CS 151L-501 -- Tuesdays & Thursdays 7:30-8:45AM in B127

Instructor: Annette Hatch Email: ahatch2@unm.edu

Office: A123 Phone: 925-8642

Office Hours: Learning Commons: Thursday 10:30-12

A123: Monday & Wednesday 11:20-12 & 1:00-1:30, Tuesday 10:15-1:30

OR by appointment.

COURSE DESCRIPTION: CS 151L - Computer Programming Fundamentals for Non-Majors An introduction to the art of computing. Not intended for Computer Science majors or minors. The objective of the course is an understanding of the relationship between computing and problem solving. 3 credit hours.

COURSE MATERIALS: Flash drive, notebook, pencil that may all be shared with another class. There is no required text.

Grading Scale (Note: + and – are possible but only will be given if of benefit to the student.)

C 70–79% D 60–69% F < 59%

Weekly Written Quizzes (Thurs w/first on 1/25/18) 30%
Programming Assignments 50%
Cumulative Final 20%

IMPORTANT DATES with respect to this class:

Last date to drop without a grade: Friday, February 2, 2018

Spring Break: March 10-18, 2018

Final Exam: 8:00-10:00 AM Tuesday, May 8, 2018 in B127 (Let me know ASAP if you have a conflict.)

THE COURSE: Programs, Quizzes, and Final:

- Quizzes will be Thursdays at the end of class. They will be paper quizzes and will be open book, open note
 and open computer/internet but worked alone. Quizzes will cover the most recent topics. Quizzes cannot
 be made up if you are absent but the 2 lowest scores will be dropped. If there is no class on a Thursday,
 there will be no quiz that week.
- Programs will be due on the assigned date by 11:59PM. Late work will be accepted for 1 week with the highest possible score reduced to 75% of the original score. Working together is fine but submitting another's work will result in a zero for that assignment.
- The final will be cumulative, on paper, worked alone and will be open book, open note, open computer/internet.

ATTENDANCE POLICY: If a student misses 2 classes in the first three weeks or 4 consecutive class periods, the student may be dropped from the class. The student bears full responsibility for the material and procedural information covered in class.

UNM EMAIL/BLACK BOARD LEARN ACCESS: All UNM-Valencia students will need a UNM Net ID which can be created by going to: http://it.unm.edu/accounts/. UNM Net ID will give you access to the computer labs on campus, blackboard learn and UNM Email.

COMPUTER LAB RESPONSIBILITY: Please be advised that use of computer labs on UNM properties is governed by "Policy 2500: Acceptable Computer Use" which can be found at http://policy.unm.edu/university-policies/2000/2500.html. Food and drink are also prohibited in any computer lab on campus. Anyone violating these policies is subject to possible suspension and loss of computer lab privileges.

SUPPORT SERVICES: The Valencia Campus Library provides a quiet atmosphere for study and is an excellent resource for supplementary materials. Audiotapes and videotapes are available for student use through the library. The STEM Center, the Learning Commons and the Writing Center offer tutoring at no cost to the student. For best results, schedule appointments for tutoring. Students who miss tutoring appointments may be denied future appointments.

EXPECTATIONS: Students are expected to conduct themselves in a polite, courteous, professional and collegial manner. Cell phones must be set on silent. Please step into the hall if you need to take a call during class. Cell phones must be turned off during exams.

TITLE IX: In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees" by the Department of Education (see pg 15 - http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Equal Opportunity (oeo.unm.edu). For more information on the campus policy regarding sexual misconduct, see: https://policy.unm.edu/university-policies/2000/2740.html

DISABILITY STATEMENT: If you have a documented disability, the Equal Access Services office will provide me with a letter outlining your accommodations. I will then discuss the available accommodations with you to determine the best learning environment. If you feel that you need accommodations, but have not documented your disability, please contact Jeanne Lujan, the coordinator for Equal Access Services at 925-8910 or imlujan@unm.edu

UNM's Policy on Academic Honesty: Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, including dismissal, against any student who is found responsible for academic dishonesty. Any student who has been judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course. Academic dishonesty includes, but is not limited to, dishonesty in quizzes, tests or assignments, claiming credit for work not done or done by others; hindering the academic work of other students; and misrepresenting academic or professional qualifications within or outside the University.

STUDENT LEARNING OBJECTIVES/OUTCOMES:

By the end of this course, a successful MATLAB student will be able to

- Apply standard computer programming vocabulary and practices including:
 - * Coding comments
 - * Correct formatting rules in writing programming code
 - Mathematical operators
 - Relational and conditional operators
 - * Looping statements
 - * Arrays
 - * User functions
- Solve selected engineering problems
- Manipulate data sets
- Create quality MATLAB graphs
- Solve selected mathematical problems symbolically
- Produce functional MATLAB GUIs
- Simulate selected physical problems

Week	
Beginning	Topics (Subject to change)
1/16	Intro to MATLAB, Comments & Variables
1/22	Arithmetic, Zero & Strings
1/29	Input, Output & 2D Plotting; HW #1 Due 2/1 at midnight
2/5	Conditional Statements
2/12	Switch & While; HW #2 Due 2/15 at midnight
2/19	Loops
2/26	Vectors & Arrays
3/5	Functions; HW #3 Due 3/8 at midnight
3/12	No Class - Spring Break
3/19	Tables, Reading & Writing Data Files
3/26	Symbolics & Solve
4/2	Matrices; HW #4 Due 4/5 at midnight
4/9	Calculus
4/16	Ordinary Differential Equations
4/23	GUIs
4/30	Review; HW #5 Due 5/3 at midnight
5/7	Final Exam: 8:00-10:00 AM Tuesday, May 8, 2018 in B127