SYLLABUS   **Summer II, 2019**

CSC 105 Survey of Computer Science   **4 credits**
Prerequisite(s): fulfillment of the Basic Mathematics Competency Based Skills requirement and ability to use standard computer software (e.g., operating system features, word processing, email, and web browsers).

Instructor:	Beifang Yi	**Office**: MH 211A	**Phone**: (978) 542-7246
email:	byi@salemstate.edu	**Hours**: T & R (11:30am-12:00pm)	**WebSite**: http://cs.salemstate.edu/~byi/
		T & R (3:20pm-4:00pm)	

Section	Time	Room	Final Exam
21	T/R 12:00-3:20pm	MH 206	**Thursday 8/15, 1:20pm-3:20pm** **MH206**

Catalog description:

This course provides an overview of fundamental areas within the field of Computer Science, introducing basic vocabulary, central concepts, and typical applications. The areas surveyed include computer hardware, computer arithmetic, operating systems, programming constructs, programming languages, information storage and retrieval, networking, intelligent systems, computer graphics, and the social context of computing. Four lecture hours per week

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Course Goals:

The aims of this course are to help the student to gain an appreciation for the breadth and variety within the computer science field and to be better prepared for the technical treatments presented in later courses. Specifically, the goals are:
- CG1: to provide an overview of fundamental concepts in computer science;
- CG2: to introduce key application areas of computer science;
- CG3: to recognize problems and appreciate solution strategies in each topic area covered.

Course Objectives:

Upon completion of this course, students will have demonstrated the ability to:
- CO1: use correct terminology to name the physical and software components of a computer system;
- CO2: explain how data is represented in a computer system;
- CO3: recognize and utilize fundamental algorithm patterns;
- CO4: explain basic terminology and concepts of computer networks and security;
- CO5: explain basic terminology and concepts of operating systems;
- CO6: design solutions to problems from selected areas of artificial intelligence, computer graphics, and human-computer interaction;
- CO7: give a general description of professional ethics and intellectual property standards.

Course Topics:

The department-standard list of topics and a general course bibliography can be found on the Computer Science Department website (at http://cs.salemstate.edu/dept/index.php?page=184). Select CSC 105 to access a PDF document.

Text(s): (required) **Computer Science: An Overview**, 12th Edition, by J. Glenn Brookshear and Dennis Brylow. Pearson, 2015. (ISBN-10: 0-13-376006-5; ISBN-13: 978-0-13-376006-4)

Additional references (for reference)**:**
- Course website: http://cs.salemstate.edu/~byi/CSC105/index.html: this is a very ***important*** source, since the required textbook does not cover all the topics in the course and lecture slides and materials are posted on this site.
- *Computer Science Illuminated* (6th edition, 2015), by Dale and Lewis. Jones and Bartlett Publishers.
- *The Essence of Artificial Intelligence*, by Alison Cawsey. Prentice Hall. 1998
- *The Architecture of Computer Hardware and Systems Software: An Information Technology Approach*, 3rd Edition, by Irv Englander (2003), Wiley.

Cell phones:
Turn the ringer off, or, better yet, *turn the phone off*.

Class Attendance:
Class attendance is highly recommended. You are responsible for all materials presented in class, quizzes, examinations, and other announcements. No excuses of any nature will be construed as relieving you from the responsibility for completion of the work assigned. Each student is responsible for completing all course requirements and for keeping up with all that goes on in the course (whether or not the student is present).

Final Grade:
Final grade will be determined using the following grading weights:

homework assignments	30%
mini-tests/quizzes	36%
final examination	34%

Attendance is not used to calculate the final grade: however, note that you are at all times responsible for assignments and materials presented in class.

The following table shows how the course work is assessed against the course objectives:

	Homework Assignments	Quizzes/Mini-tests	Examinations
CO01	✓		
CO02	✓	✓	✓
CO03	✓	✓	✓
CO04	✓	✓	✓
CO05	✓	✓	✓
CO06	✓	✓	✓
CO07	✓	✓	✓

Lecture Attendance:
Class policy is that of the Registrar's office - see the University catalog for details. Lecture will start promptly at the scheduled time, so please make a serious effort to not be late; if you *have* to be late, please be discrete when entering the classroom. While class attendance does not *directly* affect your final grade, some of the material covered in class is not found (in the same form) in the text, so class attendance and notes are very important. Note that you are at all times responsible for materials and assignments discussed in class: if you miss a class, try to get lecture notes from a classmate and review them *before* the next lecture. We will use SSU's online course management system, Canvas (https://elearning.salemstate.edu/) to post assignments, test grades, and announcements regarding the course topics and progress. You will need to visit Canvas (with your SSU Navigator use-name and password) for the course activities. Canvas uses your ***SSU-stored email*** box for the communication between you and the instructor and thus you ***must use this email*** address. Each student is responsible for completing all course requirements and for keeping up with all that goes on in the course (whether or not the student is present).

Exams/Tests/Quizzes:

There will be two mini-tests and one comprehensive final examination, all of which will be administrated in the class hours. Check the table under Final Grade above for these test grading weights and times.

Homework Assignments:

There will be a series of assignments from the textbooks and other sources. Reading assignments will be a part of the assignments. All assignments are due *at the beginning* of class on the dates to be set by the instructor. Penalties will be applied to any late assignment submissions (check the following Due Dates/Time).

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Missed Tests:

Tests (exams and quizzes) may not be made up except for *documented emergency* situations. If a test must be made up, arrangements must be made with the instructor and it is usually within a week of the test being administered.

Due Dates/Time:

- **There will be a 50% penalty for each day an assignment (lab/project/short-answer exercise) is late**; penalties accrue at the due time of the assigned due date (any assignments being submitted later will be considered "being late at least one day", that is, one day late is defined as a 24-hour period starting at the time the assignment is due (weekday or weekend); *n*-day-late can be counted in the same way. For example, if an assignment is due on a Tuesday at 4:00 PM and it is handed in after 4:00 PM on Tuesday but by 4:00 PM on the next day, this assignment is considered one day late.
- **No assignments will be received after the final examination**.

Study Groups:

While I strongly encourage study groups, I require that each student hand in his/her answers in her/his own words - if two answers are highly similar to each other (particularly both have very similar errors), neither will receive credit.

Academic Integrity:

Academic Integrity Policy and Regulations can be found in the University Catalog and on the University's website (http://catalog.salemstate.edu/content.php?catoid=13&navoid=1295#Academic_Integrity). The formal regulations are extensive and detailed - familiarize yourself with them if you have not previously done so. A concise summary of and direct quote from the regulations: "Materials (written or otherwise) submitted to fulfill academic requirements must represent a student's own efforts". *Submission of other's work as one's own without proper attribution is in direct violation of the University's Policy* and will be dealt with according to the University's formal Procedures.

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All students are expected to be familiar with the academic regulations, including those regarding Academic Integrity, for Salem State University as published in the college catalog. In addition, each student is responsible for completing all course requirements and for keeping up with all that goes on in the course (whether or not the student is present).

Salem State University is committed to providing equal access to the educational experience for all students in compliance with Section 504 of The Rehabilitation Act and The Americans with Disabilities Act and to providing all reasonable academic accommodations, aids and adjustments. Any student who has a documented disability requiring an accommodation, aid or adjustment should speak with the instructor immediately. Students with Disabilities who have not previously done so should provide documentation to and schedule an appointment with the Office for Students with Disabilities and obtain appropriate services.

In the event of a university declared critical emergency, Salem State University reserves the right to alter this course plan. Students should refer to http://www.salemstate.edu/ for further information and updates. The course attendance policy stays in effect until there is a university declared critical emergency. In the event of an emergency, please refer to related course announcement and alternative study guide and materials at Canvas (https://elearning.salemstate.edu/) by logging to the course link at Canvas. Students should review the plans and gather all required materials before an emergency is declared.

Please remember that if, for any reason, you decide to drop this course, you **MUST** do so officially through the Registrar's office. The last day to withdraw from a course this semester is **July 29th**.

> **Note:** This syllabus represents the intended structure of the course for the semester. If changes are necessary, students will be notified in writing and via all regular class communication mechanisms (class discussion, emails, and/or the course link at Canvas https://elearning.salemstate.edu/).