LSU Syllabus Template

Last updated January 2025

Course Title: Cybersecurity Essentials

Course Number and Section: CSC 1362

Fall 2026

Instructor: Kellie Dieutto

Contact Information
Email: kdieutto@lsu.edu

Office Hours: By appointment

Course Description
Introduction to cybersecurity fundamentals, including threats, network security, and risk management; explores computing systems, data protection, and societal impacts through practical applications

Course Objectives
Upon successful completion of this course, students will be able to:
- Identify components and vulnerabilities of computing systems.
- Explain network operations and apply cybersecurity practices.
- Protect and analyze data in security contexts.
- Use basic programming for security tasks.
- Assess ethical, legal, and societal impacts of cybersecurity.
- Apply risk management to real-world scenarios.

Modality
In-person as follows: 3 hrs. lecture

Required Materials
- All required materials and resources will be shared via Moodle.

Grading Scale & Policies
LSU letter grades will be assigned according to this table. Your end of semester numerical grades are rounded up to whole numbers (for example, 94.49 = 94, 94.50 = 95)

A+	98-100
A	94-97
A-	90-93
B+	87-89
B	84-86
B-	80-83
C+	77-79
C	71-76
C-	68-70
D+	65-67
D	62-64
D-	58-61
F	57 and below

Final grades will be computed from the following activities:

Homework Assignments/Labs	60%
Quizzes and Midterm	20%
Final Exam	20%

Description of Graded Activities

Homework Assignments/Labs
Weekly assignments include hands-on labs and research tasks. Labs use Python for security scripting (e.g., password checkers), network simulations, and data protection exercises, with exploration of cybersecurity tools and IoT security concepts. Research covers threats, career paths, and societal impacts (e.g., privacy, breaches), using open-source resources.

Quizzes and Midterm
Periodic quizzes and a midterm in Week 7 test concepts via multiple-choice, short-answer, and practical exercises, covering systems, networks, cybersecurity, data, and risk management up to that point.

Final Exam
Comprehensive exam tests all objectives, including scripting, threat analysis, IoT security, and ethical considerations, preparing students for industry readiness.

15-Week Course Outline

Week	Topic
1	Introduction to Computing Systems
2	System Vulnerabilities and Security
3	Network Fundamentals
4	Network Security Techniques
5	Cyber Threats and Defenses
6	Risk Management Principles
7	Midterm & Data Collection and Storage Security
8	Data Analysis for Cybersecurity
9	Encryption and Access Control
10	Cybersecurity Tools and Practices
11	Ethical and Legal Issues in Cybersecurity
12	Societal Impacts of Cybersecurity
13	Scripting for Security Tasks
14	Advanced Cybersecurity Topics - Security in IoT
15	Review All Topics

Course Communication Policy

Communication between the instructor and students is essential for success in this course. Please review the following guidelines:

- Email: All course-related inquiries should be sent to kdieutto@lsu.edu Please use your LSU email address when contacting the instructor.
- Response Time: Emails will typically be answered within 24 hours on weekdays and within 48 hours on weekends. Please plan accordingly and do not wait until the last minute to ask questions.
- Moodle Announcements: Important updates, assignments, and reminders will be posted on Moodle. Students are responsible for checking Moodle regularly.
- Students are encouraged to communicate proactively and reach out with any concerns related to course material, assignments, or grading.

Class Attendance Policy

Regular attendance and active participation are essential for success in this course. Students are expected to attend all scheduled classes, engage in discussions, and complete all coursework on time.

Excused Absences

Absences may be excused in accordance with LSU Policy Statement 22 (PS-22): PS-22 Student Absence from Class

Excused absences include, but are not limited to:

- University-sponsored events (athletics, academic competitions, etc.)

- Illness or medical emergencies (with appropriate documentation)
- Religious observances
- Family emergencies

Students must notify the instructor in advance and provide appropriate documentation where required. It is the student's responsibility to communicate promptly regarding absences and make arrangements to complete any missed work.

Academic Continuity Plan

In the event of a campus-wide closure, this course may transition to an alternative form of instruction. I will notify you by [e-mail, Moodle announcement] as soon as possible of the format our course will take. For example, the class may be held via Zoom and recorded for those unable to attend, or I will provide a lesson online that you can do asynchronously, or we may cover content at a different pace or schedule. If the emergency closure impacts scheduled tests, I will make alternative arrangements as soon as possible. If alternative formats are not available due to widespread loss of power and/or internet or other extenuating circumstances, the University may schedule makeup days per Policy Statement 117.

Expectations

LSU's general policy states that for each credit hour, you (the student) should plan to spend at least two hours working on course related activities outside of class. Since this course is for three credit hours, you should expect to spend a minimum of six hours outside of class each week working on assignments for this course. Visit the LSU catalog for more information regarding general information for courses.

LSU Code of Student Conduct

The LSU Code of Student Conduct explains student rights, excused absences, and what is expected of student behavior. Students are expected to understand this code as described here. Any violations of the LSU Student Code will be duly reported to the Dean of Students.

Disability Services

The University is committed to making reasonable efforts to assist individuals with disabilities in their efforts to avail themselves of services and programs offered by the University. To this end, Louisiana State University will provide reasonable accommodations for persons with documented qualifying disabilities. If you have a disability and feel you need accommodations in this course, you must present a letter to me from Disability Services in 124 Johnston Hall, indicating the existence of a disability and the suggested accommodations. Their phone number is 225-578-5919 and website is www.lsu.edu/disability

Academic Success

The primary ingredients of your academic success are attending class, managing your time efficiently, taking good notes, and developing good critical thinking and communication abilities. LSU has a number of excellent resources that will assist you in

developing these skills. The place to begin is the [Center for Academic Success](#) (CAS). The CAS offers guidance on what learning strategies are best suited to your talents, tutoring in the basic subjects, and workshops on a variety of topics, from note taking to time management. [Communication across the Curriculum](#) assist students in developing the communication skills necessary for academic and professional success. Finally, with respect to professional success, the [LSU Olinde Career Center](#) can assist you in choosing a major and a profession that best suits your talents and passions and help you develop a four year career plan to ensure success when you graduate from LSU.

Nondiscrimination, Sexual Harassment, & Title IX
LSU provides equal opportunity for all qualified persons in admission to, participation in, or employment in the programs and activities which the university operates without regard to race, creed, color, marital status, sexual orientation, gender identity, gender expression, religion, sex, national origin, age, mental or physical disability, or veteran's status. LSU has implemented a procedure to address complaints for those who believe they have been subjected to discrimination and/or harassment in violation of this policy. Please know that your instructors are here to support you and listen to your experience. We also want you to know that we are mandatory reporters and must report what we know to the Office of Civil Rights and Title IX. All LSU employees, with few exceptions, are required to report instances of sex- or gender-based harassment and discrimination, including sexual misconduct and power-based violence (e.g., sexual assault, stalking, dating violence, domestic violence, sexual exploitation, retaliation, etc.) for which they may not be the victim, but of which they are aware. The Office of Civil Rights & Title IX is the LSU office responsible for investigating complaints regarding any type of discrimination, sexual harassment, or power-based violence. The Office of Civil Rights & Title IX is located in 118 Himes Hall and the phone number is (225) 578-9000. If you are aware of an individual who has been victimized, you are encouraged to contact the Office of Civil Rights & Title IX or file an online report by visiting [LSU's Domestic & Sexual Violence Support and Reporting](#) website and clicking the [Report an Incident](#) box. If you have been assaulted, harassed, or a victim of violence, we encourage you to contact the Office of Civil Rights & Title IX. Please reach out for help immediately. Some excellent resources available to Baton Rouge residents include:

- STAR (Sexual Trauma Awareness and Response; 24/7 hotline: (855) 435-STAR (7827)
- IRIS Domestic Violence Center; 24/7 hotline: (800) 541-9706
- The Lighthouse Program; (225) 578-5718
- VIA LINK; (800) 273-TALK (8255) [national line but answered from New Orleans]

National resources include:

- RAINN (Rape, Abuse & Incest National Network); 24/7 hotline: (800) 656-4673

- National Sexual Violence Resource Center

For additional information, visit www.lsu.edu/civil-rights the Office of Civil Rights & Title IX and review PM-73 (Prohibiting Power-based Violence, including Sex- and Gender-based Harassment and Discrimination, and Sexual Misconduct).