Course Syllabus

Jump to Today

Fall 2016

Instructor Contact

- Instructor: Wingyan Chung, Ph.D.
- Office: PII 330
- Office Hours: TBD
- Phone: +1 (407) 882-1300
- E-mail: wchung@ucf.edu (mailto:wchung@ucf.edu) (mailto:wchung@ucf.edu)
- Website: http://pegasus.cc.ucf.edu/~cyber/wchung (http://pegasus.cc.ucf.edu/~cyber/wchung)

Course Information

- Course Name: Cybersecurity Informatics
- Course ID & Section: IDC 6999
- Credit Hours: 3
- Semester/Year: TBD
- Location: Online

Course Description

This course introduces fundamental concepts, techniques, and tools in managing, analyzing, and interpreting data for cybersecurity informatics. The concepts and techniques include data description, modeling of user requirements and data properties, statistical summarization, making inferences from data, machine learning, and network analytics. Students will learn to use contemporary software tools to support the informatics process and research development. (Pre-requisites: graduate-level standing or instructor approval)

Course Objectives

Upon successful completion of this course, students should be able to

- Explain the challenges of managing data and applying informatics in the cybersecurity domain,
- Model and describe data in the cybersecurity domain using statistical and analytical methods,
- Make inferences and test hypotheses to support decision making to enhance cybersecurity,
- Apply machine learning and network science approaches to prediction of cybersecurity phenomena, and
- Use contemporary software tools to support management and analytics of cybersecurity data.

Required Text

• No required textbook is assigned. The instructor will post handouts on the course website.

Course Requirements

There will be weekly assignments posted on the course website. Each assignment is due for submission on Thursday 11:59 pm of each week. Mid-term and final exams will be given. The final exam will cover all materials in the course while the mid-term exam will covers all materials up to the week before the mid-term exam. An individual paper will be assigned after the mid-term exam and will be due for submission one week before the final exam.

Grading Policies

You will have one week to submit an assignment. The individual paper will be due for submission one week before the final exam. After the due date of an assignment or the individual paper, you may still submit it within one week, but your score will be deducted by 50%.

The mid-term and final exams are timed. You must complete it within the given time once you have opened it (make sure you have a good internet connection as you cannot save and return later). You have only one attempt on the exam. No late submission of exam is accepted.

Evaluation and Grading

The following tables provides a conversion between points obtained and letter grades.

Letter Grade	Percentage
A	93 – 100 %
A-	90 – 92.99 %
В+	87 – 89.99 %
В	83 – 86.99 %
В-	80 – 82.99 %
C+	77 – 79.99 %
С	73 – 76.99 %
C-	70 – 72.99 %
D+	67 – 69.99 %
D	63 – 66.99 %
D-	60 – 62.99 %
F	< 60 %

The following table explains the grade distribution of different evaluation items in this course.

Evaluation Item	Percentage of Grade	Points
Problem Set	30%	60 pts
Individual Paper	20%	40 pts

Discussion	10%	20 pts
Mid-term Exam	20%	40 pts
Final Exam	20%	40 pts
Total	100%	200 pts

Attendance Policy

This is a completely online course. Students are required to check the website regularly to be informed about the course progress and to keep up with the course work.

Academic Honesty

Plagiarism and cheating of any kind on an examination, quiz, or assignment will result at least in an "F" for that assignment (and may, depending on the severity of the case, lead to an "F" for the entire course) and may be subject to appropriate referral to the <u>Office of Student</u> <u>Conduct (http://osc.sdes.ucf.edu/faq#students)</u> for further action. See the <u>UCF Golden Rule (http://goldenrule.sdes.ucf.edu/)</u> for further information. I will assume for this course that you will adhere to the academic creed of this University and will maintain the highest standards of academic integrity. In other words, don't cheat by giving answers to others or taking them from anyone else. I will also adhere to the highest standards of academic integrity, so please do not ask me to change (or expect me to change) your grade illegitimately or to bend or break rules for one person that will not apply to everyone.

Disability Statement

The University of Central Florida is committed to providing reasonable accommodations for all persons with disabilities. This syllabus is available in alternate formats upon request. Students with disabilities who need accommodations in this course must contact the professor at the beginning of the semester to discuss needed accommodations. No accommodations will be provided until the student has met with the professor to request accommodations. Students who need accommodations must be registered with <u>Student Disability Services</u> (<u>http://www.sds.sdes.ucf.edu/</u>), Ferrell Commons, 7F, Room 185, phone (407) 823-2371, TTY/TDD only phone (407) 823-2116, before requesting accommodations from the professor.

Copyright

This course may contain copyright protected materials such as audio or video clips, images, text materials, etc. These items are being used with regard to the Fair Use doctrine in order to enhance the learning environment. Please do not copy, duplicate, download or distribute these items. The use of these materials is strictly reserved for this online classroom environment and your use only. All copyright materials are credited to the copyright holder.

Third-Party Software and FERPA

During this course you might have the opportunity to use public online services and/or software applications sometimes called third-party software such as a blog or wiki. While some of these could be required assignments, you need **not** make any personally identifying information on a public site. Do not post or provide any private information about yourself or your classmates. Where appropriate you may use a pseudonym or nickname. Some written assignments posted publicly may require personal reflection/comments, but the assignments will not require you to disclose any personally identity-sensitive information. If you have any concerns about this, please contact your instructor.

Course Expectations

Course Schedule

Assignments Summary:

Date	Details
	D0: Introduction Discussion (https://webcourses.ucf.edu/courses/1176456/assignments/4533018)
	D1: Data and Informatics Techniques to Prevent Cyber Attacks (https://webcourses.ucf.edu/courses/1176456/assignments/4531902)
	Q0: Syllabus Quiz (https://webcourses.ucf.edu/courses/1176456/assignments/4538913)
	Q1: Problem Set 1 (https://webcourses.ucf.edu/courses/1176456/assignments/4495990)