CSE/ISE 301
History of Computing

Instructor:	Tony Scarlatos
Time:	MW 2:00 - 3:20
Location:	Frey Hall 317
Office Hours:	Held online via Google Meet By appointment only Friday 10:00 - 11:30 am
Email:	comphist@cs.stonybrook.edu
Home Page:	https://www3.cs.stonybrook.edu/~tony/comphist/

Course Description

A study of the history of computational devices from the early ages through the end of the 20th century. Topics include needs for computation in ancient times, deveopment of computational models and devices through the 1800's and early 1900's, World War II and the development of the first modern computer, and early uses in business. Creation of programming languages and the microchip. Societal changes in computer usage due to the microcomputer, emergence of the Internet, the World Wide Web, and mobile computing. Legal and social impacts of modern computing. Cannot be used as a technical elective for the CSE major or minor. This course is offered as both CSE 301 and ISE 301.

U2 standing or higher

Advisory Prerequisite: one course in computing

3 credits

Course Objectives

1. To study the historical, political, and social events that led to the development of modern computational devices.
2. To examine the lives of some of the most influential inventors, thinkers and entrepreneurs of the computer revolution.
3. To understand how computer hardware and software evolved based on social and economic forces in the 20th century.
4. To consider current social, legal and ethical issues in computer science and determine the factors that led to these modern problems.

Course Delivery Mode and Structure

This course may occasionally meet on Zoom, **but it is almost exclusively in-person**. See the Zoom for Students page (https://it.stonybrook.edu/services/zoom/students) for more information on how to download and use this application.

We will also be using **Class Question**. If you already have a Class Question account, skip to step 2. If you are new to it, start at step 1.

1. Go to classquestion.com/students and click "Click here to register". This link will allow you to register for the site.
2. Once you have registered, go to classquestion.com/students and sign in.
3. Click "Add Class" at the bottom. Enter the Class Code for this class - PNHPV - and then click "Add Class".
4. Your class will be added to the dropdown menu at the top. You can now click the "Sign In" button to log into your class!
5. You will need to bring an internet-connected device to class each lecture.

Course-related questions should be posted to the course email account, comphist@cs.stonybrook.edu, which is monitored daily by the TA's. You should always use your SBU gmail account for coursework and correspondence. Only for urgent personal/private issues should you email me directly (at anthony.scarlatos@stonybrook.edu). **Please allow between 24-48 hours for an email reply.** All instructor correspondence will be sent to your SBU email account. **Plan on checking your SBU email account for course-related messages.** To log in to Stony Brook Google Mail, go to http://www.stonybrook.edu/mycloud and sign in with your NetID and password.

Office hours will be conducted using Google Calendar and Google Meet. In order to manage requests for office hours I have instituted the following system. To make an appointment, go to the link below:

https://calendar.app.google/3yYsqg98qs8NhBvL7

Choose a time slot (15 minutes each), at least 24 hours before you wish to meet with me. The system will send me an email notification and the meeting will be added to your Google Calendar as an event. I will then send you a Zoom meeting link for our appointment.

Please note that there are appropriate uses for office hours, and inappropriate ones. Office hours are a good time to get clarification on assignments and seek advice. Grading disputes should be resolved with the grading TA's through the course email.

Suggested Text:

"The Innovators: How a Group of Hackers, Geniuses, and Geeks Created the Digital Revolution"
By Walter Issacson
Simon & Schuster
ISBN 147670869X

Technical Assistance

DoIT provides technical assistance to all students .   If you require assistance with hardware or using any supported applications, available support options include:

Visit one of DoIT's Tech Stations

Access self-help materials

Submit a ticket online at service.stonybrook.edu

[Chat live](#) with a student consultant

Call 631-632-9800 for assistance (2-9800 from on campus)

If you need assistance with Brightspace, you can access resources from the Brightspace Resources link on Stony Brook Brightspace homepage (https://brightspace.stonybrook.edu) or contact the SUNY helpdesk via phone/ticket/live chat at: https://online.suny.edu/help/

Need a laptop? You can borrow a laptop from the Melville LIbrary SINC Site. Details can be found at: https://it.stonybrook.edu/services/student-laptop-loaner-program

Advisories

Student Accessibility Support Center: If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact the Student Accessibility Support Center, Stony Brook Union Suite 107, (631) 632-6748, or at sasc@stonybrook.edu. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential.

Have a problem that's impacting your attendance or performance in this class? Contact the **Student Support Team** at https://www.stonybrook.edu/commcms/studentaffairs/studentsupport/about/index.php right away! Do not wait until late in the semester to try to resolve any problems you may be having.

Academic Integrity: Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty is required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Professions, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty please refer to the academic judiciary website at http://www.stonybrook.edu/commcms/academic_integrity/index.html

Critical Incident Management: Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Student Conduct and Community Standards any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures. Further information about most academic matters can be found in the Undergraduate Bulletin, the Undergraduate Class Schedule, and the Faculty-Employee Handbook.

Course Evaluation: Each semester Stony Brook University asks students to provide feedback on their courses and instructors through an online course evaluation system. The course evaluation results are used by the individual faculty, department chairs and deans to help the faculty enhance their teaching skills and are used as part of the personnel decision for faculty promotion and tenure. No individually identifiable data are ever reported back to the university or instructor. Students who have completed previous evaluations can view all faculty ratings at: https://classie-evals.stonybrook.edu/

Schedule

Assignments are due 1 week after they are assigned, unless otherwise noted. Please note that this schedule is approximate, and subject to change.

Date	Topic	Reading	Assignment
Week 1	Class Orientation		
Week 2	Why Study History?		HW 1
Week 3	Origins of Computing		Journal Entry 1
Week 4	Computing in the 1800's	Chapter 1	HW 2
Week 5	Electromechanical & Analog Computing	Chapter 2	Journal Entry 2
Week 6	World War II & Modern Computing	Chapter 2	HW 3
Week 7	Commercial Computing	Chapter 4 & 5	Journal Entry 3
Week 8	Mainframe & Mini Computing	Chapter 4 & 5	Living History - Research Report
Week 9	Large Scale Computing	Chapter 4 & 5	Journal Entry 4
Week 10	Programming Languages	Chapter 3	HW 4
Week 11	The Integrated Circuit	Chapter 4 & 5	Journal Entry 5
Week 12	The Personal Computer	Chapter 8 & 9	HW 5
Week 13	The Internet & World Wide Web	Chapter 7, 10, & 11	
Week 14	Artificial Intelligence	Chapter 12	Making History - Final Project

Grading

There are no exams in this class.

Scoring breakdown:

Journaling
What did you learn about CS this week?
What lessons from the past inform your view of the present or the future?
5 entries, 2 points each. 10%

Class Questions
35 questions (out of 50) answered correctly
1 point each. 35%

Living History - group project
Research
Paper

Presentation
5 points each. 15%

Making History - group project
Research
Paper
Presentation
5 points each. 15%

Group Activities
5 points each, 10%

Homework
3 assignments, 5 points each. 15%

1/2 points can be given by the grading TA's

Up to 10 points of extra credit may be offered (TBD).

All assignments are announced on Brightspace (generally a week prior to the due date) and emailed to students.

Scale:

93 - 100+	A
90 - 92	A-
87 - 89	B+
83 - 86	B
80 - 82	B-
77 - 79	C+
73 - 76	C
70 - 72	C-
65 - 69	D+
60 - 64	D
Below 60	F

All due dates are at 11:59 pm on the date given. Homework is due within 24 hours of the due date to receive credit. Project assignment submissions later than 24 hours past the due date will have 1 point per day deducted, and no projects will receive credit after 5 days from the due date. Projects with content that is offensive or defamatory will have points deducted, or may get no credit at all. Plagiarized work will recieve no credit, and may be reported to the academic judiciary.

A grade of "I" (incomplete) for the semester is rarely given.

No assignments will be accepted after midnight on the last day of classes for the semester.