# Course Syllabus

**Jump to Today** 



# VALENCIACOLLEGE

# Division of Engineering, Computer Programming & Technology

**Department of Cybersecurity & Network Engineering Technology** 

(https://valenciacollege.edu/academics/departments/engineering/programs/cybersecurity-and-network-engineering-technology/index.php)

West Campus Building 9, Room 140 (407) 582-1902/1903

http://valenciacollege.edu/west/engineering

Summer 2024

Course Date: May 3, - July, 2024

Course Title: CET 2894C-32565 Projects in CyberSecurity

Contact Hour Breakdown: CR 3 Class 3 Lab 1

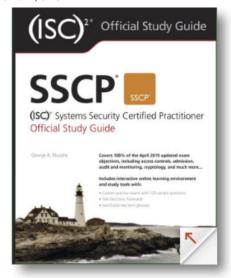
Prerequisite: CET2892C - Ethical Hacking

**Catalog Course Description:** In this course, students can apply the skills, methodologies, tools, and practices they learned in previous Cyber Security-related courses to inventory a live network, conduct assessments and needs analysis, harden information systems, and monitor the network.

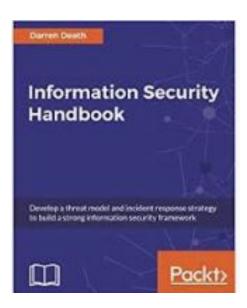
Link to Guide:

#### Textbook: Cengage Unlimited

- Information Security Handbook by Darren Death
  - ISBN 9781788478830
- SSCP Systems Security Certified Practitioner Official Study Guide ISBN 978-1-119-05965-3 <u>SSCP</u>
   (ISC)2 Systems Security Certified Practitioner Official Study Guide.pdf
   (https://online.valenciacollege.edu/courses/200733/files/49717725/download?wrap=1) ↓
   (https://online.valenciacollege.edu/courses/200733/files/49717725/download?download\_frd=1)



ISBN-10: 1119059658 ISBN-13: 9781119059653



(https://online.valenciacollege.edu/courses/200733/files/49717712/download?wrap=1)

#### Required Material

- Microsoft TEAMs, this will be our primary tool for communication during the week
- Access to VMWare Workstation through VMware academy
- <u>Minimum Hardware Requirements:</u> Windows 10 or 11 Pro PC/Laptop with at least 12 to 16 GB RAM; i5 or i7 processor; and a headset.

Please note that no other hardware or operating systems are supported. Any support provided for hardware/software outside the requirements is done best-effort-only. You are responsible for your equipment meeting requirements.

(https://online.valenciacollege.edu/courses/200733/files/49717657/download?wrap=1)

#### Resource Links

- Microsoft Azure for Teaching: <a href="https://signup.azure.com/studentverification?offerType=3">https://signup.azure.com/studentverification?offerType=3</a>
   (<a href="https://signup.azure.com/studentverification?offerType=3">https://signup.azure.com/studentverification?offerType=3</a>
- VMWare Software (BrightSpace):
  - VMWare license key page (https://itacademy.vmware.com/catalog?pagename=Software-Licenses-Repository)
  - <u>Download VMWare Workstation for Windows (https://www.vmware.com/go/getworkstation-win)</u>
  - Download VMWare Workstation for Linux (https://www.vmware.com/go/getworkstation-linux)
  - Download VMWare Player 17 → (https://www.vmware.com/products/workstation-player/workstation-player-evaluation.html)

#### Additional Support

Location: Microsoft Teams Virtual Lab

Follow this link: <a href="https://valenciacollege.edu/academics/departments/engineering/lab-hours.php">https://valenciacollege.edu/academics/departments/engineering/lab-hours.php</a>)

Choose Cybersecurity and Network Engineering Technology Lab to join this TEAM, on this site, you will see the hours of operation.

#### **Tutoring:**

Here is the directions for tutoring: <a href="Net\_Tutor.pdf">Net\_Tutor.pdf</a>

**Hours:** Monday to Thursday: 1 pm to 6 pm EST (subject to change due to availability - we will update you if they do)

(https://online.valenciacollege.edu/courses/200733/files/49717657/download?wrap=1)

#### Course Learning Outcomes

On course completion, students will be able to:

- Analyze business needs for various security measures and develop adequate security policies to meet those needs
- Demonstrate competency in performing various penetration testing and information assurance analysis
- Discuss sound project management practices and demonstrate proficiency in utilizing various project management tools
- Apply federal and state regulations and standards in all aspects of information assurance and network security designs, implementations, testing and documentation

# Class Time and Location: Online (Asynchronous)

- Instructor: J Chisholm (Doc C) Faculty Site: <u>Dr C's Faculty Front Door</u> (<a href="http://frontdoor.valenciacollege.edu/?jchisholm2">http://frontdoor.valenciacollege.edu/?jchisholm2</a>)
- Contact Information: Email: <u>jchisholm2@valenciacollege.edu</u> (<u>mailto:jchisholm2@mail.valenciacollege.edu</u>)
- Phone: 407/582-1614
- TEAMs Link: <u>Projects in Cybersecurity TEAM</u> 

   (<a href="https://teams.microsoft.com/l/team/19%3Akekd2Y6Hb5Kb8Q8xHVzyxutgjDgDr-">https://teams.microsoft.com/l/team/19%3Akekd2Y6Hb5Kb8Q8xHVzyxutgjDgDr-</a>

<u>RKgVGc9fKh7hQ1%40thread.tacv2/conversations?groupId=10aad9b6-73f3-4ca2-b2d5-a1dbff839bb3&tenantId=0e886695-3d17-41a8-8544-135b0a92a47c)</u>

- Optional Zoom Monday's 1:30 pm to 2:15 pm
  - Join Zoom Meeting → (https://valenciacollege.zoom.us/j/99867534774?
     pwd=cDNEdXRFVSs5amhGUklkbzJIRVE3UT09%20)

Engagement Hours				
Day	Location	Time		
Monday	TEAMs	2:00 pm to 4:00 pm		
Tuesday	RM252	11:00 am to 1:00 pm		
Wednesday	TEAMs	3:00 pm to 5:00pm		
Thursday	TEAMs	Noon to 2:00 pm		
Friday	TEAMs	9 am to 11 am		
	Teaching Schedule			
Day	Class	Time		
Monday	CET2892C	11:30 am to 2:00 pm		
Monday	CNT2000C	4:00 pm to 5:00 pm		
Tuesday	CET2792C	1:00 pm to 3:00 pm		
Tuesday	CET2894C	3:00 pm to 4:00 pm		

Microsoft TEAMs is required and will be used for all communication for this class. Please use this link to get in contact with me via TEAMs directly



**Chat with me on TEAMs ⇒** 

(https://teams.microsoft.com/l/chat/0/0?users=jchisholm2@yalenciacollege.edu)

## Valencia College Core Competencies

"The faculty of Valencia College has identified four core competencies that define the learning outcomes for a successful Valencia graduate. These competencies are at the heart of the Valencia experience and provide the context for learning and assessment at Valencia College. You will be given opportunities to develop and practice these competencies in this class. The four competencies are:

- 1. **Think** think clearly, and creatively, analyze, synthesize, integrate and evaluate in the many domains of human inquiry
- 2. Value- make reasoned judgments and responsible commitments
- 3. Communicate- communicate with different audiences using varied means
- 4. Act- act purposefully, effectively and responsibly."

5.

### Learning Support Statement

Learning Support Services provides students with academic support through distance tutoring, face to face tutoring at the campuses, writing consultations, library services, and resources. Tutoring is offered

in most academic disciplines including math, science, foreign languages, English for academic purposes (EAP), computer programming and writing assistance for any course. Assistance with library research can be accessed online through Atlas or the tutoring LibGuide. For more information on how to access tutoring and library research assistance, please visit the college-wide Learning Support Services LibGuide at: <a href="https://libguides.valenciacollege.edu/distancetutoring">https://libguides.valenciacollege.edu/distancetutoring</a> <a href="https://libguides.valenciacollege.edu/distancetutoring">https://libguides.valenciacollege.edu/distancetutoring</a>)

#### Please Note

Brainfuse is our new 24/7 online tutoring and learning hub, which is available to all of Valencia's students. This service is best used as a back-up to Valencia's Distance Tutoring service, not as a replacement. Brainfuse is accessible through Canvas or by

visiting <a href="https://valenciacollege.edu/students/learning-support/">https://valenciacollege.edu/students/learning-support/</a>

(https://valenciacollege.edu/students/learning-support/)

#### **Expected Student Conduct**

Valencia Community College is dedicated not only to the advancement of knowledge and learning but is concerned with the development of responsible personal and social conduct. By enrolling at Valencia Community College, a student assumes the responsibility for becoming familiar with and abiding by the general rules of conduct. The primary responsibility for managing the classroom environment rests with the faculty. Students who engage in any prohibited or unlawful acts that result in the disruption of a class may be directed by the faculty member to leave the class. Violation of any classroom or Valencia's rules may lead to disciplinary action up to and including expulsion from Valencia. Disciplinary action could include being withdrawn from class, disciplinary warning, probation, suspension, expulsion, or other appropriate and authorized actions. You will find the Student Code of Conduct in the current Valencia Student Handbook.

#### Students with Disabilities

Students with disabilities who qualify for academic accommodations must provide a Notification to Instructor (NTI) form from the Office for Students with Disabilities (OSD) and discuss specific needs with the professor, preferably during the first two weeks of class. The Office for Students with Disabilities determines accommodations based on appropriate documentation of disabilities.

East Campus Bldg. 5-216 Ph: 407-582-2229 Fax: 407-582-8908 TTY: 407-582-1222

West Campus SSB, Rm. 102 Ph: 407-582-1523 Fax: 407-582-1326 TTY: 407-582-1222

Osceola Campus Bldg. 1-140A Ph: 407-582-4167 Fax: 407-582-4804 TTY: 407-582-1222

Winter Park Campus Bldg. 1-212 Ph: 407-582-6887 Fax: 407-582-6841 TTY: 407-582-1222

#### Lab Procedures

All assigned work is due by Sunday by 8 pm each week.

#### **Quality Expectations, Late Work, Missed Deadlines:**

All students in this course are future networking or security professionals and candidates for an Associate in Science degree in Cybersecurity & Network Engineering Technology. You might be the best networking technologist on the planet, but all I know about you is the quality of your work in our class. Your work is a direct reflection of you as a professional.

I understand that occasionally, our real lives overtake our school life, so there is leeway for one late assignment. I will accept a one-time-only late assignment. The late assignment starts with 1/2 credit. Then as I grade it, you might lose more points if the quality is poor. After the first late assignment, the next one will NOT be accepted for grading. Failure to upload an assignment correctly is the same as being late. (This excludes Midterm and Finals since they are exams and cannot be submitted late)

There is no extra credit anticipated in this course.

- Students are responsible for using the appropriate link in Canvas to submit homework. Emailed assignments to the instructor will not be graded
- All Labs are individual assignments unless explicitly told differently at the beginning of the lab. Any student caught copying another student's answers will be given a '0' for the
- Failure to complete the final project will give you an automatic F in the course, and you must pass the project with a 70% or better passing score.
- It is your responsibility to contact the instructor if any extenuating circumstances arise. Communication occurs during or before an event, not after the event has occurred.
- You must satisfactorily complete all the course requirements in order to receive a passing grade; Midterm and Final projects are required.

\*\*\* Failure to follow the directions regarding the type of report will result in a 15% deduction of points. No APA or MLA\*\*\*\*

#### **Grading System**

A 90 -100

B 80 - 89

C 70 - 79

D 60 - 69

#### **Important Dates**

• 2023/2024 Academic Calendar (https://valenciacollege.edu/academics/calendar/)

	Full Term	H1	TWK	H2
Classes Begin	May 6, 2024	May 6, 2024	June 4, 2024	June 18, 2024
Drop/Refund Deadline by 11:59PM ET	May 13, 2024	May 13, 2024	June 11, 2024	June 25, 2024
No Show Reporting Period	May 15-24, 2024	May 15-24, 2024	June 12-21, 2024	June 26 -July 5, 2024
Graduation Application Deadline	May 31, 2024	May 31, 2024	May 31, 2024	May 31, 2024
Student-Initiated Withdrawal (W Grade) Deadline by 11:59PM ET	June 28, 2024	June 7, 2024	June 12, 2024	July 19, 2024
Faculty-Initiated Withdrawal (W Grade) Deadline 11:59 PM ET	Last Class Meeting	Last Class Meeting	Last Class Meeting	Last Class Meeting
Day/Evening Classes End	July 30, 2024	June 17, 2024	July 30, 2024	July 30, 2024
Final Exams	Last Class Meeting	Last Class Meeting	Last Class Meeting	Last Class Meeting
Term Ends	July 30, 2024	July 30, 2024	July 30, 2024	July 30, 2024
Grades Due (by 9:00 AM ET)	August 1, 2024	August 1, 2024	August 1, 2024	August 1, 2024
College Closed (Credit classes Do Not Meet)	May 27 (Memorial Day) July 4 (Independence Day)			

#### Classroom Policy on Recording Lectures

Students may record video or audio of class lectures for their own personal educational use. A class lecture is defined as a planned presentation by a college faculty member or instructor, during a scheduled class, delivered for the purpose of transmitting knowledge or information that is reasonably related to the pedagogical objective of the course in which the student is enrolled. Recording class activities other than class lectures, including but not limited to class discussions, student presentations, labs, academic exercises involving student participation, and private conversations, is prohibited. Recordings may not include the image or voice of other students in the class, may not be used as a substitute for class participation and class attendance, and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of the College's Student Code of Conduct.

#### Important Note

\*\*\*\*For the online classes, the Submittal of labs each week will also constitute attendance for the class -- logging into Canvas does not count as attendance; you must complete an assessment or assignment. If you fail to submit work, you will be marked as absent. \*\*\*

#### Miscellaneous Rules

- It is the student's responsibility to withdraw from the course. Any withdrawal after the withdrawal deadline could result in WF.
- No make-up labs, Quizzes, Homework, or exams are permitted unless prior arrangement with the instructor has been made.
- Cheating is prohibited. If a student is caught cheating, the instructor has the right to withdraw the student from the class and recommend expulsion from the program.

#### Online Student Assessment of Instruction

As part of our continuing goal to provide the best possible instruction for Valencia Community College students, the student evaluation of instructor form is now available online.

On a completely anonymous basis, all students are invited to complete this online form. To do so, go into Atlas, click on My Courses then click on the box at the right that says 'Assessment Survey'. You will be able to submit one assessment form per class. After that, the form will no longer be available to you.

Please set aside some time toward the end of the semester to complete the assessment. By doing so, you will assist the instructor is assessing the effectiveness of his/her teaching methods and techniques. Thank you for your feedback.

#### Withdrawal Deadline and Policy

Per Valencia Policy 4-07 (Academic Progress, Course Attendance and Grades, and Withdrawals), a student who withdraws from class before the established deadline for a particular term will receive a grade of "W. A student is not permitted to withdraw after the withdrawal deadline. See Important Dates for the Withdrawal Deadline for the part of term of this course. A student who is withdrawn by faculty for violation of the class attendance policy will receive a grade of "W". Any student who withdraws or is withdrawn from a class during a third or subsequent attempt in the same course will be assigned a grade of "F". For a complete policy and procedure overview on Valencia Policy 6Hx28:4-07, please go to: College Policies (http://valenciacollege.edu/generalcounsel/).

A student who withdraws from class before the **withdrawal deadline of March 20th will** receive a grade of "W." A faculty member is permitted to withdraw a student from the faculty member's class up to the beginning of the final exam period, for violation of the faculty member's attendance policy, as published in the faculty member's syllabus. A student is not permitted to withdraw from this class after the withdrawal deadline; if you remain in the class after the withdrawal deadline, you can only receive a grade of A, B, C, D, F or I. An I grade will only be assigned under extraordinary circumstances that occur near the end of the semester. If you receive an I, the work missed must be made up during the following semester, at which time you will get an A, B,C,D or F. Failure to make up the work during the following semester will result in you getting a grade of F in the course. Any student who withdraws from this class during a third or subsequent attempt in this course will be assigned a grade of "F."

Students on financial aid should consult an advisor or counselor before withdrawing from a course; there may be financial implications to the student which he or she must know about to make an informed decision before withdrawing from a course. Students with some scholarships who withdraw or are withdrawn from a class must pay the college for the cost of the class. Other scholarship sponsors may also require repayment.

To maintain financial aid academically, students must meet all of the following requirements:

- · Complete 67% of all classes attempted, and
- Maintain a Valencia GPA of 2.0 or higher, and
- Maintain an overall GPA of 2.0 or higher, and
- Complete degree within the 150% timeframe

Detailed information about maintaining satisfactory academic progress (SAP) can be found at:

Satisfactory Academic Progress (https://valenciacollege.edu/finaid/satisfactory-progress.php)

For a complete policy and procedure overview on Valencia Policy 4-07 please go to:

Valencia's Policy 4-07 (https://valenciacollege.edu/about/general-counsel/)

#### Security Statement

We want to reassure you that our security officers are here around the clock to ensure the safety and security of the campus community. It's essential to remain alert and aware of your surroundings, especially during the early morning or evening hours. Remember that you can always call security for an escort if you feel uncomfortable walking alone on campus. White security phones can also be found in many of our buildings; simply pick up the phone and security will answer.

Finally, report any suspicious persons to West Campus Security at 407-582-1000 or 407-582-1030 (after-hours number) or use the yellow emergency call boxes located on light poles in the parking lots and along walkways.

#### BayCare Behavioral Health Student Assitance Program

Valencia is committed to ensuring all our students have a rewarding and successful college experience. To that purpose, Valencia students can get immediate help that may assist them with psychological issues dealing with stress, anxiety, depression, adjustment difficulties, substance abuse, time management as well as relationship problems dealing with school, home or work. Students have 24-hour unlimited access to **Baycare Behavioral Health's confidential student assistance program** phone counseling services by calling (800) 878-5470. Three free, confidential face-to-face counseling sessions are also available to students.

#### **DISCLAIMER**

This syllabus is an agreement between the student and the instructor. By enrolling in and then attending this course, the student agrees to and accepts the terms and conditions of this agreement. It is the student's responsibility to carefully read this syllabus/agreement in its entirety and adhere to all policies and procedures within it. Please retain a copy of this syllabus for your records.

Any Changes in the policy and/or schedule of this syllabus may be made at any time during the semester at the discretion of the instructor.

# Course Summary:

Date	Details	Due
Sun May 12, 2024	Network Design with Visio (https://online.valenciacollege.edu/courses/200733/a	due by 8pm assignments/5656872)
	Product Review  (https://online.valenciacollege.edu/courses/200733/a	due by 8pm assignments/5656874)
	Verify Accounts  (https://online.valenciacollege.edu/courses/200733/a	due by 8pm assignments/5656881)
	€ Week 1 Discussion - CVE	due by 8pm

Date	Details Du	
	(https://online.valenciacollege.edu/courses/200733/assignments/5656851)	
	Week 1 Discussion: Introductions due by 8pm (https://online.valenciacollege.edu/courses/200733/assignments/5656850)	
	AD DS Design  (https://online.valenciacollege.edu/courses/200733/assignments/5656862)	
Sun May 19, 2024	Defense In Depth  (https://online.valenciacollege.edu/courses/200733/assignments/5656866)  due by 8pm	
	Mind Mapping (https://online.valenciacollege.edu/courses/200733/assignments/5656871)	
	Week 2 Discussion due by 8pm (https://online.valenciacollege.edu/courses/200733/assignments/5656852)	
Sun May 26, 2024	Biometrics (https://online.valenciacollege.edu/courses/200733/assignments/5656863)	
	Build ADDS Server due by 8pm (https://online.valenciacollege.edu/courses/200733/assignments/5656865)	
	Build Kali Linux (https://online.valenciacollege.edu/courses/200733/assignments/5708164)	
	₩eek 3 Discussion (https://online.valenciacollege.edu/courses/200733/assignments/5656853)	
Sun Jun 2, 2024	File Server  (https://online.valenciacollege.edu/courses/200733/assignments/5656868)	
	Pharming Attacks (https://online.valenciacollege.edu/courses/200733/assignments/5656873)	
	Python #1 (https://online.valenciacollege.edu/courses/200733/assignments/5708153)	
	₩eek 4 Discussion  (https://online.valenciacollege.edu/courses/200733/assignments/5656854)	

Date	Details	Due
	Gregarious Games due (https://online.valenciacollege.edu/courses/200733/assignments/565688	by 8pm
Sun Jun 9, 2024	Group Policy due (https://online.valenciacollege.edu/courses/200733/assignments/565687	by 8pm
Guii Guii 3, 2024	Python #2 due (https://online.valenciacollege.edu/courses/200733/assignments/570815	by 8pm
	Week 5 Discussion due (https://online.valenciacollege.edu/courses/200733/assignments/565685	by 8pm
	NICE Challenge 1 (https://online.valenciacollege.edu/courses/200733/assignments/570815	by 8pm
0 1 40 0004	Python #3 (https://online.valenciacollege.edu/courses/200733/assignments/570815	by 8pm
Sun Jun 16, 2024	Secondary Domain Controller  (https://online.valenciacollege.edu/courses/200733/assignments/565687	by 8pm
	<b>Week 6 Discussion</b> que (https://online.valenciacollege.edu/courses/200733/assignments/565685	by 8pm
Mon Jun 24, 2024		by 8pm
	Python #4 due (https://online.valenciacollege.edu/courses/200733/assignments/570815	by 8pm
Sun Jun 30, 2024	₩eek 8 Discussion due (https://online.valenciacollege.edu/courses/200733/assignments/565685	by 8pm
Sun Jul 7, 2024	Blue Team Defense (https://online.valenciacollege.edu/courses/200733/assignments/570816	by 8pm
	Download Final Machine  (https://online.valenciacollege.edu/courses/200733/assignments/565686	e by 8pm
	<b>Vulnerability scan</b> (https://online.valenciacollege.edu/courses/200733/assignments/565688	by 8pm

Date	Details	Due
	Week 9 Discussion due b (https://online.valenciacollege.edu/courses/200733/assignments/5656858)	y 8pm
	NICE Challenge 2 due b (https://online.valenciacollege.edu/courses/200733/assignments/5708158)	y 8pm
Sun Jul 14, 2024	Server Hardening due b (https://online.valenciacollege.edu/courses/200733/assignments/5708159)	y 8pm
	FN Week 10 Discussion due b (https://online.valenciacollege.edu/courses/200733/assignments/5656859)	y 8pm
Sun Jul 21, 2024	FN Week 11 Discussion due b (https://online.valenciacollege.edu/courses/200733/assignments/5656860)	y 8pm
Sun Jul 28, 2024	Final Mission due b (https://online.valenciacollege.edu/courses/200733/assignments/5656869)	y 8pm
Sun sui 20, 2024	₩eek 12 Discussion   due b (https://online.valenciacollege.edu/courses/200733/assignments/5656861)	y 8pm