

Syllabus

BIS3111 Information Security Assurance: Principles & Practices

Garry L. White, CCP, CISSP, PhD, Visiting Professor from Texas State University, USA
Summer Semester 2024

Level	Bachelor												
Credits	3												
Student Contact Hours	<ul style="list-style-type: none">• 2 hours 45 minutes per week – compressed course• Format online (3 sessions) + on campus (12 sessions); overview online vs. on campus please see schedule in Moodle• Time & room details please see timetable LSF												
Workload	30 in class + 60 h self-study												
Prerequisites	General Computer Literacy												
Time	further details, see: LSF												
Room	further details, see: LSF												
Start Date	March 19, 2023												
Lecturer(s)	<table border="1"><tr><td>Name</td><td>Garry White, CCP, CISSP, PhD</td></tr><tr><td>Office</td><td>W2.2.23</td></tr><tr><td>Virtual Office</td><td>TBA</td></tr><tr><td>Office Hours</td><td>TBA</td></tr><tr><td>Phone</td><td>-</td></tr><tr><td>Email</td><td>gw06@txstate.edu</td></tr></table>	Name	Garry White, CCP, CISSP, PhD	Office	W2.2.23	Virtual Office	TBA	Office Hours	TBA	Phone	-	Email	gw06@txstate.edu
Name	Garry White, CCP, CISSP, PhD												
Office	W2.2.23												
Virtual Office	TBA												
Office Hours	TBA												
Phone	-												
Email	gw06@txstate.edu												

Visiting Prof. Dr. Garry White Summer Semester 2024 – Information Security Assurance: Principles & Practices Schedule

		Sessions of 90 minutes on campus	Sessions of 90 minutes online					
		12	3					
Tuesday, March 19, 2024	Kickoff online 15:30 - 17:00		1					
Tuesday, March 26, 2024	online 15:30 - 17:00 + 17:15 - 18:45		2					
Tuesday, June 04, 2024	13:45 - 15:15 + 15:30 - 17:00 + 17:15 - 18:45	3						
Wednesday, June 05, 2024								
Thursday, June 06, 2024	<i>+ Office hours for individual questions /feedback from/for students [90 minutes]</i>							
Friday, June 07, 2024	11:30 - 13:00	1						
Saturday, June 08, 2024								
Sunday, June 09, 2024								
Monday, June 10, 2024	11:30 - 13:00 + 13:45 - 15:15	2						
Tuesday, June 11, 2024	13:45 - 15:15 + 15:30 - 17:00 + 17:15 - 18:45	3						
Wednesday, June 12, 2024								
Thursday, June 13, 2024	<i>+ Office hours for individual questions /feedback from/for students [90 minutes]</i>							
Friday, June 14, 2024	11:30 - 13:00 + 13:45 - 15:15 + 17:15 - 18:45	3						

Outline of the Course

<u>Date</u>	<u>time schedule</u>	<u>period</u>	<u>Ch</u>	<u>notes</u>
Mar 19, Tues	15:30 to 17:00	a 45 min	Intro to course,	Intro topics & Intro 2 projects & tests
on-line		b 45 min	RCA Sec Br topic	Proj#2: Target Breach Intro Project – RCA
Mar 26, Tues	15:30 to 17:00	a 45 min	Ch 1	Security Systems
on-line		b 45 min	BUFFER	
	17:15 to 18:45	a 45 min	Ch 2	Changing technologies
		b 45 min	Supplement	Physical security, Mindsets, DatBr, N.AmCySum, Trends, Privacy, 800-33
June 4, Tues Proj #1 Res Due	13:45 to 15:15	a 45 min	Ch 3 Proj #1 Res Due	Risks, Threats, Vulnerabilities
		b 45 min	Ch 7	Cryptography; Pub/Pri keys & DigSig
	15:30 to 17:00	a 45 min	Project RCA lab with partner	Lab to work on Project – RCA
		b 45 min	Work on Ex1 ques. with partner	Work on Ex1 ques. with partner
	17:15 to 18:45	a 45 min	Ch 4, Ch 5	Bus. Drivers, Risk Manag, Net & Tele- tech
		b 45 min	Ch 5 & Cloud	Cloud (tech)
June 7, Fri	11:30 to 13:00	a 45 min	Work on Ex1 ques. with partner	Work on Ex1 ques. with partner
		b 45 min	Ch 6	Access controls
June 10, Mon Exam #1 due	11:30 to 13:00	a 45 min	Ex1 DUE	
Proj #2 RCA Due		b 45 min	Ch 6, 8	Access controls, Malicious Software, Attack Vectors
	13:45 to 15:15	a 45 min	Ch 8	Malicious Software, Attack Vectors
		b 45 min	Ch 9	Operations & Admin., SDLC

June 11, Tues	13:45 to 15:15	a 45 min	Ch 10	Auditing, testing, monitoring
		b 45 min	Ch 11	Contingency Planning
	15:30 to 17:00	a 45 min	Work on Ex2 ques. with partner	Work on Ex2 ques. with partner
		b 45 min	Work on Ex2 ques. with partner	Work on Ex2 ques. with partner
	17:15 to 18:45	a 45 min	Ch 13, 14	Security Standards
		b 45 min	Ch 14, 15	Security Certifications, Compliance Laws
June 14, Fri	11:30 to 13:00	a 45 min	CASE Studies	CASE studies
Exam #2 DUE		b 45 min	CASE Studies	CASE studies
	13:45 to 15:15	a 45 min	Proj #1 Res presentation	Proj #1 Res presentation
		b 45 min	Proj #1 Res presentation	Proj #1 Res presentation
	17:15 to 18:45	a 45 min	BUFFER	
Exam # 3 e-mail by June 17		b 45 min	Exam #3, Ch 13-15, Case Studies, Presentations	

Assessment

The course is graded through a project and four essay exams. The Root Cause Analysis project and three of the essay exams may be done with a partner.

Proj #1 Res		15%
Proj #2 RCA		15%
Exam #1	Ch 1-5, 7	25%
Exam #2	Ch 6, 8-11	25%
Exam #3	Ch 13-15, Case Studies, Stu Res Pres.	20%

The following evaluation scheme is used: 'Very good' means exceptional performance that is far above the average. 'Good' means good performance that is above the average. 'Satisfactory' means average performance, which certainly has shortcomings, but basically complies with the requirements. 'Adequate' means underperformance with conspicuous defects. 'Poor' means not acceptable performance, which no longer complies with the requirements.

Academic Integrity and Student Responsibility

In general, I expect that you will be using code, examples, and ideas from many different websites and resources for your exercises. This is allowed within reason. Wholesale copying of entire projects is definitely not allowed. Using code to round out a feature is allowed. If you ever have a question about what is or is not appropriate, ask first!

In all cases, you need to cite all sources at the top of the file where the code or algorithm was used, and you should note all sources in your documentation. Failure to properly attribute your sources will result in failing the complete lecture.

Code of Conduct

In this course, there will be a focus on working well together and learning about the development process. A large portion of that process involves interpersonal skills and conflict management. Students and staff are all expected to treat each other with respect. This includes, but certainly is not limited to:

- Excessive web browsing during class
- Disrespectful language
- Promptness for all deadlines and class meetings
- Quality work
- Not working well with your partner
- Collaborating with other teams
- Be fair to the other students!
- Be punctual and do not leave early!

The number one problem with professionalism in class is the overuse of laptops and mobile devices. Taking notes on a laptop and following along with the slides is welcome and encouraged. Doing work for other classes, watching videos, chatting, or anything else that distracts from your ability to learn and follow along (or anyone around you), will result in a professionalism penalty. Students can and will be penalized for unprofessional behavior.

Your class work might be used for research purposes. For example, we may use anonymized student assignments to design algorithms or build tools to help programmers. Any student who wishes to opt out can contact the instructor or do so after final grades have been issued. This has no impact on your grade in any manner.

In addition, please be aware and follow rules as explained in the University's online code of conduct:

[Code of Conduct for online Teaching](#)

Teaching Philosophy

I am always happy to serve as conversation partner and support you with advice. Please contact me during the lecture or via teams (or e-mail).

I am willing to contribute to your successful learning and provide an understanding of the practical impacts of the learning content. Comprehension questions should, if possible be equated during the lessons. Your comments, which serve the progress of all others are also welcome. Also, suggestions for improvements, and constructive criticism are very welcome. My goal is that you can successfully pass the exam, however a major part of the work is up to you.

Course Intended Learning Outcomes and their Contribution to Program Intended Learning Outcomes / Program Goals

Program Intended Learning Outcomes		Course Intended Learning Outcomes	Assessment Methods		
After completion of the program the students will be able...		After completion of the course the students will be able...	Project Work	2 Written Exams	Written Exam
			30%	50%	20%
			Collective	Collective	Individual
1 Expert Knowledge					
1.1	...to demonstrate their distinguished and sound competencies in General Business Administration.	To define and explain the components of security and assurance.		X	X
1.2	...to demonstrate their distinguished and sound competencies in Economics.	To explain the impact of security breaches.		X	X
1.3	...to have command of legal methodology for case solutions on basis of claims.	To understand due care and due diligence and forensics.	X	X	
1.4	...to solve business problems based on profound data research skills and by applying quantitative methods.	To be able to calculate loss and risk levels		X	X
1.5	...to demonstrate profound expert knowledge in their field of specialization.	To be able to analytical thinking in solving security threats	X	X	
2 Digital Skills					
2.1	...to know and understand relevant IT software tools used in business and their features and have a solid understanding of digital technologies.	To be able to use encryption and hashing calculations.		X	X
2.2	...to effectively use and apply information systems to develop solutions in business settings.	To develop safeguards and countermeasures for threats and vulnerabilities	X	X	X
2.3	...to effectively use digital technologies to interact, to collaborate and to communicate.	To collaborate in solving security threats and vulnerabilities	X	X	
2.4	...to handle the professional use of digital technologies in a responsible manner.	To know and apply the security policies of an organization.		X	X
3 Critical Thinking and Analytical Competence					
3.1	...to implement adequate methods in a competent manner and to apply them to complex problems.	To know and use root cause analysis to resolve security breaches and to develop countermeasures.	X		
3.2	...to critically reflect and interpret findings and to develop comprehensive solutions for complex problems.	To evaluate case studies of security breaches			X
4 Ethical Awareness					
	...to develop sound strategies in the areas of ethics, sustainable development and social responsibility and are able to apply them to typical economic decision-making problems.	To know the ethics of security professionals		X	
5 Communication and Collaboration Skills					
5.1	...to express complex issues effectively in writing.	To write about complex issues for the essay exams and RCA project report	X	X	X
5.2	...to demonstrate their oral communication skills in presentations.	This is done through working with a partner for the RCA project and three essay exams.	X	X	
5.3	...to work successfully in a team by performing practical tasks.	This is done through working with a partner for the RCA project and three essay exams.	X	X	
6 Internationalization					
6.1	...to understand and explain business challenges in an international context.	To understand how the globalization of the Internet makes cybercrime hard to stop		X	
6.2	...to articulate themselves in a professional manner in international business.	To know the differences with privacy laws between the USA and Europe.		X	
6.3	...to successfully demonstrate awareness of cross-cultural differences.	To know the differences between national laws and standards.		X	