MATH 2214        DIFFERENTIAL EQUATIONS
SPRING 2017

CRN: 15454 MWF 12:20PM-1:10PM in WLH 320
CRN: 15453 MWF 1:25PM-2:15PM in SURGE 104C

INSTRUCTOR:          EUN CHANG
E-MAIL:              changer@vt.edu
OFFICE:              MCB 443
PHONE:               (540)231-8006
OFFICE HOURS:        WED 10:15AM – 11:45AM
                      WED 2:30PM – 3:30PM
                      FRI 10:15AM – 11:45AM
                      OR BY APPOINTMENT

COURSE WEBSITE:
https://www.math.vt.edu/courses/math2214/

COURSE CONTENT:
Direction Fields, mathematical modeling and applications (population dynamics, mechanics & resonance), first order linear & non-linear equations, separable equations, multidimensional Euler’s Method, higher order linear non-homogeneous equations, and linear & non-linear systems.

PREREQUISITES:       Math 1114 and Math 1226

COURSE MATERIAL/REQUIRED TEXTBOOK:
Elementary Differential Equations, second edition by Kohler and Johnson

MATH EMPORIUM & MORE TUTORING:
• (FREE TUTORING) The tutoring lab is open 4pm to 9pm Sunday through Thursday. Check for the updated schedule http://www.emporium.vt.edu.
• (FREE TUTORING) The Student Success Center offers individual tutoring by appointment for many subjects.
• Information about private tutoring can be found here.

EVALUATION:          Final grades are determined as follows:

COURSE GRADING:
3 Tests: (Each contributing 20%)              60%
Homework/Online Quizzes/Pop Quizzes/In-class Work/MATLAB 20%
Comprehensive Final Exam                      20%

Final course grades will be assigned as follows: 90% guarantees at least an A-, 80% guarantees at least a B-, 70% guarantees at least a C-, and 60% guarantees at least a D-. The instructor reserves the right to revise the grading criteria as appropriate and will make reasonable attempts to notify students as time permits.
**TESTS/FINAL EXAM:**
- Test dates will be given on the first day of the class and posted on Canvas.
- No make-up tests will be given.
- If you miss a test for legitimate reasons, Class Absence Verification will be done by Dean of Students (http://www.dos.vt.edu/), then your final exam grade will replace the missed test grade.
- **COMMON FINAL EXAM: WEDNESDAY, MAY 10, 2017 7:45AM-9:45AM.**
- The final exam is a required class meeting that will not be rescheduled for discretionary reasons, including conflicts with work schedules and with classes and exams at other colleges. The first half of this is the common time final and the second half is your instructor’s part of the final exam. Room assignments will be posted on Canvas and the course website a week before the finals begin.

**HOMEWORK/ONLINE QUIZZES/POP QUIZZES/IN-CLASS WORK/MATLAB:**
Homework will be collected in the first lecture class of the week. Each week's homework problems will be given in class.
Homework will be checked for completeness, work shown and correctness.

- **GRADING HOMEWORK ASSIGNMENTS:**
  - 0 point: Few problems attempted and / or correct, little or no work shown.
  - 5 points: COMPLETENESS: All problems attempted.
  - 5 points: CORRECTNESS: Two problems will be graded for correctness.
- NO LATE HW WILL BE ACCEPTED!
- NO MAKE-UP QUIZZES WILL BE GIVEN! (YOU MAY OR MAY NOT KNOW THE QUIZ DATES)
- TOTAL four lowest homework/quizzes/in-class work/MATLAB assignments will be dropped.

**HONOR SYSTEM**
The Undergraduate Honor Code pledge that each member of the university community agrees to abide by states: “As a Hokie, I will conduct myself with honor and integrity at all times. I will not lie, cheat, or steal, nor will I accept the actions of those who do.”

Students enrolled in this course are responsible for abiding by the Honor Code. A student who has doubts about how the Honor Code applies to any assignment is responsible for obtaining specific guidance from the course instructor before submitting the assignment for evaluation. Ignorance of the rules does not exclude any member of the University community from the requirements and expectations of the Honor Code.

All assignments, tests, and quizzes submitted will be considered graded work and must be completed on an individual basis. Homework may be discussed with other students. However, in writing up an assignment to be handed in, each student works alone and certifies that what is written accurately represents the student’s own understanding of the material expressed in the student’s own words. In working, or in preparing to work, homework problems, students may not consult partial or complete solutions of the problems that have been prepared by anyone else. The prohibited solutions include, but are not limited to, solutions by current or former teachers or students at VT or elsewhere, whether these solutions are posted on the web or available from other sources. More info is here: http://www.honorsystem.vt.edu/HSConstitution/honor_code_manual_and_policy.html
**AMERICANS WITH DISABILITIES ACT (ADA):**
In accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990, if you have a disability or think you have a disability, we ask that you please contact the Disability Service office.
Location:
Lavery Hall, STE 310, Virginia Tech. 430 Old Turner Street. Blacksburg, VA 24061
Telephone: 540-231-3788. Email: ssd@vt.edu

**CLASSROOM COURTESY:**
You and your classmates are entitled to learn in an atmosphere of mutual respect and freedom from distractions and disturbances.
- Students are expected to arrive on time and stay until class is dismissed.
- Talking to classmates during class, aside from group assignments, and cell phone use are disruptive to those around you. If you engage in such behaviors, I may ask you to leave.
- Laptops used as a tablet PC are permitted provided they are used in the flat-on-the-desk position. Open laptops are not allowed.
- **Cell phones must be turned off before you enter the classroom.**

**OTHER IMPORTANT DATES:**

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<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>Jan 17</td>
<td>Classes Begin</td>
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<td>Mar 4</td>
<td>Spring Break Begins</td>
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<td>Mar 12</td>
<td>Spring Break Ends</td>
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<tr>
<td>May 3</td>
<td>Classes End</td>
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<tr>
<td>May 4</td>
<td>Reading Day</td>
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<td>May 6</td>
<td>Final Exams Begin</td>
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<td>May 10</td>
<td>MATH 2214 COMMON FINAL EXAM</td>
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**BUDDY SYSTEM**

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<th>NAME</th>
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**YOU ARE RESPONSIBLE FOR MISSED CLASSES AND ANNOUNCEMENTS.**