ATHENS STATE UNIVERSITY

ITE 523 | Crypto and Network Security

Spring 2026

Instructor Contact Information

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Office Location: Waters Hall, S103D
Office Hours
TW 9:00AM -2:00PM

Course Communication and Response Times

It is preferred that students contact the instructor via email. The instructor will respond within 24 hours. To meet with the instructor, please make an appointment first at https://baoqiangyan.youcanbook.me/, then either click this Zoom link https://athens.zoom.us/my/baoqiangy or visit S103D, Waters Hall for an in-person meeting.

Prerequisites

Prerequisite(s): ITE 420

Additional Skills Needed

Familiarity with discrete mathematics and networking would be beneficial.

Course Description

Prerequisite: ITE 420. The objective of this course is to understand (in a deeper sense) the fundamentals of Cryptography and know how to apply them in a balanced manner to achieve secrecy of information and security of systems that house the information. Modern cryptography encompasses problems as diverse as authentication, key distribution, confidentiality, integrity, and availability of information, to name a few. This course provides the foundation upon which one may understand what these definitions and problems are, how to evaluate protocols and methods to solve them, and how to build secure software solutions for these problems.

Access Athens

This course **does not** participate in the Access Athens program. Students are responsible for purchasing their required textbooks and course materials directly.

Most materials for this course can be purchased through the Athens State University online bookstore at: https://athens.ecampus.com.

Please note that not all course materials are available through eCampus. Some additional resources or materials may need to be purchased separately.

Required Text(s) and Other Materials

Cryptography and Network Security: Principles and Practice [Rental Edition]
ISBN: 9780136707226
Authors: Stallings, William
Publisher: Pearson Rental Program
Edition: 8th
Additional Information
Students are required to purchase access to the online course that already includes the electronic version of the required textbook. Students can get a discounted price at
https://www.ucertify.com/cart/?order=03nrC&ref=&add_order=1.
Media Type: Access to Online Platform
Requirement: Required

Course Learning Objectives

- Understand core cybersecurity concepts for securing information and networks.

- Grasp the fundamentals of cryptography and explore various encryption methods.

- Apply secure communication protocols like TLS/SSL and SSH to safeguard data transmission.

- Mitigate security challenges specific to wireless networks and email communication.

- Master essential network security tools and best practices, including firewalls and intrusion detection systems.

- Navigate the security considerations of cloud computing and the Internet of Things (IoT).

- Gain hands-on experience with real-world security tools through practical exercises.

Program Learning Outcomes

Information Technology Program Learning Outcomes

Evaluation and Grading Scale

Item	Weight
Labs	33%
Quizzes	33%
Exams (lowest score dropped)	34%
Total	100%

Grading Scale	
A	90.0-100.0%
B	80.0-89.9%

C	70.0-79.9%
D	60.0-69.9%
F	Below 60.0%

This course includes extensive reading, hands-on labs, quizzes, and four exams. You have a new lesson to work on every four days on average, including weekends.

You are recommended to follow this order when going through the materials: "Ebook", "Labs", then "Quizzes". Labs help you understand the concepts covered in quizzes.

Quizzes are multiple-choice questions. Labs are done on remote virtual machines (VMs). You need to watch the "Lab tips and tricks" the 1st time you do a lab to learn how to use the lab environment, especially how to copy and paste between the local text and the VMs to save time when running commands.

You have two attempts available for each exam, and the higher score will be recorded. You have 3 hours to finish an exam each time. The 2nd exam will not be available until the 1st exam is due. The 3rd exam will not be available until the 2nd exam is due. The final exam will not be available until the 3rd exam is due. The lowest score of all 4 exams will be dropped. All other assessments open at the beginning of the class and stay available until they're due. Late submissions will incur a penalty after the due date.

Your assessment scores will be posted to Canvas automatically once you complete each assessment. Your overall course grade will be calculated using the weights shown in the first table above. Specifically, the following formula is used:

Average lab score * 33% + Average quiz score * 33% + Average exam score * 34%

Late Assignment Policy

It is your responsibility to pay attention to the due dates. If, for any reason, you require additional time for an assessment, please notify me via email with a valid reason at least 3 days in advance without penalty. Otherwise, late assignments will be accepted with a 25% deduction per day, up to 3 days late.

Participation Policy

This is an online course with scheduled assignments and due dates. To actively participate in this course, students are expected to:

- Log in to Canvas regularly

- Complete eBook readings and follow the posted module schedule

- Submit labs, quizzes, and take exams by their due dates

- Monitor announcements and course messages, and communicate professionally when questions arise

Waiting until the due date to begin work is strongly discouraged, as technical issues and time constraints may prevent successful completion. Late work and missed activities are handled according to the late policy stated in this syllabus. Extensions are not guaranteed and are typically considered only for documented or university-approved circumstances.

Attendance Policy

Since this is a 100% online course, no formal roll call will be taken. For Financial Aid purposes, submission of the first assessment in the course will be used to indicate that you are attending the class. Your last submission of an assessment will be used to report your last attendance.

AI Policy

You are permitted to use generative AI tools in this course as a resource for learning, provided you use them responsibly and transparently. You must cite or acknowledge AI contributions, and your work should reflect your own critical thinking and understanding. Failure to follow this policy will be handled according to the procedures outlined in the Academic Dishonesty Policy.

Academic Misconduct

In support of the University's mission, Athens State University strives to prepare students for leadership roles and encourages students to be responsible citizens, to have integrity, and to show consideration for others. Violations of the Code of Conduct may result in sanctions or disciplinary actions, including formal reprimand, loss of privileges, suspension, or expulsion. Policies relating to academic misconduct can be found in the Student Code of Conduct and Discipline policy.

Academic honesty is required in all academic endeavors. Violations of academic honesty include any instance of plagiarism, cheating, seeking credit for another person's work, falsifying documents or academic records, or any other fraudulent activity. Once verified, violations of academic honesty will result in a failing grade in the course and be reported to the school.

Remote Proctoring

This Athens State University course does not require the use of remote proctoring software. Exams and assessments will be administered without third-party monitoring tools, and students will receive specific instructions from the instructor regarding exam procedures and expectations.

Student Support Services

Academic Support Services

The above link contains information related to a variety of Academic Support Services to help increase your academic success while at Athens State University. These areas include: Kares Library, Transfer / Academic Advising, University Labs, Writing Center, Help Desk, and Accessibility Services. For more information, select this link: Academic Support Units.

Tech Support

The Help Desk provides technical support to students, faculty, and staff. This support includes accessing accounts and troubleshooting technical issues with the learning management system. This link provides the system requirements for online courses at Athens State.

Support Hours: Monday – Friday: 8 am – 4:30 pm, Sunday: 12 pm – 6 pm (Virtual Support Only)

Phone: 256-216-6698, Email: helpdesk@athens.edu

Accessibility Statement

Athens State University complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990. It is the policy of the University that a good-faith effort shall be made to meet the accommodation requests of persons with disabilities. If you are a student with a disability that might require special materials, services, or assistance, you should notify your instructor as soon as possible and arrange a meeting with the Accessibility Services Specialist. Please contact Accessibility Services Specialist: (phone) 256-233-8143: (email)

accessibility.services@athens.edu for an appointment. For more information, select this link: [Accessibility Services](#).

Kares Library and Writing Center

Kares Library

The Kares Library provides assistance in-person and online. Specific to this course, the Library Resources link in Canvas (located in the left Navigation menu) allows you to access databases that contain scholarly articles, peer-reviewed journals, eBooks, and more. To use these resources off-campus, you'll be prompted to enter your Athens State student email and to create a library password. The Library Resources link also provides ways to contact Kares Library's expert librarians.

Other ways to contact the library:
Email: refdesk@athens.edu
Phone: 256-216-6650
Website: libguides.athens.edu/home

Writing Center

The purpose of the Writing Center at Athens State University is to support writers who want to improve their writing, critical thinking, and communication skills. Peer consultants help writers in all disciplines and at all skill levels—beginner to advanced. You may email us at writing.center@athens.edu, call 256-216-6665, or click [here](#) to schedule an appointment.

Course Schedule

Please refer to the graded assignments for the course schedule. Students are supposed to read the eBook first before doing each assignment.

Graded Assignments

Due Date	Assignment	Type	Points
	[Course Q&A](#)	Discussion	0

Due Date	Assignment	Type	Points
	Course Q&A	Discussion	0
1/13/26	Syllabus Quiz	Quiz	100
1/15/26	Lesson 1 Quiz	Assignment	100
1/19/26	Lesson 2 Quiz	Assignment	100
1/24/26	Lesson 3 Quiz	Assignment	100
1/24/26	Lesson 3 Virtual Lab	Assignment	100
1/28/26	Lesson 4 Quiz	Assignment	100
1/28/26	Lesson 4 Virtual Lab	Assignment	100
2/1/26	Lesson 5 Quiz	Assignment	100
2/5/26	Lesson 6 Quiz	Assignment	100
2/9/26	Lesson 7 Quiz	Assignment	100
2/9/26	Lesson 7 Virtual Lab	Assignment	100
2/13/26	Lesson 8 Quiz	Assignment	100
2/15/26	Exam 1	Assignment	100
2/19/26	Lesson 9 Quiz	Assignment	100
2/19/26	Lesson 9 Virtual Lab	Assignment	100
2/23/26	Lesson 10 Virtual Lab	Assignment	100
2/23/26	Lesson 10 Quiz	Assignment	100
2/27/26	Lesson 11 Quiz	Assignment	100
2/27/26	Lesson 11 Virtual Lab	Assignment	100
3/3/26	Lesson 12 Quiz	Assignment	100
3/7/26	Lesson 13 Virtual Lab	Assignment	100

Due Date	Assignment	Type	Points
3/7/26	Lesson 13 Quiz	Assignment	100
3/11/26	Lesson 14 Quiz	Assignment	100
3/15/26	Lesson 15 Quiz	Assignment	100
3/15/26	Lesson 15 Virtual Lab	Assignment	100
3/19/26	Lesson 16 Quiz	Assignment	100
3/19/26	Lesson 16 Virtual Lab	Assignment	100
3/21/26	Exam 2	Assignment	100
3/30/26	Lesson 17 Quiz	Assignment	100
3/30/26	Lesson 17 Virtual Lab	Assignment	100
4/3/26	Lesson 18 Quiz	Assignment	100
4/7/26	Lesson 19 Virtual Lab	Assignment	100
4/7/26	Lesson 19 Quiz	Assignment	100
4/11/26	Lesson 20 Quiz	Assignment	100
4/11/26	Lesson 20 Virtual Lab	Assignment	100
4/15/26	Lesson 21 Quiz	Assignment	100
4/15/26	Lesson 21 Virtual Lab	Assignment	100
4/19/26	Lesson 22 Quiz	Assignment	100
4/23/26	Lesson 23 Quiz	Assignment	100
4/25/26	Exam 3	Assignment	100
4/29/26	Final Exam	Assignment	100