

COMP 1900 CS 1: Introduction to Computer Science – Fall 2018

Mr. Kriangsiri (“Top”) Malasri

Contact Information:

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The best way to get in touch with me is through email – I will almost always respond within 24 hours.

Office Hours:

No formal hours, but I’m usually around on weekday afternoons. Stop by anytime, but you may want to call or set up an appointment in advance to ensure I’m there.

Lecture Meeting Times/Locations:

Section	Meeting Times	Location	Instructor	Graders
001	MW 12:40-2:05 pm	FIT 226	Malasri	Eric Hicks, elhicks@memphis.edu Kathryn Bridson, kbridson@memphis.edu
002	MW 5:30-6:55 pm	Dunn Hall 124	Malasri	Keli Cheng, kcheng@memphis.edu Borhan Samei, bsamei@memphis.edu
003	TR 9:40-11:05 am	FIT 226	Baggett	Khang Nguyen, knguyen3@memphis.edu Aashis Ghimire, ghimire1@memphis.edu

Lab Meeting Times/Locations:

Section	Meeting Times	Location	Instructor*	Lab TA
102	R 1:00-3:00 pm	Dunn Hall 232	Malasri	Shima Azizzadeh-Roodpish, szzzdhrd@memphis.edu
103	R 3:15-5:15 pm	Dunn Hall 232	Malasri	Khang Nguyen, knguyen3@memphis.edu
107	R 5:30-7:30 pm	Dunn Hall 232	Baggett	Stephen Lee, smlee@memphis.edu
105	F 10:20 am-12:20 pm	Dunn Hall 232	Baggett	Mazharul Hossain, mhssain9@memphis.edu
106	F 2:00-4:00 pm	Dunn Hall 232	Malasri	Akash Allam, aallam@memphis.edu

* This is just the instructor of record. The lab sessions are supervised by lab TAs.

Catalog Description:

COMP 1900 – CS 1: Introduction to Computer Science (4) Overview of computer science as a field; problem-solving strategies with emphasis in fundamental programming skills, primitive data types, control structures, arrays, strings, I/O, basic recursion, documentation, testing and debugging techniques; introduction to object-oriented concepts. Three lecture hours, two laboratory hours per week. **PREREQUISITE** or **COREQUISITE:** MATH 1910 or MATH 1421 (or MATH 1830 for COMP minors)

Course Outcomes:

After completing this course, students should be able to:

1. Read and write code involving variables and assignments.
2. Read and write code involving conditionals.
3. Read and write code involving loops.
4. Read and write code to manipulate strings and lists.
5. Read and write code to manipulate one- and two-dimensional arrays.
6. Write programs to define functions and make function calls with various input and output types.
7. Be able to decompose code into sections using methods.
8. Be able to define simple classes.
9. Be able to create objects and invoke method calls.

Course Website:

Notes, sample code that I write in class, and grades will be posted to the eCourseware system at <https://elearn.memphis.edu>.

Required Text:

Online text through zyBooks. A subscription costs \$67 and will last until December 27, 2018. Please sign up at <https://learn.zybooks.com/signin> and use the registration code **MEMPHISCOMP1900MalasriFall2018**.

Evaluation:

Lecture Attendance and Classwork	50 pts
zyBook Assignments	100 pts
Lab Assignments	125 pts
Lab Homework	125 pts
Quizzes	100 pts (2 @ 50 pts each)
Midterm Exam	200 pts
Lab Final	50 pts
Final Exam (Comprehensive)	300 pts

Final grade: add up your point total and divide by 1000. Note that the highest possible percentage grade is 105% since the points add up to 1050. This gives you some built-in buffer in case your second cousin's ex-wife's brother-in-law has a funeral that forces you to miss an assignment, or a temporary zombie apocalypse happens to just your neighborhood, or whatever. This also means I'll be strict about enforcing assignment deadlines. Please don't beg me for credit for late assignments.

Grading Scale: Letter grades will be determined as follows:

A+: 96% and above; **A:** 90-95%
B+: 87-89%; **B:** 81-86%; **B-:** 79-80%
C+: 77-78%; **C:** 71-76%; **C-:** 69-70%
D+: 67-68%; **D:** 60-66%
F: Below 60%

Assignments:

This is a programming course, and the only way to get better at programming is to do a lot of it. There will be many assignments throughout the semester to give you hands-on practice. Altogether, assignments make up nearly half your grade for this course. You cannot pass unless you do them!

The assignments fall into four categories:

1. **Classwork** consists of simple problems to immediately reinforce what was covered during lecture. Attendance is also indirectly taken through classwork submissions. We will do at least one classwork assignment almost every lecture.
2. **zyBook assignments** are short exercises selected from the required textbook. These are done on your own, to further reinforce what was covered during lecture. There will be a zyBook assignment given after almost every lecture session.
3. **Lab assignments** are what you work on during the lab meeting each week. You are expected to complete them within the 2-hour lab session and turn them in to the lab TA before leaving lab for the day. Lab assignments are generally more involved than classwork and zyBook assignments.
4. **Lab homework** is assigned at the end of each lab meeting and should be turned in by the following week's lab session. Lab homework allows you to explore a topic more deeply and is usually even more involved than the in-lab assignments.

Time Expectations:

Programming definitely has a learning curve, and many people find this to be a demanding class. In order to do well, most students should expect to spend 2-3 hours outside of class per hour of credit. Since this is a 4-hour class, that translates to 8-12 hours per week of work outside of class. If you are unable or unwilling to devote this time, I highly recommend that you postpone taking the course until you can.

Attendance:

It is crucial that you attend class (both lecture and lab) regularly, especially if this is your first experience with computer programming. The class will keep building on itself and moves at a brisk pace, so you need to get a good handle on each concept soon after we discuss it. As mentioned above, I will indirectly take attendance via classwork submissions.

Late/Makeup Policy:

All assignments are expected to be completed and turned in on schedule. Due dates will be clearly indicated for each assignment. Late assignments are **NOT** accepted except in extreme circumstances. Likewise, makeup quizzes and exams will be given only under extreme circumstances. If you feel that your circumstances warrant a late work submission or a makeup quiz/exam, get in touch with me as soon as possible. Be prepared to show some kind of documented proof of your situation.

Plagiarism/Cheating Policy:

By the end of this course, you are expected to be a competent programmer. For this to happen, you need to get plenty of practice yourself. As such, all grade items (unless specifically indicated otherwise) must be individual efforts. Although you are welcome to work in study groups, NEVER submit any code that you did not write yourself.

Examples of ACCEPTABLE behavior:

- Discussing the general solution approach to an assignment with other students, then writing the code to solve the problem individually
- Using Internet resources to help with an assignment, then writing your own code that incorporates what you've learned

Examples of UNACCEPTABLE behavior:

- Submitting the same code as another student. Making trivial changes like changing variable names and/or order of methods does not hide this.
- Copying and pasting code that you found from the Internet
- Copying someone else's code during a quiz or exam

I have a zero-tolerance policy against cheating. Plagiarized code is very obvious. If I catch you submitting code that you did not write yourself, the first offense will result in a 0 for that grade item. Further offenses will possibly result in a failing grade in the entire course, and/or referral to the University Judicial Affairs Office for further disciplinary action. Please don't put me in this situation.

Getting Help:

Although I expect your work for this class to be done individually, I encourage you to seek help if you get stuck:

- Come talk to me! I'm very willing to sit down and try to provide hints without giving away the solution.
- Contact your lab TA. S/he is there to help you during lab sessions (although you cannot get the TA's help for the lab final).
- The Computer Science Learning Center (Dunn Hall 208) is open throughout the week. The center is staffed by upper-level undergraduate students who have done well in this course and can give you one-on-one help. Hours will be posted on the door of Dunn Hall 208 as well as online at http://www.memphis.edu/cs/current_students/cslc.php.

Miscellaneous Policies:

Email - Please check your University of Memphis email account at least once a day, as that is my primary means of communicating with you outside of class.

Student Disabilities - If you have a disability that may require assistance or accommodations, or if you have any questions related to any accommodation for testing, note taking, reading, etc., please speak with me as soon as possible. You must contact the Disability Resources for Students office (678-2880) to officially request such accommodations / services.

Tentative Course Schedule:

Date	Lecture Material	Text	Quizzes	Labs
8/27 8/29	Intro to computers and CS, binary numbers, first Java programs Variables and assignment	Ch. 1 Ch. 2		<i>NO LAB</i>
9/03 9/05	<i>NO CLASS – Labor Day</i> Variables and assignment, cont'd.	Ch. 2		Lab 1: Binary numbers, basic Java programs
9/10 9/12	Conditionals: making decisions	Ch. 3		Lab 2: Variables and assignment
9/17 9/19	Loops: repeating things	Ch. 4	Quiz 1 (9/17)	Lab 3: Conditionals
9/26 9/28	Loops, cont'd.	Ch. 4		Lab 4: Basic loops
10/01 10/03	User-defined methods	Ch. 6		Lab 5: Advanced loops
10/08 10/10	Arrays: basic syntax and usage	Ch. 5		Lab 6: Methods
10/15 10/17	<i>NO CLASS – Fall Break</i> MIDTERM EXAM			<i>NO LAB</i>
10/22 10/24	Arrays in depth: arrays as references, arrays with methods	Ch. 5-6		Lab 7: Basic arrays
10/29 10/31	Arrays, cont'd. 2D arrays	Ch. 5-6		Lab 8: Advanced arrays
11/05 11/07	Basic OOP concepts	Ch. 7		<i>NO LAB</i>
11/12 11/14	OOP, cont'd.	Ch. 7	Quiz 2 (11/12)	Lab 9: OOP concepts
11/19 11/21	Introduction to recursion <i>NO CLASS – Thanksgiving</i>	Ch. 12		<i>NO LAB</i>
11/26 11/28	Searching and sorting algorithms	Ch. 18		LAB FINAL
12/03 12/05	Searching and sorting, cont'd. Review for final	Ch. 18		<i>NO LAB</i>

FINAL EXAM: Wednesday, Dec. 12
10:00 am-12:00 pm (section 001)
5:30-7:30 pm (section 002)
 (same classroom as lecture)

Tentative Quiz and Exam Topics:

- Quiz 1: Binary numbers, variables and assignment
- Midterm Exam: Everything up to and including methods
- Quiz 2: Arrays
- Final Exam: Everything!