%

**Make-up Policy:**  Absolutely no make-ups will be allowed.

**Academic Dishonesty:**  As a core part of its mission, the University of Arkansas provides students with the opportunity to further their educational goals through programs of study and research in an environment that promotes freedom of inquiry and academic responsibility. Accomplishing this mission is only possible when intellectual honesty and individual integrity prevail.

Each University of Arkansas student is required to be familiar with and abide by the University’s ‘Academic Integrity Policy’ which may be found at honesty.uark.edu/policy. Students with questions about how these policies apply to a particular course or assignment should immediately contact their instructor.

**Academic Support:** University of Arkansas [Academic Policy Series 1520.10](http://provost.uark.edu/152010.pdf) requires that students with disabilities are provided reasonable accommodations to ensure their equal access to course content. If you have a documented disability and require accommodations, please contact me privately at the beginning of the semester to make arrangements for necessary classroom adjustments. Please note, you must first verify your eligibility for these through the Center for Educational Access (contact 479–575–3104 or visit http://cea.uark.edu for more information on registration procedures).

**Prepared by**: Brajendra Panda **Date**: February 4, 2021