INSTRUCTOR: Boris D. X. NGUYEN
The name Nguyen is pronounced, in Vietnamese, much like the word “when” in English.

OFFICE: located in building 7, room 108-B

PHONE: 407-582-1649 (Office)

E-MAIL: bnguyen@valenciacollege.edu

OFFICE HOURS:
M & W: 1:00 pm – 2:00 pm in 7-108
T & R: 1:30 pm – 2:30 pm in 7-108
W: 7:00 pm – 10:00 pm Online: LINE APP / Blackboard
F: 10:00 am – 1:00 pm in 7-108

At times office hours will be changed in order for the instructor to attend meetings or conferences. Such changes will be announced in class and/or posted by the office door.

TEXT: Differential Equations with Modeling Applications, tenth edition, by Dennis G. Zill
Available as an electronic version online through WebAssign:
Use the class key valenciacollege 0207 8189

RESOURCES: The instructor’s office is always a great place to get advices, support and extra help!
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 located in 7-240. It offers great avenues for learning and securing extra help such as walk-in tutoring for mathematics.

TOOLS: A graphing calculator (TI 84 PLUS is recommended) can be used on homework and during tests. The use of the TI 89, TI 92 and Voyage 200 is not allowed on tests. On most problems on the tests and the final analytical work is also required, even though one can use the graphing capabilities of a TI 84 to check answers.

EVALUATION:

<table>
<thead>
<tr>
<th>Evaluation Item</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three in class tests</td>
<td>200 x 3 = 600</td>
</tr>
<tr>
<td>Ten Quizzes</td>
<td>200 x 10 = 2000</td>
</tr>
<tr>
<td>Final test</td>
<td>200</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>1000</td>
</tr>
</tbody>
</table>

GRADING SCALE: The final grade for the class is obtained by dividing the total number of points earned by 10, to obtain a number on a scale of 100 points.
90 to 100 points yields an A; 80 to 89 points yields a B; 70 to 79 points yields a C; 60 to 69 points yields a D; any score below 60 points yields an F.
ACADEMIC HONESTY:
Students are expected to act in compliance with the college policy regarding academic honesty. Failure to comply will result in a grade of zero. In some cases, an automatic grade of F may be assigned. Expulsion from the college may also be sought by the instructor depending on the offense. Please refer to the Valencia Student Code of Conduct policy for more details on Valencia policies and processes. Cheating on a test or a quiz will result in a grade of zero.

TEST POLICY: All tests will be administered in the classroom. Tests will usually run for one full class session and it is important for people to arrive on time. Only students who have official paperwork from the Office for Students with Disabilities will be allowed to take tests in the testing center and be given special time arrangements. Make-up tests are not given, with the exceptions of cases of dire emergency as long as adequate proof is turned in before taking the make-up test. The instructor’s definition of an emergency prevails. All make-up tests will be taken in the testing center and students are required to show proper identification (Student ID or Driver License). Also, the final test must be taken on time in the classroom and there is absolutely no make-up for the final test.

ATTENDANCE: Attending class meetings and arriving on time are two very important things. Failure to come to class on time will result in an automatic withdrawal from the course. Behavior that is disruptive to the learning environment will result in dismissal from the classroom and possible withdrawal from the course. You are expected to attend every class meeting, unless an illness or emergency makes it impossible for you to do so. Absences are excused 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 cannot 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. Missing the equivalent of a week of classes will result in withdrawal.

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 to class late or leave the classroom while class is in session. Students that fail to arrive on time, leave class early, fail to show up repeatedly, or disrupt class, may be withdrawn from the class roll.

COUNSELING: 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, as well as 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.

WITHDRAWAL DEADLINE: Friday 11/10/2017 – Deadline for a W grade.
Please, do keep in mind that to obtain a W you must withdraw from the course by Friday November 10, 2017. You must be eligible to do so: for instance, if you are retaking the course for the third time, the W would turn into an F automatically. A student is not permitted to withdraw after the withdrawal deadline. Absences past the withdrawal deadline will result in an F.

FINAL TEST: In the classroom, Wednesday December 13, 2017 from 10:00 a.m. to 12:30 p.m.

CHANGES: Changes to the syllabus might be made during the semester, at the discretion of the instructor. Such changes, if they were to occur, would be announced in the classroom.
TOPICS COVERED

- Initial-Value Problems
- Direction Fields, Autonomous D.E.s
- Separable Equations
- Linear Equations
- Exact Equations
- Bernoulli D.E.s
- Numerical Methods
- Dirac Delta Function
- Linear Models
- Nonlinear Models
- Modeling with Systems of D.E.s
- Reduction of Order
- Homogeneous Equations
- Undetermined Coefficients
- Variation of Parameters
- Cauchy-Euler Equations
- Systems of Linear D.E.s
- Spring/Mass Systems
- Free damped Motion
- Series Circuit
- Power Series Solutions
- Laplace Transforms

DIFFERENTIAL EQUATIONS

SECTIONS HOMEWORK ASSIGNMENT WEEK

1.1 1-31 odd and 32 1
1.2 1-6, 11-14, 17-24 1
1.3 1-23 odd 1
2.1 1-4, 21-28, 38, 40, 41, 42 2
2.2 1-33 odd 2
2.3 1-35 odd 2
2.4 1-13 odd, 21, 23 3
2.5 1-29 odd 3
2.6 1-13 odd 3

1.1, 1.2 and 2.1-2.6 TEST 1 3

3.1 1-7 odd, 21-29 4
3.2 1-3, 21, 22 4
4.1 1-5 odd, 13, 14, 15-30, 31-36 5
4.2 1-15 odd, 17-20 6
4.3 1-39 odd 6
4.4 1-39 odd 7
4.6 1-21, 25, 27 8
4.7 1-29 9
4.8 1-21 odd 10

3.1-3.2 and 4.1-4.8 TEST 2 10

5.1 1-11 odd, 21-33 odd 11
6.1 TBA 11
6.2 TBA 11
7.1 1-39 odd 12
7.2 1-39 odd 12
7.3 1-29 odd, 37-48, 55-61 13
7.4 1-8, 9-12, 19-30, 31-34 14
7.5 1-5 15

6.1, 6.2 and 7.1-7.5 TEST 3 15

Wednesday December 13, 2017 FINAL (10:00 a.m. - 12:30 p.m.) 16