**COT 2104C ONLINE CRN 14953 FALL (2020100)**

# PROFESSOR:

Name: Lisa Macon, PhD

Office: 2-308

E-mail: Lmacon@valenciacollege.edu

Phone number: 407-582-1420

Office hours (also by Appointment):

**On campus in 2-308 Virtual (Email and Canvas)**

Monday 1:00 – 3:00pm Monday, Tuesday, Thursday 9:00 – 10:00pm

Tuesday 10:00 – 11:00am Friday 9:00 – 11:00am

Wednesday 1:30 – 2:30pm

Thursday 10:00 – 11:00am

# COURSE:

Name and Catalog description: COT 2104C Foundations of Discrete Mathematics

This course builds basic mathematical logic skills and foundations of discrete mathematics. Topics include statements; truth tables and tautologies; arguments; rules of demonstrations; conditional demonstrations and indirect proof; logic of quantifiers; algebra of sets; definitions and axioms of set theory; informal proof; relations and functions; mathematical induction; graphs and trees and other topics in discrete mathematics.

CRN: 14953

Credit: 3

# Prerequisite(s) and Co-requisite(s): Grade of C or higher in MAC 1105 College Algebra

Meeting places and times: ONLINE

# COURSE OUTCOMES:

Upon completion of the course, the following learning outcomes will be met for all students:

* Students will apply the principles of logic to problem solving.
* Students will be able to apply various methods of proof and disproof.
* Students will be able to determine the properties inherent in mathematical functions.
* Students will be able to define properties associated with basic graphs.

# EDUCATIONAL MATERIALS:

We will use the following FREE textbook, which you can download from within the Course Orientation module if you’d like.

To access the web page for this book go here: [http://faculty.uml.edu/klevasseur/ads2/.](http://faculty.uml.edu/klevasseur/ads2/) There is an HTML version of the book that is a little more readable than the PDF version.

Note that you can purchase a paper copy or print it yourself, or simply use it as an electronic file.

There are no other REQUIRED materials for this class. There will be optional web resources available in each topic module.

# ASSESSMENT METHODS AND EVALUATION:

Calculation of final grade:

20 points: Orientation Quiz

60 points: Six homework assignments worth 10 points each

120: Six discussions worth 20 points each

600: Six unit exams

Total: 800 points

Type of final: There is no cumulative final exam for this class. Exam 6 will take place during the final exam period.

Grade Scale:

At the end of the semester, all of your points will be added together and your grade assigned as follows:

A: 720 – 800 points

B: 640 – 719 points

C: 560 – 639 points

D: 480 – 559 points

F: Less than 480 points

# IMPORTANT CALENDAR DATES:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Full Term | H1 | TWJ | TWK | H2 |
| Classes Begin | Aug. 26, 2019 | Aug.26, 2019 | Aug.26, 2019 | Sept. 30, 2019 | Oct. 18, 2019 |
| Drop/Refund/No Show | Sept. 3, 2019 | Sept. 3, 2019 | Sept. 3, 2019 | Oct. 7, 2019 | Oct. 25, 2019 |
| Graduation Application Deadline | Sept. 13, 2019 | Sept. 13, 2019 | Sept. 13, 2019 | Sept. 13, 2019 | Sept. 13, 2019 |
| Withdrawal Deadline | Nov. 1, 2019 | Sept. 27, 2019 | Oct. 11, 2019 | Nov. 15, 2019 | Nov. 22, 2019 |
| Day/EveningClasses End | Dec. 8, 2019 | Oct. 17, 2019 | Nov. 3, 2019 | Dec. 15, 2019 | Dec. 15, 2019 |
| Final Exams | Dec. 9-15, 2019 | Last Class Mtg | Last Class Mtg | Last Class Mtg | Last Class Mtg |
| Term Ends | Dec. 15, 2019 | Oct. 17, 2019 | Nov. 3, 2019 | Dec. 15, 2019 | Dec. 15, 2019 |
| Classes do not meet on Monday September 2, Monday November 11, 2019, and Wednesday November 27 – December 1, 2019  |

See College calendar for important dates and final exam schedule at  [http://valenciacollege.edu/calendar](http://www.valenciacollege.edu/calendar) .

# NO-SHOW PROCEDURE:

Any student who does not complete the **Orientation Quiz** by the No-Show deadline will be withdrawn as a no-show.

# CLASSROOM POLICIES ATTENDANCE:

Students who stop turning in work will not be withdrawn and will receive zeros on any work not submitted.

Students who miss a single assignment or discussion will be removed from my recommendation list of students I would write a recommendation letter for or recommend for a scholarship or similar opportunity without possibility of reinstatement for the rest of the semester. I will post frequent announcements and send out regular reminders, so it is recommended that you log into Canvas at least once per day. If you miss vital information because you neglect to do so, that is the chance you personally decided to take. “I didn’t know… because I didn’t log in” will never be considered an acceptable excuse for any purpose.

# WITHDRAWAL:

**After the no-show reporting deadline, I will not withdraw students for any reason. If you want to withdraw, please speak to me first regarding your progress and with an Academic Advisor to discuss the impact of the W on your academic progress, future fees, and financial aid.**

**NOTE:  Before choosing to withdraw, students should speak first with your professor regarding your progress in the course and with an Academic Advisor to discuss the impact of the W on your academic progress, future fees, and financial aid.**

# NOTE TO INTERNATIONAL STUDENTS (F-1 OR J-1 VISA):

Please be advised that withdrawal from this course due to attendance may result in the termination of your visa status if you fall below the full-time enrollment requirement of 12 credit hours. Consult the International Student Services office for more information.

# LATE WORK POLICY:

A student can turn in work up to one week past the deadline for a maximum of 50% credit regardless of the reason for the lateness of the assignment. After one week, no late work will be accepted. There will be no exceptions to this for any reason at all whatsoever. One late or missed assignment will also result in the student being removed from Dr. Macon's "Recommendation List" for job referrals and recommendation letters. Once you are off this list, you cannot be added back onto it for the entire semester.

**Note that this one-week 50% credit period starts one minute after the deadline. There is no grace period.**

# STANDARDS OF CLASSROOM CONDUCT:

Valencia College is dedicated to the advancement of knowledge and learning and to the development of responsible personal and social conduct. By enrolling at Valencia College, a student assumes the responsibility for becoming familiar with and abiding by the general rules of conduct as listed in 6Hx28: 8-03 and the Student Handbook. Even though Faculty manage the classroom environment, the primary responsibility for maintaining a respectful and civil learning environment rests with the students. Students who violate the Student Code of Conduct may be referred to the Dean of Student's Office for disciplinary action, which may result in a sanction up to and including expulsion. <http://valenciacollege.edu/generalcounsel/policy>

# ACADEMIC HONESTY:

You are taking this class to become a computer professional. Obviously, if you do not do your own work, you cannot become a professional as you won’t know the basic concepts. Therefore, all work you do must be your own. That being said, it is encouraged that you speak to your classmates regarding homework assignments and bounce ideas off one another. This is fine, and recommended. In spite of this, each assignment you turn in must be your own work. Companies that hire graduates, programs that accept Valencia transfer students, and scholarship agencies that award funding, depend on me to produce professionals who know the material well when they finish my course and I will not let them (or the future students who can benefit from these programs) down.

Students caught turning in identical assignments or exams will both receive zeros on the assignment, regardless of who copied from who and/or why. A second offense will result in an F in the course and referral to the Dean. Please note that I have myself developed sophisticated software to check your files against each other for identical work and I have caught many, many students cheating in this way in the past. You’re much better off turning in work that isn’t perfect than cheating in this way.

Students caught turning in solutions they have downloaded from an internet site that contains libraries of programming assignments will receive an automatic F in the course and be referred to the Dean. Please note that I use software available in Canvas that checks the entire internet to see if you have plagiarized work. It will check typed answers as well as OCR versions of your handwritten work.

In short, just do your own work if you want to avoid an F or expulsion.

# COLLEGE POLICIES:

A full description of all College policies can be found in the College Catalog at <http://valenciacollege.edu/catalog/> ; Policy Manual at <http://www.valenciacollege.edu/generalcounsel/> .

# STUDENT ASSISTANCE PROGRAM:

Valencia College is interested in making sure all our students have a rewarding and successful college experience.  To that purpose, Valencia students can get immediate help with issues dealing with stress, anxiety, depression, adjustment difficulties, substance abuse, time management as well as relationship problems dealing with school, home or work.  BayCare Behavioral Health Student Assistance Program (SAP) services are free to all Valencia students and available 24 hours a day by calling (800) 878-5470. Free face-to-face counseling is also available.

# OFFICE OF STUDENTS WITH DISABILITIES INFORMATION:

Students with disabilities who qualify for academic accommodations must provide a Notification to Instructor (NTI) form from the Office for Students with Disabilities (OSD) and discuss specific needs with the professor, preferably during the first two weeks of class. The Office for Students with Disabilities determines accommodations based on appropriate documentation of disabilities.

East Campus Bldg. 5, Rm. 216 Ph: 407-582-2229 Fax: 407-582-8908 TTY: 407-582-1222

West Campus SSB, Rm. 102 Ph: 407-582-1523 Fax: 407-582-1326 TTY: 407-582-1222

Osceola Campus Bldg. 1, Rm. 140A Ph: 407-582-4167 Fax: 407-582-4804 TTY: 407-582-1222

Winter Park Campus Bldg. 1, Rm. 212 Ph: 407-582-6887 Fax: 407-582-6841 TTY: 407-582-1222

# SPECIAL RULES:

This is an online class so you are expected to have your own computing equipment and fast internet connection at home. Note that you can always use the equipment on East Campus if your computer or internet connection is not working. You will not receive an extension for these reasons so please start your work early and plan accordingly.

# DISCLAIMER:

Changes may be made at the discretion of the instructor.

# SCHEDULE OF CLASSES AND/OR LABS:

All homework, discussions, and exams due at 11:59pm

|  |  |
| --- | --- |
| **Due Date** | **Details** |
| Tue Sep 3, 2019 | Orientation Discussion and Orientation Quiz |
| Tue Sep 10, 2019 | Set Theory Assignment |
| Thu Sep 12, 2019 | Set Theory Discussion |
| Tue Sep 17, 2019 | Set Theory Exam (available 12am Sep 11) |
| Thu Sep 26, 2019 | Logic and Proof Assignment |
| Tue Oct 1, 2019 | Logic and Proof Discussion |
| Thu Oct 3, 2019 | Logic and Proof Exam (available 12am Sep 27) |
| Tue Oct 15, 2019 | More Logic and Set Theory Assignment |
| Thu Oct 17, 2019 | More Logic and Set Theory Discussion |
| Tue Oct 22, 2019 | More Logic and Set Theory Exam (available 12am Oct 16) |
| Thu Oct 31, 2019 | Functions and Relations Assignment |
| Tue Nov 5, 2019 | Functions and Relations Discussion |
| Thu Nov 7, 2019 | Functions and Relations Exam (available 12am Nov 1) |
| Tue Nov 19, 2019 | Recursion and Recurrence Relations Assignment |
| Thu Nov 21, 2019 | Recursion and Recurrence Relations Discussion |
| Tue Nov 26, 2019 | Recursion and Recurrence Relations Exam (available 12am Nov 21) |
| Tue Dec 3, 2019 | Graphs and Trees Assignment |
| Thu Dec 5, 2019 | Graphs and Trees Discussion |
| Tue Dec 10, 2019 | Graphs and Trees Exam (available 12am Dec 4) |