

**MTH 2220 - Mathematical Programming
Spring 2016**

Class Time: MWF 1:00 - 1:50
Place: MSCX 112 (McCall Hall 112)
Instructor: Pat Rossi
Office: 202B McCartha Hall; prossi@troy.edu; (334)670-3588
Office Hours: M 11:00 - 11:50; 2:00 - 3:30; 5:00 - 6:00
T 1:00 - 3:00
W 11:00 - 11:50; 2:00 - 3:30
F 11:00 - 11:50
Or By Appointment

Text: There is no required text. Students who want a written reference to *PYTHON* may want to obtain a copy of *PYTHON Programming - an Introduction to Computer Science*, 2nd Edition, by John Zelle, published by Franklin, Beedle & Associates, Inc.

Calculation of Final Average

Test #1	20%
Test #2	20%
Programming Assignments	35%
Final Exam	25%

Assignment of Final Grade

Final Average	Grade
90-100	A
80-89	B
70-79	C
60-69	D
0 -59	F

NOTE: Final Grades Cannot be Given Out Over The Phone

Tests

Tests will be on Fridays (not necessarily every Friday) and will be announced one week in advance. They will cover material presented in class up to and including the Wednesday before the test. All tests and the Final Exam are property of the instructor.

Programming Assignments

Programming assignments will be weighted equally. Each assignment will be due one week from the day it is assigned. Five points will be taken off the grade of the assignment for each day that the assignment is overdue.

Academic Honesty

Academic misconduct shall be handled according to the guidelines listed in the *Oracle*. Regarding lab assignments, a certain amount of collaboration is acceptable (See the following examples).

Example 1: You have written a program and there is an error in the program. After trying, unsuccessfully, to find the error, you ask your friend if he or she can see anything wrong with it. This is fine with me. Sometimes it's easier for other people to find our mistakes than it is for us to find them, and vice versa.

Example 2: Your program runs, but you aren't sure if it is running correctly. You compare your output with your friend's output, to get an idea of whether or not your output is reasonable. This is fine with me.

Example 3: You don't understand the algorithm and have no idea how to go about writing a program, so you ask someone if you can copy theirs. This is NOT ok with me. If you're stuck, don't be ashamed. It happens to the best of us. If you don't understand how to go about an assignment, ASK ME. I won't tell you, but I'll try to give you enough hints so that you can figure it out for yourself.

Attendance Policy:

More than five (5) absences (other than University Excused absences) will result in a grade of FA (Failure due to excessive absences).

Study and Preparation:

To increase your chances for success, do the assignments when they're assigned and ask questions either in class or during office hours on things that you find difficult to understand. To a great extent, your conscientiousness in this matter will determine your success in the course.

AMERICANS WITH DISABILITIES ACT:

Troy University, under the guidelines of ADA and the Rehabilitation Act, makes reasonable accommodations for documented physical and mental limitations of otherwise-qualified individuals with disabilities. To provide the best possible services to students, employees, and visitors, Troy University has designated Disability Services Coordinators and Human Resources representatives on each campus as responsible parties for coordinating accommodations for persons with disabilities. For more information about physical access to building or grounds, academic or workplace accommodations, or other ADA related services, individuals should contact a Disability Services Coordinator or Human Resources representative on their campus of attendance. Specific information regarding the ADA, including contact information for responsible parties, can be found at the following link:

<http://trojan.troy.edu/employees/humanresources/documents/ADAPolicy2003.htm>

Makeup Policy:

There will be no make-up tests given during the semester. Make-up tests will be given on Wednesday, April 27 at 10 am **for those students who missed a test** during the course. **No student will be allowed to make up more than one missed test.** Notice that these make-up tests are only given to students who **missed a test** (for whatever reason) during the course. (This implies that you may choose to miss a test if you feel that you are not ready. Don't do this indiscriminately - You may need to miss a test later on in the course, due to extreme illness, etc. Nevertheless, the option remains. One catch - once you enter the room to take an exam, you must take the exam. You will not be allowed to enter the room, look at the exam, and then decide whether or not you want to take the exam.

Incomplete Policy

A grade of "I" (incomplete) may be given in the case of illness or emergency situations occurring towards the end of the semester, which make it impossible for the student to complete all course work by the end of the semester in such a way that the student's performance accurately reflects his or her mastery of the course. Such grades are given very sparingly, and only in a case of genuine hardship. Time limits for removing an incomplete can be found in the Undergraduate Bulletin. To receive a grade of "Incomplete," a grade of "Incomplete" must be requested by the student and approved by the instructor. (i.e. The student must initiate the process.) See the undergraduate catalog for complete information.

Commonly Asked Questions and Their Answers

Q: Are the Test scores or the final averages scaled?

A: I've never scaled test scores or final averages, and don't anticipate doing so.

Q: Can I do extra credit work, like a report or a term paper, to raise my grade?

A: No. The purpose of this course is to develop, in each student, the programming skills that they will be expected to have, as mathematicians, engineers, and computer programmers. Outside work of this sort will not develop, within you, the programming skills that you will need.

Q: What can I do to improve my grade?

A: Study. In particular;

1. Read through the Lecture notes, carefully, after we cover them in class, and try to do the examples without looking in the notes.
2. See me during office hours. I don't mind, honest!
3. Before each test and the Final we'll have problem solving sessions working with the problems in our Lecture Notes, under the heading "Problems For Our Consideration". Work the assigned problems in advance, and come to the problem solving sessions for help with these. (The extra problem solving sessions will be announced in class.)
4. Practice Tests for Tests 1, 2 and the Final Exam will be made available before the tests are given. Working through these practice tests should help prepare you for the tests, and should also give you a good idea of what kinds of problems to expect on the tests. You'll be doing yourself a big favor by going through these thoroughly well before the tests. Conversely, you'll be at a severe disadvantage if you don't avail yourself of these study aids.

Final Exam: Our Final Exam will be Friday, April 29, from 5pm - 7pm. Students will not be allowed to take the Final Exam early. Exceptions WILL NOT be made for those who have made travel arrangements (e.g. purchased an airplane ticket) for a date on, or before the Final Exam.

Other Matters: Behavior such as wearing headphones in class, sleeping in class, exiting class during a lecture, talking to classmates during the lecture, reading a newspaper during class time, reading a book other than the assigned text for the course during class time, or doing work not assigned in this class during class time will not be tolerated. (If you are sick, or need to use the restroom, raise your hand and ask to be excused.)

Cell Phones and Other Electronic Devices

Troy University no longer has a cell phone policy. This means that I will not prohibit students from having a cell phone, tablet, etc. on their desk, except while tests are being given. I do not like for students to have such devices in plain sight and engaged in their use during my lectures - it's discourteous and it's a distraction to the person who has the device and to others around him/her. Considering how much students pay for each credit hour of instruction, being engaged in using such devices during class time also wastes money that students pay for tuition. But, since there is no longer any University policy regarding the use of such devices in the instructional environment, there is not much that I can do to prohibit their use (except during tests). While taking tests, neither calculators nor cell phones, tablets, etc. will be allowed on your desk and/or in your work environment. Particularly, the use of a communication device to violate the Troy University *Standards of Conduct* will result in appropriate disciplinary action (See the *Oracle*.)

It would be a courtesy for students who are expecting an emergency call to inform me before the start of class. Students receiving calls that they believe to be emergency calls should answer quietly without disturbing the teaching environment. If the call is an emergency, they should move unobtrusively and quietly from the instructional area.

Letters of Recommendation: I will gladly write letters of recommendation for students who receive an "A" in the course, who have reasonably good attendance, who do not cause discipline problems, and who do not text in my class; provided that the letters are for graduate/professional school and/or employment in a field related to your academic major. Letters of recommendation for employment must be for positions that will be filled in the near future. (e.g., don't ask me to write a letter of recommendation for a teaching position, when your date of graduation is over a year away.) Such letters are *confidential*. Also, if you want me to write a letter of recommendation, you must ask me *personally*. (i.e., do not put a note in my mailbox asking me for a letter of recommendation.) Oh – one more thing – the better I know you, the more I will be able to say about you in my letters of recommendation. *Therefore, it is to your advantage to come and see me, and ask for help during office hours.* This is how I get to know my students. Remember – I do not write letters of recommendation for students who have texted in my class. If I see you texting in my class, I put your name on my "Text List" in my office. When someone asks me for a letter of recommendation, I check my list. If your name is on my "Text List," I will not write a letter in your behalf. SO DON'T TEXT IN MY CLASS!!!

My Website: Lecture notes, programming assignments, and other course materials will be made available on my website. To get to my website:

1. Go to <http://www.pat-rossi.com>
2. On the left hand side, click "Academic Links for Troy University Students"
3. Under "Course Links" click "MTH 2220"

Course Description: Structured programming of a mathematical nature, arithmetic computations, algorithmic design, control structures, functions and subroutines, intrinsic functions, array processing. *Prerequisite: MTH 1125*

University Firearms Policy

Regardless and in spite of recent changes in Alabama law related to the matter, it remains the policy of Troy University that no person other than authorized law enforcement officers shall be permitted to bring any firearm onto any campus, teaching, or service support property, owned or leased by the University, no matter whether they hold a permit to do so, or not. It has been determined that it is the University's prerogative to establish its policy related to this matter and therefore the current University policy on firearms remains in effect.

Important Dates (Which Are Not Listed Elsewhere in the Syllabus)

Jan 11	Last Day to ADD a Course In Person/Web Express Without Financial Penalty
Jan 11	Last Day to Withdraw from the University Without owing Full Tuition (cannot be done on Trojan Web Express)
Jan 11	Last Day to Drop a Course In Person/Web Express Without Financial Penalty
Jan 18	Holiday (Martin Luther King, Jr. Day) – no classes
Mar 7-13	Spring Break – no classes
Mar 14	Last Day to Drop a Course – No Drops after this date
Mar 14	Last Day to Withdraw – No Withdrawals after this date
Mar 14	Last Day to Complete Incomplete Work from the previous semester
April 8	Last Day to File Intent to Graduate for Summer 2016
April 26	Last Day of Classes – Classes End
April 27	Dead Day

This syllabus represents a tentative plan for the instruction in this course. The instructor reserves the right to amend this syllabus if, in his opinion, such action will enhance and/or optimize learning. Any changes in this syllabus will be announced in class and/or on the instructor's website. This syllabus is a best possible assessment of the course aspirations, assignments and requirements at the time it was developed for this semester.