VALENCIA

MAP 2302 Differential Equations Spring Semester 2020

Professor Amy Montague-Kincade

College General Phone Number	(407) – 299 – 5000			
College Website	www.valenciacollege.edu			
Math Department Phone	(407) – 582 – 1625 OR (407) – 582 – 1848			
Numbers				
Instructor's Phone Number	(407)-582-1150			
Instructor's E-mail	akincade@valenciacollege.edu			
	akincade@mail.valenciacollege.edu			
Instructor's Office Hours Location	4 - 221			

Faculty Website:

 $\label{eq:http://frontdoor.valenciacollege.edu/faculty.cfm?uid=akincade&CFID=1721052&CFTOKEN=57358526&jsessionid=21B91038C0D5C17948D0A5BFA5F3FA6E.cfusion}$

Class Schedule for Professor Kincade

CRN	Course	Description	Days	Times	Location
20069	MAC 1105-004	College Algebra	ΜW	1:00 pm – 2:15 pm	3-230
21429	MAC 2311-004	Calculus I	ΜW	2:30 pm – 4:50 pm	1-235
22314	MAP 2302-002	Differential Equations	ΜW	5:30 pm – 6:45 pm	3-212
22068	MAC 1105-006	College Algebra	TR	10:00 am – 11:15 am	7-216
20137	MAP 2302-001	Differential Equations	TR	11:30 am – 12:45 pm	7-231
22064	MAC 1105-002	College Algebra	TR	2:30 pm - 3:45 pm	3-212

Student Engagement Hours for Professor Kincade

Day	Times	Location
Monday	11:15 am -12:45 pm	4-221
	4:55 pm - 5:25 pm	
Tuesday	12:55 pm - 2:25 pm	4-221
Wednesday	11:15 am -12:45 pm	4-221
	4:55 pm - 5:25 pm	
Thursday	12:55 pm - 2:25 pm	4-221
Friday	9:00 am -12:00 pm	Online/phone
		akincade@valenciacollege.edu
		407-582-1150

Additional Student Engagement Hours may be available upon request.

Math Center Contact Information:

Math Center Front Desk	(407) – 582 – 1633
Aditi Batra (Supervisor)	(407) – 582 – 1720
Nicolas Navarro (Supervisor)	(407) – 582 – 1780

Math Center Resource Information:

Math Center Hours & Open Lab (Building 7, Room 240):

Days	Times
Monday – Thursday	8:00 AM – 8:00 PM
Friday	8:00 AM – 7:00 PM
Saturday	10:00 AM – 3:00 PM
Sunday	CLOSED

SPECIAL NOTE: Hours subject to change. Check with the Math Center for updated changes and/or closures throughout the semester.

COURSE DESCRIPTION: Prerequisite: Minimum grade of C in MAC 2313 or departmental approval. Introduction to methods and applications of ordinary differential equations. Topics include first order differential equations and applications; higher order linear differential equations with applications; Laplace transforms; introduction to numerical methods. Gordon Rule course. Minimum grade of C required if MAP 2302 is used to satisfy Gordon Rule and general education requirement.

REQUIRED TEXTBOOK AND OTHER MATERIALS

- 1) A First Course in Differential Equations with Modeling Applications, 11th Edition, Zill
- As your instructor I do not require a WebAssign Student Access Kit (Blackboard Learning Systems).
 OPTIONAL: Web Assign Course code for Spring 2020: valenciacollege 6716 8476
- 3) Calculator:

A graphing calculator that does not perform symbolic manipulations is required. The TI-84+ is used for in-class demonstrations and is particularly recommended.

If you are receiving financial aid it may be possible to utilize some of your funds to purchase your calculator. Check with the financial aid office for more information.

Class Policies

Attendance

- You are expected to attend every class meeting, unless an illness or emergency makes it impossible for you to do so.
- Absences are excused solely at the discretion of the instructor, who may require that you prove the existence of extenuating circumstances before excusing any absence(s).
- You are responsible for any information and/or assignments given during class, whether you are present or not.
- In-class activities can't be "made up." If you are absent on a day that an in-class activity occurs for credit or extra credit, your grade is likely to be adversely affected.
- You are expected to be in class on time, and to remain in class for the entire period unless permission to leave early has been granted by the instructor. It is disruptive to arrive or depart while class is in session.
- Missing more than 3 of the class meetings will be considered sufficient reason for you to be withdrawn from the class for inadequate attendance.

As an incentive, you can earn bonus points for attendance. The point structure is listed below:

No absences	10 points
1 absence	5 points
more than 1	no bonus points

All absences (both excused or unexcused) will be considered as absences when attendance bonus points are awarded at the end of the semester.

Homework

- Completion of homework on a regular basis is crucial to your success in this course.
- Problems from the text will be assigned for completion before each class meeting. You are encouraged to seek assistance from the instructor if you encounter difficulties with the assigned problems or visit the Math Center, 7-240.
- Several times during the semester, selected homework problems may be collected and graded in the form of a homework quiz.

Homework Quizzes

During the semester, you may be required to turn in selected homework problems or assignments for grading as a quiz grade. The quizzes may vary in point value based on the number of problems selected for that assignment. No late homework quizzes/assignments will be accepted.

Exams and Quizzes

Exam dates will be announced at least one class prior to the testing date. During the semester, at least 3 exams will be given. <u>NO MAKE-UP EXAMS OR QUIZZES will be given</u>. Quizzes of any type may be announced or unannounced. Additonal guidelines are listed below.

- You must complete each test within the time allotted during the class period.
- Every quiz score will be used in the computation of your overall course grade. All exam scores will be used in computation of your overall course grade. The lowest test/exam score will be replaced with your final exam percentage if it is beneficial to your overall course grade.
- It is your responsibility to make a timely request for an excused absence, prior to the testing period, should you miss a test. If you do not request an excused absence for a missed test, or your request for an excused absence is denied, you will receive a zero on that test.
- All materials in your work area during testing, including electronic memory, are subject to thorough and unannounced inspection by the instructor.
- Failure to take the Comprehensive Final Exam will result in a grade of F.

Projects

During the semester, the class may have the opportunity to participate in one or more projects. They may be during class time or outside of class time. The value for each project can range from 20 to 100 points.

Grading

- Partial credit on tests and assignments is sometimes given, when appropriate, solely at the discretion of the instructor.
- Grades will not be disclosed over the telephone or via e-mail, except through your Atlas account.
- You must meet with the instructor if you wish to discuss your grade.

Course Grade Determination

Your grade will be an overall average of points earned from the following list:

Tests/Exams	100 points each
Quizzes	10-60 points each
Homework Quizzes	10-60 points each
Attendance	up to 10 bonus points
Projects	20-100 points each
Final Exam	100 - 200 points (not to exceed 25% of the total grade)

Grade percentage = (points earned / total points possible)

Scores on all tests and assignments will be rounded to the nearest percent. End-of-term averages are rounded to the nearest tenth of a percent. Failure to take the Comprehensive Final Exam will result in a grade of F.

Grading Scale (%)

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

Final Exam Schedule

There will be a comprehensive final exam given according to the official schedule. Failure to take the Comprehensive Final Exam will result in a grade of F. For Summer Sessions, the Final Exam will be given on the last day of class. For Fall and Spring Semesters, the official final exam schedule will be followed.

CRN	Course	Description	Class	Class	Location	Final Exam	Final Exam
			Days	Times		Day/Date	Time
20069	MAC 1105-	College Algebra	ΜW	1:00 pm –	3-230	<mark>Monday</mark>	<mark>1:00 pm –</mark>
	004			2:15 pm		<mark>April 20, 2020</mark>	<mark>3:30 pm</mark>
21429	MAC 2311-	Calculus I	MW	2:30 pm –	1-235	<mark>Wednesday</mark>	<mark>1:00 pm –</mark>
	004			4:50 pm		<mark>April 22, 2020</mark>	<mark>3:30 pm</mark>
22314	MAP 2302-	Differential	MW	5:30 pm –	3-212	<mark>Wednesday</mark>	<mark>5:00 pm –</mark>
	002	Equations		6:45 pm		<mark>April 22, 2020</mark>	<mark>7:30 pm</mark>
22068	MAC 1105-	College Algebra	TR	10:00 am –	7-216	Tuesday	<mark>10:00 am –</mark>
	006			11:15 am		<mark>April 21<i>,</i> 2020</mark>	<mark>12:30 pm</mark>
20137	MAP 2302-	Differential	TR	11:30 am –	7-231	Thursday	<mark>10:00 am –</mark>
	001	Equations		12:45 pm		<mark>April 23, 2020</mark>	<mark>12:30 pm</mark>
22064	MAC 1105-	College Algebra	TR	2:30 pm -	3-212	Thursday	<mark>1:00 pm –</mark>
	002			3:45 pm		<mark>April 23, 2020</mark>	<mark>3:30 pm</mark>

NOTE: Your Final Exam may be at different time than your regular class time.

Make-Up Policy

You are expected to participate in all classroom activities (including exams and quizzes of all types) regardess of whether the activities are scheduled or unscheduled. There are **NO make-up examinations, quizzes or projects** unless you are absent due to a legitimate reason approved by the instructor or a valid emergency circumstance such as an illness or death in the family. Obligations to work, child care, traffic conditions, or being sick with no documentation are not considered excused absences and make-up examinations due to these reasons will NOT be permitted! All make-up examinations should be completed immediately upon return to class. If your absence is unexcused or timely notice was not given, you will receive a zero for any missed tests, quizzes, or in-class assignments.

Withdrawal

The deadline for withdrawing from class with a grade of "W," if you are eligible to do so, is March 20, 2020 (11:59 PM on atlas) for Spring Semester, 2019. During the first or second attempt in the same course at Valencia, if you withdraw or are withdrawn by the professor, before the Withdrawal Deadline, you will receive a W (Withdrawn). You will not receive credit for the course, and the W will not be calculated in your grade point average; however, the enrollment will count in your total attempts in the specific course. If you do not withdraw prior to the Withdrawal Deadline or fail to take the required final examination, the professor will assign your grade based on your performance in the course at the time of withdrawal.

Per Valencia Policy 4-07 (Academic Progress, Course Attendance and Grades, and Withdrawals), a student who withdraws from class before the withdrawal deadline will receive a grade of "W." A student is not permitted to withdraw after the withdrawal deadline. A faculty member MAY withdraw a student up to the beginning of the final exam period for violation of the class attendance policy. A student who is withdrawn by faculty for violation of the class attendance policy will receive a grade of "W." Any student who withdraws or is withdrawn from a class during a third or subsequent attempt in the same course will be assigned a grade of "F." For a complete policy and procedure overview on Valencia Policy 4-07 please go to: http://valenciacc.edu/generalcounsel/policydetail.cfm?RecordID=75

Academic Honesty

Plagiarism or cheating of any form will be cause for **immediate removal from this class, a course grade of F and referral of this incident to the Dean of Student Affairs/Mathematics**. Cheating is defined by any behavior that can be construed as cheating such as blatant cheating, looking at somebody's paper, talking or whispering during a test, copying (including all take-home activities, examinations, and/or homework assignments), use of a cellular phone or other electronic device without prior permission, suspicious behavior, or failing to follow appropriate procedures for taking a test as prescribed by the instructor. SIMPLY stated, cheating will not be tolerated.

Special Accommodations

Students with disabilities who qualify for academic accommodations must provide a letter 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 (West Campus SSB 102, extension 1523).

Student Resource for Assistance

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.

Conduct

- You are encouraged to actively participate and ask pertinent questions during class. Courtesy will be observed at all times.
- Your attitude will greatly affect your ability to succeed in this course. It will also affect your classmates' attitudes should you choose to participate in class discussions. Always consider this carefully before you speak or act.
- Cell phones, pagers, or other devices that are audible are not permitted to be on during class. Texting is not permitted during class. Unplug yourself and make the most of class time! Personal electronic devices disrupt your learning as well as the learning of other students.
- To create a good environment for learning, avoid sidebar conversations with other students while work is being done at the board, rude comments or remarks, raised voices or confrontational comments. Follow instructions given by your instructor, who serves as your classroom manager.
- If your actions in class are deemed by your instructor to be disruptive, you will be asked to leave class immediately. If you are ever asked to leave class, you may be permitted to return to future class meetings after consultation with your instructor outside of class. You may also be required to arrange a conference with another college official before a determination is made on whether you will be attending class again.

Resources

- Your instructor is interested in your success in this class. Please ask questions regularly!
- Many students of mathematics find it extremely helpful to form study groups with their classmates. This practice is highly recommended.
- The West Campus Math Center is being renovated this term. During the renovation, learning support for mathematics can be found in

7-240 (required Open Lab and Math Connections),

7-240 (materials for check-out with your VCC identification card), and 7-240

(walk-in tutoring for mathematics).

These facilities are open from 8:00 a.m. to 8:00 p.m. Monday through Thursday, 8:00 a.m. to 12:00 p.m. Friday, from 10:00 a.m. to 3:00 p.m. Saturday.

- Peer tutors in 7-240 are available for walk-in assistance, no appointment necessary. Tutors have been trained to use techniques that help you become an independent learner. They have been instructed to guide you through the problem solving process and utilize the materials you have available through your course. They may help you by asking open-ended questions, walking you through examples in your text, or (hopefully on rare occasions) using pencil and paper to show you how to solve a problem similar to one you are working on. Since the tutors' goal is to help you become an independent learner, they will let you do the work as much as possible. The learning process requires a regular investment of your time, and patience is the key.
- If you purchased a new text, you received a Student Access Kit for the MyMathLab software with it. It is also possible to purchase a student access kit for MyMathLab separately in the bookstore or online. Please take your MyMathLab Student Access Kit with you to your Open Lab orientation. You will use the software is optional for this course.

Valencia Community College wants graduates to possess and demonstrate a set of global competencies including the ability to **THINK, COMMUNICATE, VALUE AND ACT**. In an effort to help you acquire and improve your ability to demonstrate the competencies this course will include activities that require you to:

- 1. Think clearly, critically and creatively.
- 2. Communicate with others in written and verbal form.
- 3. Make reasoned value judgments and responsible commitments.
- 4. Act purposefully, reflectively and responsibly.

Other policies & Information:

Computer/Equipment Use Policy: This course relies on the use of technology to aid in your learning. You are expected to check Blackboard and your e-mail at least once before class to ensure that you have the most current information. Computers are available on campus if you do not own one. If you experience any technical issues, call the support number below.

 Blackboard Help Desk:
 (407)-582-5600 or
 onlinehelp@valenciacollege.edu

 OIT Help Desk:
 (407)-582-5554

E-mail Communication Policy: The instructor will only correspond with you through your atlas e-mail only. Students are expected to check their atlas e-mail daily. The instructor may send updates, announcements, changes, etc. to your atlas e-mail. Students are responsible for all messages sent to your atlas e-mail by the instructor. The instructor will not correspond with any other e-mail account, PDA, or cell phone. All e-mail correspondence must originate from your Valencia account. Grades are discussed by appointment only or through your atlas e-mail. All e-mail by students and the instructor should be respectful and professional. Students should identify their name, class that they are in, and a complete message using respectful language, complete sentences, and proper grammar. A subject line is mandatory.

Valencia ID card: Your student ID card can be obtained in the Student Development office on any Campus once you have registered and paid for your classes. You will need your student ID card to access campus services such as the Library and Testing Center. The first student ID card is free. There is a \$5 fee for a

replacement card. Student IDs can be used for library access, testing purposes and discounts in the community.

Changes in the syllabus, schedule, and/or assignments for this class may be made at the discretion of your instructor.

List of Topics to be Covered this Term for MAP 2302

CHAPTER 1- Introduction to Differential Equations

CHAPTER 2- First Order Differential Equations

- CHAPTER 3- Modeling with First Order Differential Equations
- CHAPTER 4- Higher Order Differential Equations
- CHAPTER 5- Modeling with Higher Order Differential Equations
- CHAPTER 6- Series Solutions of Linear Equations (if time permits)

CHAPTER 7- The Laplace Transform

MAP 2302 Differential Equations Assignments (11th Edition)

Section	Homework Assignment Questions
Chapter 1	CHAPTER 1- Introduction to Differential Equations
1.1	1 – 31 odd, 32
1.2	1-6, 11-14, 17 - 24
Chapter 2	CHAPTER 2- First Order Differential Equations
2.1	1-4, 21-28, 40, 41, 42
2.2	1 – 33 odd
2.3	1 – 35 odd
2.4	1 – 13 odd, 21, 23
2.5	1 – 29 odd (Bernulli)
2.6	Overview only – no assignments
	Exam on 1.1, 1.2, 2.1 – 2.6
Chapter 3	CHAPTER 3- Modeling with First Order Differential Equations
3.1	1-7 odd, 21 – 29
3.2	1-3 odd, 21, 32
Chapter 4	CHAPTER 4- Higher Order Differential Equations
4.1	1-5 odd, 13, 14,15, 15 – 30, 31
4.2	1 – 39 odd
4.3	1 – 39 odd
4.4	1 – 39 odd
4.6	1 – 21, 25, 27
4.7	1-29 odd
	Exam on 3.1, 3.2, 4.1 – 4.7
Chapter 5	CHAPTER 5- Modeling with Higher Order Differential Equations

Chapter 6	CHAPTER 6- Series Solutions of Linear Equations (if time permits)
6.1	1 - 16, 23, 24, 25 - 34
6.2	1-6, 7-17 odd, 19-22, 23, 24
Chapter 7	CHAPTER 7- The Laplace Transform
7.1	1 – 39 odd
7.2	1 – 39 odd
7.3	1 – 29 odd, 37 – 48, 55 - 61
7.4	1 - 8, 9 - 12, 19 - 30, 31 - 34
	<i>Exam on all parts of Chapters 5, 6, and 7 that we have covered during class.</i>