# Mississippi Valley State University Mathematics, Computer & Information Sciences Itta Bena, Mississippi 38941

# Course Syllabus - Fall 2018

Course Number: CS 423 Class Hours: 9:25 – 10:40pm Course Title: Intro. to Cyber Security Credit Hours: 3 Credit Hours

Instructor: Christopher I. G. Lanclos Coordinator: Christopher I. G. Lanclos

**Email:** christopher.lanclos@mvsu.edu **Website:** bluebird.mvsu.edu

#### Office Hours:

Monday & Wednesday: 12:00PM – 2:00PM 3:30PM – 4:30PM Tuesday & Thursday: 10:45AM – 11:45AM 2:30PM – 4:00PM

Wednesday (Tutoring Hours): 4:30PM - 5:30PM

## **Catalog Description:**

This course is an introductory course on cyber security, which include topics, such as but not limited to cyber threats, fundamentals of security design principles, information assurance fundamentals and introduction to cyber security.

Course Prerequisites: CS 371 - Operating Systems

# Textbook(s) and other required materials:

Security in Computing 5th Ed., Pfleeger, Pfleeger & Margulies ISBN-13: 9780134085050

CompTIA Security+ SY0-501 Cert Guide 4<sup>th</sup>, Pearson IT Certification David L. Prowse ISBN-10: 0789758997ISBN-13: 978-0789758996

Major Topics Covered in Course	45 Hours Total
Overview of Computer Security	4
Authentication	4
Programming	4
The Web	4
Operating Systems	4
Networks	4
Privacy	4
Cryptography	4
Emerging Topics	1.5
*Assessments of Topics	7.5 hours

#### **Certification: CompTIA Security+- Student Learning Outcomes:**

By the time of graduation, students will be able to:

- 1.0 Threats, Attacks, and Vulnerabilities
- 2.0 Technologies and Tools
- 3.0 Architecture and Design

- 4.0 Identity and Access Management
- 5.0 Risk Management
- 6.0 Cryptography and Public Key Infrastructure

# **Program Objective and Outcomes:**

- 1. Graduates will be successful in computer science related fields.
  - 1.1. An ability to use current techniques, skills, and tools necessary for computing practice. (i)
  - 1.2. An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices. (j)
  - 1.3. An ability to apply design and development principles in the construction of software systems of varying complexity. (k)
- 2. Graduates will apply knowledge in computer science and related fields to solve problems.
  - 2.1. An ability to apply knowledge of computing and mathematics appropriate to the program's student outcomes and to the discipline. (a)
  - 2.2. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution. (b)
  - 2.3. An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs. (c)
- 3. Graduates may obtain advance degrees.
  - 3.1. An ability to function effectively on teams to accomplish a common goal. (d)
  - 3.2. An understanding of professional, ethical, legal, security and social issues and responsibilities. (e)
  - 3.3. An ability to communicate effectively with a range of audiences (f)
  - 3.4. An ability to analyze the local and global impact of computing on individuals, organizations, and society (g)
  - 3.5. Recognition of the need for and an ability to engage in continuing professional development. (h)

# **Laboratory Projects:**

1. National Cyber League

#### **Oral and Written Communication:**

N/A

#### Social and Ethical Issues:

No Component

#### **Attendance Policy:**

Students are required to keep regular attendance to classes. Students are allowed to miss three (3) days of class. Days that have been approved by the university are not included in the three days. Any greater number of absences will result in the student failing the course.

## **Late/Missed Assignments:**

Late assignments that are accompanied by a valid university excuse will be accepted with no late penalty. The late penalty is 10% of the grade for each class period, up to 3 class periods. After 3 days the assignment will not be accepted.

Students will be able to earn points back on quizzes, exams and in class work through attending office hours. The following are the points and time required for each. Quizzes = 30 minutes for 50% of missed points, exams = 2 hours for 50% of missed points, in class work = until assignment is done = 50% of missed points. Students are only allowed to put in 2-hour worth of office hours per day that go towards earning points back on the above listed work.

Grading Scale Course Evaluation			
Α	100-90	Attendance	5%
В	89-80	Quizzes	20%
С	79-70	Homework	20%
D	69-60	Exams	20%
F	59-Below	In Class Assign.	20%
		NCL	15%

# **Cheating, Plagiarism/Academic Integrity and Penalties:**

Academic Integrity is the avoidance of gaining an unfair advantage in academic work, such as cheating, falsification of information, fraud, plagiarism, and unauthorized access to academic records or computer systems. The instructor ordinarily has final authority over the grades assigned to students and the authority to lower grades if cheating or plagiarism occurs. If a student violates the Academic Integrity Policy, the following steps will take place:

- 1. Ordinarily, the instructor will take appropriate disciplinary action, which may include the awarding of "F" on the particular assignment or in the course.
- 2. The instructor will make a report of the incident and of action taken, if any, to his/her department Chairperson, the Vice President for Student Affairs, and the student.
- 3. The Judicial Board may review the incident and impose conduct discipline in accordance with the standard of conduct.

If a student is caught cheating, the first violation will be an "F" on that assignment. The second will follow the above process with an automatic "F" in the class.

#### **Student with Special Needs:**

Mississippi Valley State University is committed to providing reasonable accommodations for students with a documented disability. If you feel you are eligible to receive accommodations for a covered disability (medical, physical, psychiatric, learning, vision, hearing, etc.) and would like to request it for this course, you must be registered with the Services for Students with Disabilities (SSD) program administered by University College.

It is recommended that you visit the Disabilities Office located inside the EMAP Computer Lab in the Technical Education (IT) Building to register for the program at the beginning of each semester.

For more information or to schedule an appointment, please contact Mr. Billy Benson, Jr. via phone or email at 662-254-3005 or billy.benson@mvsu.edu.

I reserve the right to make changes on this syllabus as needed. This document does not constitute a contract with the University. It contains guidelines.