

# PENNSYLVANIA STATE UNIVERSITY

## CYBER100—COMPUTER SYSTEMS LITERACY

### Spring 2022 - Course Syllabus

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*\*Please note that the specifics of this course syllabus are subject to change. Students will be notified and responsible for any changes. Please check this document as needed.*

#### Instructor Contact & Information

- Instructor: Prof. Lane
- **Primary Contact: The Canvas Inbox is the best way to reach me!**
- Secondary Contact: PSU email at [jul62@psu.edu](mailto:jul62@psu.edu)
- Office Hours: Tu/Th from 2 - 4 PM; Zoom by appointment
- Office Location: Rydal Executive Plaza 320
- Office phone: 215-881-7509
- Office Directions: <http://abington.psu.edu/directions-penn-state-abington>
- Personal Zoom: <https://zoom.us/my/junelane>

#### COVID-19

Penn State University requires everyone to wear a mask in all university buildings, including classrooms, regardless of vaccination status. ALL STUDENTS MUST wear a mask appropriately, i.e., covering both your mouth and nose while indoors on campus. This is to protect your health and safety and the health and safety of your classmates, instructor, and the university community. Anyone attending a class without a mask will be asked to put one on or leave the classroom. Instructors may end class if anyone present refuses to wear a mask for the duration of class appropriately. Students who refuse to wear masks appropriately may face disciplinary action for Code of Conduct violations. If you feel you cannot wear a mask during class, please speak with your advisor immediately about your options for altering your schedule.

#### Prerequisites

None

Credits: 4

#### Course Description

This is an introductory course in computer systems literacy. The history, architecture, and operation of computing systems and the underlying computing theory are covered. The intent of this course is to ensure that students with diverse backgrounds can gain the foundational knowledge and understanding necessary to succeed with subsequent in-depth courses in the Cybersecurity Analytics and Operations curriculum. The course is also designed to prepare students who are pursuing other majors relating to information and computing systems within the College of IST and elsewhere.

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## Learning Outcomes

At the end of the course, the student will comprehend:

- The major components of a computer system.
- The role of various programming languages in solving real-world information technology problems.
- The full computing cycle, i.e., from input gathered through various channels or internal or external data to the processing of input to the generation and processing of output.

## Course Format

- Section 001 – In-person - Tu/Th 9:05 AM – 10:20 AM EST, Woodland 343

## Important Dates

- Course: Jan 10, 2022 – Apr 29, 2022
- Late Drop - Deadline -  
[https://www.abington.psu.edu/sites/abington/files/pdf/looking\\_up\\_drop\\_dates.pdf](https://www.abington.psu.edu/sites/abington/files/pdf/looking_up_drop_dates.pdf)
- College Calendar: [Academic Calendar at Penn State Abington](#)

## Emergency Notifications

PSUAlerts is available at <https://psualert.psu.edu/> PSUAlerts is Penn State's emergency notification system for students, faculty and staff. The system will be used to alert members of Penn State's campus communities of emergencies, campus closings and other urgent information. Using this portal, students, faculty and staff can choose to receive PSUAlert messages by text message, voice message and e-mail.

## Required Course Materials

Tomsho, G., (2020). Guide to Operating Systems (6th ed.) Cengage Learning. ISBN 9780357433836 (paperback) 9780357433959 (eBook)

Alternatively, you may purchase the Cengage Unlimited Subscription if you prefer.

You do NOT need the MindTap resources for the text. Please do NOT purchase them.

You will also need access to Practice Labs to work on the Cyber 100 lab assignments within that platform. Voucher provided by IST department.

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## Assignments & Grading

Your grade in this course will be derived from several assessment mechanisms. Each quiz will contain questions related to the given chapter in the text, videos in the module, and outside materials in the module. As per university policy, all grading is done by instructors in a fair and consistent manner. This entails not giving preferential treatment in grading with regards to the timeliness, quantity, or quality of work submitted by any one student or group of students unless extra special circumstances warrant it and are approved by the instructor prior to submission. Students must realize that they earn a particular grade on a given assignment or exam and not that the instructor has determined such on his or her own without proper justification. Due to the subjective nature of some assignments, it is the instructor's right to determine a grade based on his or her own evaluation of the timeliness, quantity, and quality of the student's (or group's) work.

### Grade Category      Percentage of Final Grade

Participation/Attendance	10%
Chapter Quizzes	30%
Labs	30%
Research Papers	10%
Exams	<u>20%</u>
Total	100%

(See Canvas for Assignment Due Dates)

## Course Grading Scale

The following are minimum cutoffs for each grade:

93% = A  
90% = A-  
87% = B+  
83% = B  
80% = B-  
77% = C+  
70% = C  
60% = D  
less than 60% = F

**Amount of Time to be Invested by Students in the Class:** University classes require a good deal more time than high school ones. Please see: [Academic Success at PSU](#) to get a sense of the amount of time you should be spending on this course. The instructor is "here" to assist you; but in the end, it is your work and effort that determines the grade in the class. There is a direct correlation between the amount of time spent and grades awarded.

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## Course Policies and Expectations

### School Closing and/or Cancelled Class

In the event of a school closing due to weather or other related incident, students are responsible for completing scheduled coursework. A message will be sent via Canvas and posted in the Announcements. It is your responsibility to have your [Canvas Notification preferences set up](#) to receive messages.

### Ethical Use of Course Content

The content provided in this course can be used for educational purposes to understand cyber security concepts and techniques. It can also be used for nefarious purposes. Students are expected to use the course content for their own edification only and shall not apply this knowledge except in the classroom, on specific systems (such as the virtual lab) and only for the purposes defined by the instructor.

Any use of the course's content that is performed without expressed, written permission of the system's owner may be in violation of Penn State University policies as well as local, state and federal laws. The instructor will cooperate fully with all university investigations and the requests of all law enforcement agencies in investigations against students in the course.

### Use of Canvas

Students are expected to login regularly to check for course updates, announcements, emails, discussions, etc. Students are expected to use Canvas for all course email communication. Students are instructed to NOT email the instructor first, please check Canvas FIRST.

### Technical Requirements

Basic computer skills are necessary. A reliable broadband Internet connection is required for many of the elements in the course outside of the class. Not having access to application software or the Internet are not acceptable excuses for incomplete and late assignments. Computer issues, in general, are not acceptable excuses for incomplete and late assignments.

You will be required to utilize a number of technical systems to accomplish your goals in this course. All required hardware and software will be made available to you via Practice Labs.

### Late Work

Late work is unacceptable in the "real world". A due date is a due date. However, I will accept work late, but I will assess a penalty of 20% for each day the work is turned in late up to a

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maximum of 4 days (on the 5th day late, the percentage goes to 100% and therefore the assignment will not be accepted).

### **Late Work and Attendance Exceptions**

Late assignments be accepted without penalty under the unusual circumstances below.

Pre-approval for late submissions may be offered for official university travel (sports teams, clubs, etc.), religious observance and for out-of-town interviews for internships or jobs. Students can REQUEST one week prior to the class period by emailing “all course faculty” in Canvas.

For cases of extreme illness, injury or family emergency, students may request excused late submissions by emailing the instructor in Canvas, prior to the assignment’s due date, or in rare cases of significant life events.

Claims of technical system faults (Canvas, Personal Computer) are generally not acceptable.

### **Copyright Statement**

All course materials students receive or to which students have access are protected by copyright laws. FOR COURSES IN WHICH THEY HAVE PREVIOUSLY BEEN OR ARE CURRENTLY ENROLLED, students may use course materials and make copies for their own use as needed, but unauthorized distribution and/or uploading of materials without the instructor’s express permission is strictly prohibited. [Policy AD 40](#). (Recording of Classroom Activities and Note Taking Services) addresses this issue. Students who engage in the unauthorized distribution of copyrighted materials may be held in violation of the University’s Code of Conduct, and/or liable under Federal and State laws.

## **University Policies**

### **Academic Integrity**

Penn State and the College of Information Sciences and Technology are committed to maintaining [Penn State's policy on Academic Integrity](#) in this and all other courses. We take academic integrity matters seriously and expect you to become a partner to the University/College standards of academic excellence.

For more information, please review these policies and procedures:

- [College of IST Academic Integrity Resources](#)

While utilizing additional sources outside of this class is encouraged for gaining a better understanding of course concepts, seeking explicit answers for graded assignments from outside sources (e.g. Course Hero, Chegg, tutoring services like tutor.com, etc.) is considered CHEATING

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and will not be tolerated. Sanctions range from failure of the assignment or course to dismissal from the University. Additionally, sharing course content without permission is a violation of copyright and may result in university sanctions and/or legal ramifications. Contact your instructor with questions related to this topic.

**Academic Integrity Statement: You must complete the Academic Integrity training and quiz and acknowledgment pledge before completing any coursework.**

### **Class Conduct**

All students are expected to behave with respect in classes, no matter the class's format or delivery mode. If you are disruptive in a remote class, this will be handled in the same way as in an in-person class. Your instructor may speak to you about your behavior. If your behavior does not change, you may be asked to leave the class. If your behavior continues to be disruptive, a report will be filed with the Office of Student Conduct, and your behavior will be responded to through the conduct process. Students involved in a serious disruption of the learning environment may not be permitted to return to class until University procedures have been completed.

### **Student Disability Resources**

Penn State welcomes students with disabilities into the University's educational programs. At Penn State Abington, services for students with documented disabilities are provided through the Office of Student Disability Resources (Coordinator, Tiffany Ostrowski, 223 Sutherland Bldg., 215- 881-7962). To receive consideration for reasonable accommodations, ADA law requires the student to self-disclose the need for accommodations. This can be done through SDR's online intake form: [equity.psu.edu/sdr/applying-for-services/intake/general](https://equity.psu.edu/sdr/applying-for-services/intake/general). SDR will then follow up with information regarding the next steps to determine eligibility: submitting diagnostic documentation and participating in an intake interview.

SDR will provide the student with an accommodation letter for the semester if the student meets eligibility requirements. It is the student's responsibility to share their letter and discuss accommodations with instructors as early in their courses as possible. Instructors are not required to provide accommodations until the letter is presented and discussed. Students must follow this process for each semester they wish to receive accommodations. Please visit [abington.psu.edu/disability-services](https://abington.psu.edu/disability-services) and [equity.psu.edu/sdr](https://equity.psu.edu/sdr) for comprehensive information. This semester, SDR will be meeting with students via Zoom. Please email [AbingtonSDR@psu.edu](mailto:AbingtonSDR@psu.edu) with questions or to schedule an appointment.

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### **Counseling & Psychological Services (CAPS)**

Many students at Penn State face personal challenges or have psychological needs that may interfere with their academic progress, social development, or emotional wellbeing. If you encounter personal problems of any kind on or off-campus, please reach out for help. The University offers various confidential services to help you through difficult times, including individual and group counseling, crisis intervention, consultations, online chats, and mental health screenings. These services are provided by staff who welcome all students, embrace a philosophy respectful of clients' cultural and religious backgrounds, and be sensitive to differences in race, ability, gender identity, and sexual orientation. In addition, remote campus counseling and psychological services are available. Comprehensive information can be found at <https://www.abington.psu.edu/counseling-psychological-services>. Please contact our campus psychologist Dr. Karen Gould, 103 Cloverly Bldg., 215-881-7577, [ksg17@psu.edu](mailto:ksg17@psu.edu), with additional questions.

### **Center for Student Achievement (CSA)**

The Center for Student Achievement, located at 315 Sutherland Bldg., offers Free Tutoring and Writing Consultations to all students. For help achieving success, please email [achieve-ab@psu.edu](mailto:achieve-ab@psu.edu). Tutoring in subjects will be available in person and through virtual formats. Writing consultations will be conducted remotely. Scheduling tutoring appointments in advance is required and can be made through Starfish. When you schedule your appointment, please send the assignment in advance to [achieve-ab@psu.edu](mailto:achieve-ab@psu.edu) to encourage social distancing during the appointment. Free Online Tutoring is also available through Brain Fuse and can be accessed by visiting [abington.psu.edu/achievement](http://abington.psu.edu/achievement). The CSA also offers workshops that strengthen students' abilities to study, write, manage time, make decisions and achieve goals. The Center for Student Achievement office is open 8 AM to 5 PM, Tuesday through Thursday, but support is also provided remotely on Mondays and Fridays.

### **Reporting Educational Equity Concerns through the Report Bias site**

Penn State takes great pride in fostering a diverse and inclusive environment for students, faculty, and staff. Acts of intolerance, discrimination, or harassment due to age, ancestry, color, disability, gender, gender identity, national origin, race, religious belief, sexual orientation, or veteran status are not tolerated and can be reported through Educational Equity via the Report Bias webpage (<http://equity.psu.edu/reportbias/>).

### **Sexual Harassment Policy**

The University's code of conduct states that all students should act with personal integrity, respect other students' dignity, rights, and property, and help create and maintain an environment in

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which all can succeed through the fruits of their efforts. Violations of this principle can result in a range of sanctions, from a warning to expulsion. Note that Title IX makes it clear that violence and harassment based on sex and gender is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, etc.

Sexual harassment of faculty, staff, or students is prohibited and will not be tolerated. It is the policy of the University to maintain an academic and work environment free of sexual harassment. Sexual harassment violates the dignity of individuals and impedes the realization of the University's educational mission.

The University is committed to preventing and eliminating sexual harassment of faculty, staff, and students through education and by encouraging faculty, staff, and students to report any concerns or complaints about sexual harassment. Prompt corrective measures will be taken to stop sexual harassment whenever and wherever it occurs. See Policy [AD-85 - Sexual Harassment](#).

If this is a Title IX issue, please contact Penn State Abington's Title IX Resource Person for more Information: Gina D'Amato-Kaufman, Director of Student Affairs, 106 Sutherland Bldg., [gxd22@psu.edu](mailto:gxd22@psu.edu), (215) 881-7391

Mary Ellen Glick, Case Manager, 102b Lares Bldg. [mpg5645@psu.edu](mailto:mpg5645@psu.edu) 215-881-7353

### **Additional resources**

- On-Campus Counseling Services, 215-881-7577
- PSU Sexual Assault & Relationship Violence Hotline, 800-560-1637
- Victim Services of Montgomery County, 888-521-0983

### **National Hotlines**

- National Domestic Violence Hotline: 800-799-7233
- National Sexual Assault (RAINN) Hotline: 800-656-4673
- Penn State Sexual Assault & Relationship Violence: 800-560-1637 or 866-714-7177 (TTY)

### **Police & Legal Information**

- Police Emergency - 911
- Penn State Abington Campus Police: 215-881-7575, 106 Rydal Bldg.
- Abington Township Police: 215-885-4450, 1166 Old York Rd, Abington, PA 19001



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## Schedule

(tentative and subject to change)

Week #	Fall	Spring	Summer
	Lesson Topic	Lesson Topic	Lesson Topic
1	Course Setup & Overview	Course Setup & Overview	Orientation Tomsho, Ch. 1, 2 Lab 1, 2
2	Tomsho, Ch. 1 Lab 1	Tomsho, Ch. 1 Lab 1	Tomsho, Ch. 3, 4, 5 Lab 3
3	Library Workshop Research #1	Library Workshop Research #1	Tomsho, Ch. 6, 7, 8 Lab 4, 5, 6
4	Tomsho, Ch. 2 Lab 2	Tomsho, Ch. 2 Lab 3	Tomsho, Ch. 9, 10 Lab 7, 8
5	Tomsho, Ch. 3 Career Services/Internship	Tomsho, Ch. 3 Career Services/Internship	Tomsho, Ch. 11 Lab 9
6	Tomsho, Ch. 4 Lab 3	Tomsho, Ch. 4 Lab 3	Final Exam
7	Tomsho, Ch. 5	Tomsho, Ch. 5	
8	MidTerm Exam Research #2	MidTerm Exam Research #2	
9	Tomsho, Ch. 6 Lab 4	Spring Break	
10	Tomsho, Ch. 7 Lab 5	Tomsho, Ch. 6 Lab 4	
11	Tomsho, Ch. 8 Lab 6	Tomsho, Ch. 7 Lab 5	
12	Tomsho, Ch. 9 Lab 7	Tomsho, Ch. 8 Lab 6	
13	Tomsho, Ch. 10 Lab 8	Tomsho, Ch. 9 Lab 7	
14	Thanksgiving Break	Tomsho, Ch. 10 Lab 8	
15	Tomsho, Ch. 11 Lab 9	Tomsho, Ch. 11 Lab 9	
16	Final Exam	Final Exam	