# Abridged Syllabus: Information Security

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# 1 Details

Course & Section:	Information Security, CISC 3325, MW12		
Days & Time:	Mondays, Wednesdays (MoWe), $12:50$ PM – $02:05$ PM		
Location:	Ingersoll Hall, Room 3413 (IH-3413 in short)		
Instructor: Miriam Briskman			
E-mail: briskman@sci.brooklyn.cuny.edu			
Response Time:	Within $24 - 48$ hours, between 12 PM to 9:30 PM		
Office Hours:	Thursdays, 07:15 PM – 09:15 PM, online through Blackboard.		
	Alternatively, please email me to schedule an appointment.		
Course Materials:	[Free] The InfoSec Handbook: An Introduction to Information Se- curity, Apress Open. Link: https://link.springer.com/cont ent/pdf/10.1007/978-1-4302-6383-8.pdf.		
	[Free] Elements of Computer Security, UTiCS Springer (You mustlog in as a 'Current Student' using your CUNYfirst credentials).Link: https://link-springer-com.brooklyn.ezproxy.cuny.edu/content/pdf/10.1007/978-0-85729-006-9.pdf.		
	Note: This course uses only free, open-source materials.		
Prerequisites:	CISC 3320 (Operating Systems)		
Tools/Resources:	Blackboard; Adobe Acrobat Reader DC		

### 1.1 Course Description

(3 credits) Principles and practices of computer and network security. Fundamental concepts and principles of computer security, basic cryptography, authentication and access control, Internet vulnerability (malware, DoS attacks, etc), intrusion detection systems, firewalls, software and operating system security, database security, web and wireless security, managerial and ethical issues in computer security. Lab and project activities such as the use of network probing for illustrative and diagnostic purposes; security tool choice, deployment and configuration; secure programming techniques. (Taken from CUNYFirst.)

#### 1.2 Course Objectives

By the end of this course, you will master the following skills:

- Proficiency of computer security concepts and current practices.
- Firm understanding of the history of computer security.
- Practice of the obtained knowledge in computer security to be gained through course assignments.

• Independent searching and verbal expression of answers based on given sources or your opinion.

Please refer to the Required Electronic Tools and Resources section at the end of the full version of the syllabus for information about how to obtain the software required for this course (for free, of course.)

# 2 Grading Components

The course's grade is influenced by the following components:

Attendance	10%
Participation	15%
Homework	20%
Midterm	25%
Final	30%
Extra Credit	5%

## 3 Grades

Students will receive a letter grade for the course according to the following score distribution established by CUNY:

<60	60-62	63-66	67-69	70-72	73-76	77-79	80-82	83-86	87-89	90-92	93+
F	D-	D	D+	C-	С	C+	B-	В	B+	A-	А

A grade of A+ will be granted for numerical grades of 97 or higher after all extra credit points you received are applied to the grade.

# 4 Important Brooklyn College Policies

#### 4.1 Center for Student Disability Services

The Center for Student Disability Services (CSDS) is committed to ensuring students with disabilities enjoy an equal opportunity to participate at Brooklyn College. In order to receive disability-related academic accommodations students must first be registered with CSDS. Students who have a documented disability or suspect they may have a disability are invited to schedule an interview by calling (718) - 951 - 5538 or emailing

Josephine.Patterson@brooklyn.cuny.edu. If you have already registered with CSDS, email Josephine.Patterson@brooklyn.cuny.edu or testingcsds@brooklyn.cuny.edu to ensure the accommodation email is sent to your professor.

#### 4.2 Nonattendance Because of Religious Beliefs

The Brooklyn College undergraduate Bulletin for the years 2022 - 2023 states:

The New York State Education Law provides that no student shall be expelled or refused admission to an institution of higher education because he or she is unable to attend classes or participate in examinations or study or work requirements on any particular day or days because of religious beliefs. Students who are unable to attend classes on a particular day or days because of religious beliefs will be excused from any examination or study or work requirements. Faculty must make good-faith efforts to provide students absent from class because of religious beliefs equivalent opportunities to make up the work missed; no additional fees may be charged for this consideration.

Based on the description above, if you are incapable of attending a class because of religious observance, you should e-mail me at least 48 hours before that class so that proper accommodations could be made. If this is an exam day, we will schedule a make-up exam when it is convenient to you, and if an assignment is due, the due date will be extended, and I will tell you when the new due date is.

### 4.3 Brooklyn College Policy on Academic Integrity

The faculty and administration of Brooklyn College support an environment free from cheating and plagiarism. Each student is responsible for being aware of what constitutes cheating and plagiarism and for avoiding both.

The complete text of the CUNY Academic Integrity Policy can be found at this site:

https://www.cuny.edu/about/administration/offices/legal-affairs/policies-r
esources/academic-integrity-policy/

If a faculty member suspects a violation of academic integrity and, upon investigation, confirms that violation, or if the student admits the violation, the faculty member MUST report the violation. Students should be aware that faculty may use plagiarism detection software.

This means that if you cheat on a test or assignment, I MUST file a report which will initiate academic penalties. Additionally, the assignment in which you cheat will get an unfortunate score of 0.

### 4.4 Brooklyn College Bereavement Policy

Students who experience the death of a loved one should refer to:

https://www.brooklyn.edu/policies/bereavement/

## 4.5 Brooklyn College Library

New student? Returning to campus? Looking for materials for your class or research? Check out the plethora of resources that the Brooklyn College Library is providing to you:

https://library.brooklyn.cuny.edu/resources/

You will certainly find something useful there!

## 4.6 More Information: Bulletin

For more information about the policies of Brooklyn College and other essential information, please refer to the Bulletin, which you can find on the following web-page:

https://www.brooklyn.edu/registrar/bulletins/

## 5 Important Dates

August 25 (Fr): Start of Fall 2023 Term August 28 (Mo): First lecture of CISC 3325, section MW12 August 31 (Th): Last day to add a course September 04 (Mo): Labor Day: College Closed September 15 (Fr): Grade of W is assigned for officially withdrawing from a course September 15 – 17 (Fr – Su): No classes scheduled September 25 (Mo): No classes scheduled October 09 (Mo): Columbus Day: College Closed October 10 (Tu): Conversion Day: Classes follow Monday schedule November 22 (We): No classes scheduled November 23 – 26 (Th – Su): Thanksgiving: No classes scheduled December 11 (Mo): Last day of classes! We indeed meet today! December 13 (We): Reading Day December 14 – 20 (Th – We): Week of Final Examinations for the Fall 2023 Term

Please refer to the Brooklyn College Academic Calendar for the Fall 2023 semester to view other important dates not mentioned above:

https://www.brooklyn.edu/events/tag/Fall-2023-main-academic-calendar/list/? tribe\_organizers%5B0%5D=8878

# 6 Schedule

Note that the schedule below is tentative; if changes are made, I will notify you and will post the updated syllabus/schedule on Blackboard.

All assignments, excluding the exams, are due at 11:59 PM EST, on Blackboard.

Week	Date	Topics, Exams, and Assignment Deadlines
1	08/28 (Mo)	Welcome! Syllabus Review
	08/30 (We)	Topic 1: Introduction to Information Security
2	09/04 (Mo)	College Closed: No CISC 3325, MW12 lecture!
	09/06 (We)	Topic 1: Introduction to Information Security – Con't
3	09/11 (Mo)	Topic 2: Key Terms & Principles in InfoSec
	09/13 (We)	Topic 2: Key Terms & Principles in InfoSec – Con't
4	09/18 (Mo)	Topic 3: Access Control
		• Homework 1 on Topic 1 due
	09/20 (We)	Topic 3: Access Control – Con't
5	09/25 (Mo)	No classes scheduled: No CISC 3325, MW12 lecture!
	09/27 (We)	Topic 3: Access Control – Con't
6	10/02 (Mo)	Topic 3: Access Control – Con't
	10/04 (We)	Topic 4: Cryptography
7	10/09 (Mo)	College Closed: No CISC 3325, MW12 lecture!
	10/10 (Tu)	Conversion Day: We have a lecture today!
		Topic 4: Cryptography – Con't
		• Homework 2 on Topic 2 due
8	10/11 (We)	Topic 4: Cryptography – Con't
9	10/16 (Mo)	Topic 4: Cryptography – Con't
		• Homework 3 on Topic 3 due
	10/18 (We)	Topic 4: Cryptography – Con't
10	10/23 (Mo)	Topic 4: Cryptography – Con't
	10/25 (We)	Topic 5: Application & Web Security
11	10/30 (Mo)	Topic 5: Application & Web Security – Con't
		• Homework 4 on Topic 4 due
	11/01 (We)	Midterm Exam: 12:50 PM – 02:05 PM, at the West End Build- ing (WEB), 1st floor, computers M133 – M188
12	11/06 (Mo)	Topic 6: Malware vs. Anti-Virus Software
	11/08 (We)	Topic 6: Malware vs. Anti-Virus Software – Con't
13	11/13 (Mo)	Topic 7: Social Engineering
	11/15 (We)	Topic 8: Networks & Network Security
14	11/20 (Mo)	Topic 9: Firewalls
		• Homework 5 on Topics 5 and 6 due
	11/22 (We)	No classes scheduled: No CISC 3325, MW12 lecture!
15	11/27 (Mo)	Topic 10: Intrusion Detection & Prevention
	11/29 (We)	Topic 10: Intrusion Detection & Prevention – Con't

Week	Date	Topics, Exams, and Assignment Deadlines			
16	12/04 (Mo)	Topic 11: Virtual Private Networks			
	12/06 (We)	Topic 12: Data Backups & Cloud Computing			
17	12/11 (Mo)	Topic 13: Current Trends in Wireless, Mobile, and Bluetooth Security			
		• Homework 6 on Topics 8, 9, and 10 due			
	12/13 (We)	Reading Day: No CISC 3325, MW12 lecture!			
Finals	12/20 (We)	Final Exam: 10:30 AM – 12:30 PM, at the West End Building			
		(WEB), 1st floor, computers M133 - M188			

– End of CISC 3325 Abridged Syllabus –