

CMPS 110B
Computer Science Seminar I
FALL 2023

2017 - 2020 Catalog Data: CMPS 110B **COMPUTER SCIENCE SEMINAR I** (Credit, 1 hour) (Lecture, 1 hour). This is a two-part sequence course designed for freshman computer science majors. These courses provide a comprehensive overview of the scope and dynamics of computer science. Topics such as history of computing and technology, computers in modern society, computer application, legal and moral issues of computing and the computer scientist as a professional will be covered. A term project will also be assigned. Prerequisite: None.

Textbook: Nell Dale and John Lewis, Computer Science Illuminated, 7th edition, Pearson, Digital Format.
ISBN: 9780136581949

Lectures: 1:00 PM – 1:50 PM, M (**CRN: 11493**)
E130 Thurman Hall

Instructor: Name: Dr. Lynette Jackson
Office Location: E114 Thurman Hall
Virtual Office Hours: 10:00 AM – 11:00 AM MW;
11:00 AM – 1:00 PM, TR or By Appointment
(Join via Microsoft Teams Meeting)
Office Phone: (225) 771 – 5958
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Program Education Objectives:

The Educational Objectives of the Computer Science Program are to produce graduates who:

PEO1: Are thoroughly trained in methods of analysis, including the mathematical and computational skills appropriate for problem solving.

PEO2: Have developed the skills pertinent to the design of computing systems, including the ability to formulate problems, to think creatively, to synthesize information, to work collaboratively, and to communicate effectively;

PEO 3: Are capable of working collaboratively, and communicating effectively with team members, constituents, and the public;

PEO 4: Uphold professional and ethical responsibilities, and contribute to society through active engagement.

Program ABET Outcomes:

Each graduate by the time of graduation will have the ability to:

Outcome 3: Communicate effectively in a variety of professional contexts; [PEO 1, PEO 3]

Outcome 4: Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles; [PEO 1, PEO 4]

Outcome 5: Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline; [PEO 1, PEO 3]

Outcome 6: Apply computer science theory and software development fundamentals to produce computing-based solutions; [PEO 1, PEO 2]

Course Objectives:

The objectives of this course are to cover:

1. the history and culture of Computer Science
2. information encoded and decoded by computers.
3. major components of computers, and how they work together.
4. the importance of algorithms to Computer Science.
5. various ways in which computers are used to solve problems.
6. To apply critical reasoning to real-world problems involving computers.

Course Learning Outcomes:

Upon successful completion of CMPS 110B, students will be able to:

1. demonstrate the ability to use foundational skills for future computer science courses
2. demonstrate the ability to use problem-solving skills and software design tools
3. demonstrate the ability to use the syntax and semantics of the C++ programming language
4. demonstrate the ability to design and implement small scale programming projects

Target: 70% will perform at the level of performance 1-2 in achieving ABET Outcomes 3, 4, 5, & 6.

Course Educational Strategies:

1. Provide clear lectures and discussions of appropriate programming concepts.
2. Provide students with the opportunity to learn course material through reading and program assignments.
3. Allow students to demonstrate mastery of the course concepts through submitted exercises such as exams, quizzes, and other assignments.
4. Provide students with the opportunity to learn more about various branches of computer science through the application of object-oriented programming to real world problems.

Course Weekly Content: (subject to change)

Week	Topic
1	Orientation and Introductions
2	The Big Picture: computing systems, history of computing, computing as a tool
3	Binary Values and Number Systems: numbers and computing
4	Binary Values and Number Systems: binary, octal, and hexadecimal
5	Data Representation: data and computers, representing numeric data and text
6	Gates and Circuits: computers and electricity, logic gates
7	Gates and Circuits: combinational and integrated circuits
8	Computing Components: individual computer components, stored program concept
9	Low-Level Programming Languages and Pseudocode: machine and assembly languages
10	Problem Solving and Algorithms: how to solve a problem, simple variables, composite variables
11	Problem Solving and Algorithms: searching and sorting algorithms
12	Abstract Data Types and Subprograms: stacks, queues, lists, trees, graphs
13	Object-Oriented Design and High-Level Programming Languages: procedural and object-oriented design
14	Introduction to Classes and Objects: writing a class, instance fields, constructors, passing objects
15	Project Presentations
16	Project Presentations

Administrative Information and Requirements*Course Requirements:*

The student is expected to:

1. purchase the course textbook by the second week of classes
2. read assignments to prepare for scheduled discussions of the material
3. access online course materials to obtain assignments and related materials
4. attend all classes to ensure that expectations are understood, and give feedback to monitor and assess progress
5. complete all assignments/activities by the scheduled date (late submissions will receive -10% for each day late)
6. place cell phone either in the off position or kept on vibrate during lecture
7. demonstrate knowledge of the subject through 9 quizzes, 9 reading assignments, and a project

Exam Information: N/A

Grading Distribution

A student's grade at the end of the semester will be determined by following percentages:

Quizzes/Assignments	75%
Special Projects/Reports	25%

Grading Scale

Course grades at the end of the semester will be given based upon performance using the standard grading scale:

90– 100%	A
80 – 89%	B
70 – 79%	C
60 – 69%	D
Below 60%	F

Course Communication

When sending any electronic correspondence (via your University-issued email address) to the instructor, please include the following:

- Subject: First and Last Name, CRN
- Greeting: Dear Dr. Jackson,
- Body of message: clearly state your concerns and/or problems, do not use text message lingo
- Signature: First and Last Name, Course Information

Note: If you have followed the above format, then you can expect that the professor or teaching assistant will respond to your e-mail message within 48 hours during the week. **Visit during virtual office hours if an urgent issue surfaces.**

ACADEMIC DISHONESTY – Southern University and A&M College's Student Code of Conduct (Code 1.1) identifies academic dishonesty as any deliberate attempt to gain an unfair advantage in academic work. Examples of academic dishonesty include cheating, falsification of information, fraud, plagiarism, and unauthorized access to academic records, providing information, material, or other assistance with knowledge that such assistance could be used in violation of the Student Code of Conduct or other University policies, or providing false information in connection with any inquiry regarding academic dishonesty.

[Academic Dishonesty Policy](#) - link to PDF

ACADEMIC GRIEVANCES– Southern University and A&M College students may seek redress in academic decisions when they believe the decision is unfair or ungrounded. The academic grievance procedure provides prompt and equitable resolutions to student academic grievances. Classroom related matters should be subjected to these procedures only when the grievance cannot be settled in the ordinary course of immediate post-class discussion. Academic grievances are not handled by the Office of the Dean of Students.

[Student Academic Grievance Procedures](#) - link to PDF

ADA COMPLIANCE/DISABILITY SERVICES

Southern University Baton Rouge is committed to providing reasonable accommodations for students with documented disabilities in compliance with the American with Disabilities Act (ADA). Students may request accommodations by registering with the Coordinator for Disability Services. It is important to do this prior to the start of each semester because classroom accommodations are not retroactive. Upon approval and student verification of the application, the Coordinator will be responsible for forwarding the letter of accommodations to the student's professors. Accommodations will begin upon acknowledgement that the professor has received the letter of accommodations. All discussions with the faculty/student/Coordinator will remain confidential.

Contact Information

The Office of Disability Services is in Office # 246, A. C. Blanks Hall, in the center of the campus.

Southern University Office of Disability Services

Jada J. Netters, Coordinator

P.O. Box 11298

Baton Rouge, LA 70813

Phone: (225) 771-3546 (V/TTDD)

Email: ods@subr.edu

Website: www.subr.edu/ods

The Office of Disability Services (ODS), under the auspices of the Department of Equity, Inclusion, and Title IX, assists students in meeting their unique academic/educational, personal, vocational, and social needs that would otherwise prove to be an obstacle to educational pursuits. The Office of Disability Services (ODS) provides confidential services to those students who, in this post-secondary setting must request and provide the necessary documentation to verify a special need request. Diagnostic educational evaluations/examinations are not conducted through ODS. Academic accommodations are made based on a student's documented disabilities.

DISRUPTION OF THE ACADEMIC PROCESS

The University's Student Code of Conduct (Codes 1.6 and 2.2) broadly defines disruption/obstruction as any major/minor action which obstructs, or attempts to obstruct, an official University function, such as teaching, research, administration, or other campus activity.

[Disruption Policy](#) - link to PDF

SOUTHERN UNIVERSITY STATEMENT OF NON-DISCRIMINATION

In compliance with Title IX of the Education Amendments of 1972, Title VI and VII of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, and other federal, state, and local laws, Southern University and A&M College forbids discriminating or harassing conduct that is based on an individual's race, color, religion, sex, ethnicity, national origin or ancestry, age, physical or mental disability, sexual orientation, gender identity, gender expression, genetic information, veteran or military status, membership in Uniformed Services, and all other categories protected by applicable state and federal laws. This commitment applies but is not limited to decisions made with respect to hiring and promotion, the administration of educational programs and policies, scholarship and loan programs, and athletic or other College administered programs. Discriminatory acts of any kind are strictly forbidden.

Any member of the Southern University and A&M College community has the right to raise concerns or make a complaint regarding discrimination without fear of retaliation. All inquiries regarding the application of this statement and related Title IX policies may be referred to:

Dr. Akai Smith

Associate Vice Chancellor of Equity, Inclusion, and Title IX

(225) 771-4955

and/or

Dawn Harris

Human Resources Director

(225) 771-2680

STANDARDS FOR SATISFACTORY ACADEMIC PROGRESS

The Higher Education Act of 1965 as amended and final regulations set by the United States Department of Education (34CFR668.16) require that institutions of higher education establish reasonable standards of Satisfactory Academic Progress (SAP) as a condition of continuing eligibility for federal aid programs. Financial aid recipients are expected to make reasonable progress as a condition of receiving and continuing to receive student financial aid. Student progress is assessed according to both qualitative and quantitative measures. The University has developed this policy to provide a framework for monitoring and determining a student's Satisfactory Academic Progress in accordance with Federal and Institutional requirements. This policy applies to all new, transfer, re-entry, re-admit with transfer work, and continuing students at Southern University.

For additional information, please see the [Satisfactory Academic Progress policy](#).

STUDENT EMAIL POLICY

Email is a universal service that has greatly enhanced communication both internally within the Southern University and A&M College community and externally to users, including prospective students, alumni, and the public at large. The purpose of the

University's general email policy is to describe the appropriate use of University email facilities, associated responsibilities, and rights of all users of University email facilities and official Southern University and A&M College email accounts. This student email policy is a supplement to the University's general email policy.

[Student Email Policy](#) - link to PDF

TOBACCO FREE CAMPUS POLICY

The Southern University System (SUS) maintains a 100% Tobacco-Free Policy. Smoking and tobacco use of any kind will be prohibited on all SUS campuses and/or other properties owned and/or leased locations/premises; all internal and external areas, parking garages, and parking lots; all entrances and exits; and in all SUS owned and/or leased vehicles. Students may not smoke in their own or others' vehicles when the vehicles are parked on SUS properties. This policy will be in place at all Southern University and A&M College sponsored events-both on our premises and at external locations hosting such events, including non-University hours and will further apply to all faculty, staff, students and visitors.

[SUBR Tobacco Free Policy](#) - link to PDF

WATERMARK-COURSE EVALUATION

Course Evaluations & Surveys by Watermark is an easy-to-use course evaluation system that integrates directly with Moodle. You will receive an email when the evaluation survey is available. The email will provide more information as well as a link and instructions on how to access the evaluation. We encourage you to be open and honest in these evaluations. Your identity will be kept private, and your instructor will not see the results of your evaluation until classes have ended. No identifying information is ever directly connected to the feedback you submit.

FOLLETT ACCESS TEXTBOOK PROGRAM

Follett Access is a partnership between the Southern University System and the SUBR Bookstore that allows you to rent textbooks at a reduced cost. The charge is posted directly to your SUBR tuition and fees bill and are paid along with your University charges. Students are able to opt out of Follett Access. If you choose to opt out of the program, be aware that you are opting out for the entire semester schedule. You may not opt out for individual courses. Fees will be refunded on your SUBR account after the add/drop date for each semester. To opt out of Follett Access, create an account on the [Follett Customer Portal](#) and follow prompts to opt out.

For more information about the program, including information about accessing your textbooks, opt-out deadlines, and more resources, refer to the [Follett Access Textbook Program guide](#). For assistance, contact the Bookstore at (225) 771-1472 or 0622txt@follett.com.

MENTAL HEALTH RESOURCES

Mental health resources and support are available from the [University Counseling Center \(UCC\)](#). The staff at UCC is trained to help you navigate the challenges and opportunities that arise for college students. The UCC provides free individual/couple counseling, crisis intervention, and other psychological services in a safe and confidential setting.

For mental health resources or to schedule an appointment, students may contact the University Counseling Center at counselingcenter@subr.edu or by calling (225) 771-2480. If you are experiencing an emergency, call 911.

MOODLE ACCESS – Southern University and A&M College at Baton Rouge will use Moodle extensively in this course. Moodle is a learning management system designed to help teachers and students communicate effectively online. The course syllabus, class materials (e.g., handouts, PowerPoint slides, journal articles, assignments, readings, etc.) will be placed on Moodle. The student should check Moodle DAILY for all assignments submitted via Moodle. If the student has problems with his Moodle account, he/she should contact the Division of Information Technology at (225) 771-4357 8 am – 5 pm Monday – Friday or the SU OneStop HelpDesk Support at 877-771-0621 24 hours a day; 7 days a week.