Instructor
Dr. Judy Hankins, Professor
Office: KOM 355
Office Phone: 898-2392
email: class questions (not homework) send to csjudy@mtsu.edu,
Course Web Site: www.cs.mtsu.edu/~jhankins or elearn.mtsu.edu
FAX: 615-898-5567

OFFICE HOURS:

<table>
<thead>
<tr>
<th>MW</th>
<th>8:00 – 9:00</th>
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<tbody>
<tr>
<td>TR</td>
<td>8:00 – 10:00</td>
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I am generally available most days of the week via email. Please send questions (not class homework) to csjudy@mtsu.edu and I will respond.

Course Description:
Computer Science I. Four credits. Prerequisite: Sufficient background in algebra and trigonometry. The first of a two-semester sequence using a high-level language; language constructs and simple data structures such as arrays and strings. Emphasis on problem solving using the language and principles of structured software development. Three lectures and two one-hour labs.

Goals:
The primary goal of this course is the development of program design and program construction skills. Topics related to program design include functional decomposition, structured programming, algorithm design, procedural abstraction, and the application of simple data structures. Topics related to program construction include the C++ programming language, UNIX tools, programming language concepts, and program development techniques.

Learning Outcomes:
Upon successful completion of this course, a student will be able to:

- Apply functional decomposition in the design of a program.
- Develop an algorithmic solution to solve a problem using sequence, selection, and iteration.
- Use simple data structures, such as arrays and strings, in an algorithmic solution.
- Demonstrate the use of procedural abstraction through the design and implementation of effective procedures and functions.
- Construct a readable, well documented, and syntactically correct C++ program.
- Explain the syntax and semantics of a target set of C++ language elements.
- Use UNIX tools to edit, compile, link, and execute a program.
- Predict the state changes of a program in execution and trace its execution.

Academic Integrity & Individual Effort:
All work for this class (including exams and open labs) is to be done on an individual basis. The penalty for unauthorized collaboration will range from a grade of zero for an individual
assignment to a failing grade for the course. See [http://www.mtsu.edu/~csdept/Academics/academicIntegrity.htm](http://www.mtsu.edu/~csdept/Academics/academicIntegrity.htm) for additional details and complete policy.

Each student is expected to complete his/her own work. This includes all homework (open labs) and exams.

- Students are encouraged to study for exams in groups.
- Students are NOT allowed to complete homework in groups.
- Students are allowed to ask any questions concerning homework to the class instructor, lab instructor, or any other instructor at MTSU.
- Students may ask questions of other students IF they deal with how to use the system at MTSU.
- Students may ask questions of other students IF they deal with clarification of a homework assignment.
- Students may ask questions of other students IF they deal with coding a section of a homework assignment.
- Students may ask questions of other students IF they deal with syntax errors in a section of a homework assignment and in which the response is how to correct the syntax error and NOT how to correct the program logic.
- Exceptions to this policy may be made if any group assignments are given.

Instances of cheating may result in punishment ranging from 0/F for an assignment to F for the course to suspension from MTSU.

**Required Materials**

**Textbook and Manuals:**


Material covered in textbook: Chapters 1 through 13. For some of these chapters, only part of the chapter will be cover. Also other material deemed necessary by the course instructor will be covered.

Lab materials are online and you should visit the course calendar page (which can be found on the course web site) to determine which lab will be assigned during the lab period.


**Methods of instruction:** Lecture (white board, PowerPoint, and system and/or programming demonstrations) plus class discussion during scheduled class times. In addition there will be open and closed labs (see below).

**Course Labs**

Two types of labs will be used in this class. They are *open* labs and *closed* labs.

**Closed labs:**

The closed lab section of this course is intended to give students the opportunity to learn and to practice the skills needed to do open labs and to be successful on tests. Unlike your open labs, in which you are expected to work independently, closed labs give you the opportunity to discuss problems with classmates and ask in-depth questions.

An hour lab period two times a week has been set for each 1170 class in which closed labs will be completed under the supervision of the class instructor and a lab assistant. Always use the
calendar on my home page for access to the closed lab to be done that week. Each closed lab will be graded on a 100 point basis.

University policies apply to attendance of closed labs. Attendance will be taken each closed lab period. You are expected to attend all closed labs. Non-attendance will result in a zero for the lab unless the lab is excused by your Computer Science I lab instructor.

More information will be given to you in a separate handout during the first lab.

The table below contains meeting rooms and times for the classes I am teaching this semester.

<table>
<thead>
<tr>
<th>CSCI 1170-001</th>
<th>CSCI 1170-002</th>
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<tbody>
<tr>
<td>Lecture: 9:10 am-10:05 am MWF KOM 307</td>
<td>Lecture: 11:30 am-12:25 pm MWF KOM 321</td>
</tr>
<tr>
<td>Closed Lab: 10:15 am-11:15 am MW KOM 360</td>
<td>Closed Lab: 12:35 pm-1:35 pm MW KOM 360</td>
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**Open labs:**
Open labs are designed for solving problems without direct teacher supervision. You will go to the lab at your own convenience and solve the assigned problem at your own pace.

Open Lab Locations: KOM 350, 351, 360 (enter through 351) or you may work at home. There will be six to nine open labs assigned. Each open lab consists of the design, programming, and implementation of a problem assigned in class. If you use your time wisely, you may be able to complete a substantial portion of your open lab work during the closed lab sessions.

Most labs will consist of two parts: a lab design and the actual implementation, i.e., the program created and executed on the computer. The lab design is used to encourage and document timely design and implementation of each assignment.

Each lab will have an assigned due date. Late programs will receive a 10% deduction for each class day late. The date will be determined by the date when you electronically submit your program. No program will be accepted after graded programs for that assignment have been returned to the class. Normally the graded programs are return within two class periods.

Programs are graded based upon design, correctness, documentation, style, efficiency, elegance, and adherence to requirements. You must design, write, implement, and debug your own open lab programs. The course instructor and lab assistant are available to help you in case of problems. You may discuss with others high level details of program design and implementation, but not generalities such as “what’s wrong with my program”…see academic integrity section above. You may discuss with others how to use the system such as the editor, operating system, printers, and email.

More information about open labs will be given to you prior to your first open lab assignment.

**Exams**
Four in-class 100 point exams will be given during the semester. See the course calendar page for a tentative listing of these exams. A comprehensive final exam will also be given. The final will be given at the time scheduled by the University for this course. No make-up exams will be given. If an exam is missed, it will be replaced by the grade made on the final exam. These exams will cover lectures, assigned readings, homework assignments, material from closed labs, etc. **If you do not miss any of the four in class exams then the lowest of the four exams can be replaced by the final exam score (if it is higher).**

**Final Grade**
Your grade will be determined as follows with an attendance adjustment (see Attendance below):
<table>
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<tr>
<th>Assignment Type</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Closed Lab Assignments (CLA)</td>
<td>10%</td>
</tr>
<tr>
<td>Open Lab Assignments (OLA)</td>
<td>20%</td>
</tr>
<tr>
<td>Four In-Class Exams</td>
<td>50%</td>
</tr>
<tr>
<td>Comprehensive Final Exam</td>
<td>20%</td>
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Letter grades will be assigned according to the following scale:
- A (average >= 90%)
- B+ (average >= 88 but < 90)
- B (average >= 82 but < 88)
- B- (average >= 80 but < 82)
- C+ (average >= 78 but < 80)
- C (average >= 72 but < 78)
- C- (average >= 70 but < 72)
- D+ (average >= 68 but < 70)
- D (average >= 62 but < 68)
- D- (average >= 60 but < 62)
- F (average < 60)

There are two exceptions:

1. **Students must have a passing test average (60 and above) to pass the course.** Your exam average is calculated using the formula (Exam 1 + Exam 2 + Exam 3 + Exam 4 + Final Exam)/5. An average exam grade below 60 results in course failure.

2. **Students must have a passing open lab average (60 or higher) to pass the course.** Your open lab average is calculated using the formula (OLAB 1 + OLAB 2 + . . . + OLAB N)/N where N is the number of open lab assignments. An average open lab grade below 60 results in course failure.

**Attendance**

Attendance is required and absences do not excuse one from class responsibilities. If for some unavoidable reason you must miss class, obtain class notes, handouts, and assignments from another class member. Generally, you will find handouts and assignments posted on the course calendar page. You are expected to be on time for class. Consistent lateness to class is disruptive and is considered to be disrespectful. It is best to come late, however, rather than not at all!

Class attendance will be taken each day.
- **If a student has perfect attendance at the end of the semester, then three points will be added to the final course average.**
- If a student only misses one class, then 2 points will be added to the final course average.
- If a student misses two classes, then 1 point will be added to the final course average.
- If a student misses three classes, then 0 points will be added to the final course average.
- **If a student misses four classes, then one point will be subtracted from the final course average.**
- If a student misses five classes, then two points will be subtracted from the final course average.
- If a student misses six or more classes, then a total of three points will be subtracted from the final average.

**Attendance is determined by the student’s initials being written on the daily attendance sheet circulated at the beginning of class.** It is each student’s responsibility to locate and sign this sheet each class period (during the class).

**Grading procedures**

To calculate your final average you should:
Determine your test average = (test 1 + test 2 + test 3 + test 4)/4.0 (Your lowest test score can be replaced by the final exam score).

Determine your Closed Lab Average = (Your Total Points)/Total Points Possible * 100

Determine your Open Lab Average = (Your Total Points)/Total Points Possible * 100

Then your final average = .5 * test Average + .2 * Open Lab average + .1 * Closed Lab Average + .2 * Final Exam Score

Add/Subtract points for attendance.

Your final letter grade will then be determined from the grading scale shown above.

Important Notes
1. Reasonable accommodation for students with disabilities: If you have a disability that may require assistance or accommodation, or you have questions related to any accommodations for testing, note takers, readers, etc., please contact me as soon as possible. Students should also contact the Office of Disabled Student Services (898-2783) with questions about such services.

3. Students must have a passing test average (60 and above) to pass the course (see above grading scale). Your exam average is calculated using the formula (Exam 1 + Exam 2 + Exam 3 + Exam 4 + Final Exam)/5

4. Students must have a passing open lab average (60 or higher) to pass the course. Your open lab average is calculated using the formula (OLAB 1 + OLAB 2 + . . . + OLAB N)/N where N is the number of open lab assignments. An average open lab grade below 60 results in course failure.

5. Inclement Weather Policy: Unless the university is closed, I will meet class, so do not call the office. However, if the school system in your county of residence is closed for bad weather, you have an excused absence from this class.

6. Cell Phone/Beeper Policy: Please turn all cell phones/beepers to silent or vibrate. If you believe you will need to be answering a cell phone, please sit near the door, and quietly leave the room if you receive a call.

7. A grade of 'C' or better is required in this course to be eligible to take other CS courses having CSCI 1170 as a prerequisite.

8. Each student is responsible for checking for updates/modifications/etc. on the class web calendar each day. The class calendar can be found at http://www.cs.mtsu.edu/~jhankins

9. Each student is responsible for checking email daily.

10. The instructor can at his/her own discretion drop a student after two class meetings if the student fails to attend the first two class meetings.

11. The final exam will be given during the official time slot designated in the university class schedule book.

Financial aid notice:

Do you have a lottery scholarship? To retain Tennessee Education Lottery Scholarship eligibility, you must earn a cumulative TELS GPA of 2.75 after 24 and 48 attempted hours and a cumulative TELS GPA of 3.0 thereafter. You may qualify with a 2.75 cumulative GPA after 72 attempted hours (and subsequent semesters), if you are enrolled full-time and maintain a semester GPA of at least 3.0. A grade of C, D, F, or I in this class may negatively impact TELS eligibility. Dropping a class after 14 days may also impact eligibility; if you withdraw from this class and it
results in an enrollment status of less than full time, you may lose eligibility for your lottery scholarship. Lottery recipients are eligible to receive the scholarship for a maximum of five years from the date of initial enrollment, or until a bachelor degree is earned. For additional lottery scholarship rules please refer to your Lottery Statement of Understanding form, review lottery scholarship requirements on the web at http://scholarships.web.mtsu.edu/telsconteligibility.htm, or contact the MTSU Financial Aid office at 898-2830.

For students receiving any form of financial aid, they should always consult with the Financial Aid Office before dropping a course. For additional information, contact the Financial Aid Office or see http://www.mtsu.edu/financialaid.

Class Problems or complaints:
If you are having problems with the course or have a class complaint you would like to voice, please bring this to the attention of the course instructor as soon as possible.