

ISM 666

Course title: Blockchains & Cryptography

Professor INFORMATION

Name: Kane J. Smith, PhD

Office Location: 422 Bryan Building

Email: Kjsmith9@uncg.edu

Office Hours: By Appointment

GENERAL INFORMATION

Graduate Level, 3 credit hours

Schedule Type – Online Weekly WebEx

Delivery - Online

COURSE REQUIREMENTS

Evaluate strategies to protect data, including cryptographic systems and their use in real world applications. Examine latest developments in Blockchains and their role in security and data management.

Prerequisites: None.

REQUIRED AND RECOMMENDED TEXTS/READINGS

All readings and materials provided on Canvas.

COURSE DESCRIPTION

Evaluate strategies to protect data, including cryptographic systems and their use in real world applications. Examine latest developments in blockchains and their role in security and data management. Students, through hands-on learning, will explore topics such as crypto-mining, the evaluation and application of blockchains as well as how to evaluate and leverage blockchain-based technologies in the business world. Additionally, students will learn the basics of cryptography and how it is utilized via blockchain technology.

COURSE-SPECIFIC STUDENT LEARNING OUTCOMES (SLOs)

Upon successful completion of this course students will be able to:

1. Understand the origins and evolution of blockchain technology from crypto-mining to other business related applications.
2. Understand the fundamentals of cryptography and how it is applied in blockchain technology.
3. Explain how blockchains can be used along with cryptography to secure information in various business sectors.
4. Demonstrate the ability to develop blockchains for various business-related applications.
5. Analyze and evaluate the blockchain-based technologies for relevance and value-add within organizations.

EVALUATION AND GRADING

Grading Scale

You will receive a score of 0 for any work not submitted. Late Assignments are subject to a 10% penalty. Your final grade in the course will be a letter grade. Letter grade equivalents for achieved points (percentages) are estimated as follows:

- *Estimated Letter Equivalencies for the Final Course Grade out of 100%*

94% or higher	A	77 – 79.9%	C+	66 – 69.9%	D+
90 – 93.9%	A-	73 – 76.9%	C	63 – 65.9%	D
87 – 89.9%	B+	70 – 72.9%	C-	60 – 62.9%	D-
83 – 86.9%	B			< 60%	F
80 – 82.9%	B-				

- *The course grade will be based on the following distribution:*

1. Weekly Assignments & Participation	500 points
2. Term Paper	200 points
3. Midterm Exam	150 points
4. Final Exam	150 points
	<hr/>
TOTAL	1000 points

- *The following criteria will apply to the grading of assignments:*

A: Work that demonstrates not only a clear understanding of the material under study, but also a superior ability to utilize that material in the assignment. All criteria are met. The student's work goes beyond the task and contains additional, unexpected or outstanding features.

B: Work that demonstrates a good understanding of the material under study, and utilizes the material well in the assignment. The student meets the assignment criteria, with few errors or omissions.

C: Work that minimally demonstrates a basic or technical understanding of the material under study, and uses some relevant material in the assignment. Work may not address one or more criteria or may not accomplish what was asked.

F: Work that is incomplete, inappropriate and/or shows little or no comprehension of the material under study.

COMMUNICATION AND COURSE TECHNICAL GUIDELINES

Technical support: Students with technical issues with the course and email should contact 6TECH for support either by email or phone or chat (<https://its.uncg.edu/Help/6TECH/>).

Please also make your instructor aware of the issue, and if there will be any delays in resolving the issue.

ACADEMIC INTEGRITY POLICY

Each student is required to comply with the Academic Integrity Policy on all work submitted for the course. Refer to the following URL: <https://osrr.uncg.edu/academic-integrity/>.

ACCOMMODATIONS

UNCG seeks to comply fully with the Americans with Disabilities Act (ADA). Students requesting accommodations based on a disability must be registered with the Office of Accessibility Resources and Services (OARS) in 215 Elliott University Center, 334-5440, oars.uncg.edu.

Students may request accommodations for religious holidays under applicable laws. See <https://catalog.uncg.edu/academic-regulations-policies/university-policies/> for more information.

Students should remind the instructor in advance when accommodation affects course activities, e.g., before taking exams, to ensure that the instructor has updated systems accordingly.

HEALTH AND WELLNESS

Your health impacts your learning. Throughout your time in college, you may experience a range of health issues that can cause barriers to your learning. These might include physical ailments, illnesses, strained relationships, anxiety, high levels of stress, alcohol/drug problems, feeling down, or loss of motivation. Student Health Services and The Counseling Center can help with these or other issues you may be experiencing. You can learn about the free, confidential mental health services available on campus by calling 336-334-5874, visiting the website at <https://shs.uncg.edu/> or visiting the Anna M. Gove Student Health Center at 107 Gray Drive. Help is always available.

ATTENDANCE AND LATE WORK/MAKEUP POLICIES

Students with university-related or requested absences, e.g., field trips in other courses or multiple exams during finals week, must make prior arrangements in advance for any conflicts with their schedule and due dates for the course.

Students should review the following [Bryan School Faculty and Student Guidelines](#) to understand the roles and responsibilities of both students and faculty.

FINAL EXAMINATION

Online – See Tentative Schedule for more information