| Text | Differential Equations, $3^{r d}$ ed., P. Blanchard, R. Devaney and G. Hall, Thomson Brooks/Cole, Boston University, 2006. |
| :---: | :---: |
| Course <br> Description | Classical techniques for first and higher order equations and systems of equations. Laplace transforms. Phase plane and stability analysis of nonlinear equations and systems. Applications to physics, mechanics, electrical engineering, and environmental sciences. Prerequisites: MATH213 or MATH223 |
| Instructor <br> Info | Instructor: Scott Strong Phone: 303.384.2446 <br> Office: Chauvenet Hall 278 Email: math225.field2008@gmail.com <br> Office Hours: MTWR 12:00pm-1:00pm |
| Grading | Exams (5 @ 10\% each): $50 \%$  $90-100 \%$ A <br> Quizzes (6 @ 5\% each): $30 \%$  $80-89 \%$ B <br> Discretionary: $20 \%$  $70-79 \%$ C <br> Total: $100 \%$  $60-69 \%$ D <br>    Below $60 \%$ F |
| Important Dates | First Day of Class May 12 <br> Last Day to Drop Without a W May 16 <br> Memorial Day May 26 <br> Last Day To Withdraw June 6 <br> End of Class June 19 |

## Academic Honor Code

I pledge to uphold the high standards of academic ethics and integrity expressed by the Colorado School of Mines Student Honor Code by which I am bound. In particular, 'I will not misrepresent the work of others as my own, nor will I give or receive unauthorized assistance in the performance of academic coursework.' I understand that my instructor will report any infraction of academic integrity to the Department Head and that any such matter will be investigated and prosecuted fully.

## Tentative Course Schedule

MAY

| Monday | Tuesday | Wednesday | Thursday |
| :---: | :---: | :---: | :---: |
| 12 | 13 | 14 | 15 |
| 1.1-4, 6, 12, 15, 21 | 1.3-1, 7, 11, 13, 15, 17 | 1.5-3, 6, 9, 10, 12 |  |
| 1.2-1, 2, 9, 15, 19, 28, 35 | 1.4-2, 4, 13 | $\begin{aligned} & \mathbf{1 . 6}-2,9,11,14,21,25 \\ & 29,30,33,34,37 \end{aligned}$ | 1.7-1, 3, 9 |
| 19 | 20 | 21 | 22 |
| 1.8-2, 3, 7, 10, 13 | $\begin{aligned} & \mathbf{2 . 2}-2,4,9,11,13,17,19 \\ & 21,23,27 \end{aligned}$ | 2.4-1, 3 | Exam I-50 Minutes |
| $\begin{aligned} & \mathbf{2 . 1}-1,2,3,4,10,15,20, \\ & 22 \end{aligned}$ | 2.3-2, 4, 5, 15, 18 | 2.5-3, 4, 5 | $\begin{aligned} & \mathbf{3 . 1}-6,9,17,21,25,26, \\ & 27 \end{aligned}$ |
| 26 | 27 | 28 | 29 |
| Memorial Day - No Class | $\begin{aligned} & 3.2-1,4,7,10,12,13,15 \\ & 18,21,24 \end{aligned}$ | $\begin{aligned} & 3.4-2,3,6,7,9,12,14, \\ & 15,22,23 \end{aligned}$ | Exam II - 50 Minutes |
|  | $\begin{aligned} & \mathbf{3 . 3 - 1}, 5,8,10,11,13,16 \\ & 20,21,24 \end{aligned}$ | $\begin{aligned} & \mathbf{3 . 5}-3,4,7,8,11,21,22 \text {, } \\ & 23 \end{aligned}$ | 3.7-2, 3, 5, 9, 11 |

JUNE

| Monday | Tuesday | Wednesday | Thursday |
| :---: | :---: | :---: | :---: |
| 2 | 3 | 4 | 5 |
| $\begin{aligned} & \mathbf{3 . 6}-3,6,9,12,13,14,15 \text {, } \\ & 21,22,23,29,34,38 \end{aligned}$ | 4.1-1, 4, 9, 12, 13, 20, ,21, <br> 31, 37 | 4.3-9, 17, 21 | Exam III-50 Minutes |
| Appendix B-1, 5, 10 | 4.2-1, 8, 9, 12, 13, 17, 19 | $\begin{aligned} & \mathbf{5 . 1}-1,4,7,11,12,17,23, \\ & 24 \end{aligned}$ | 5.1-Continued |
| 9 | 10 | 11 | 12 |
| 5.2-5, 9, 10, 15, 17, 19 | 5.3-1, 2, 9, 10, 11, 13 | 5.4-1, 2, 13, 14 | Exam IV - 50 Minutes |
| 5.2-Continued | 5.3-Continued | 5.4-Continued | 5.6-1, 3, 5 |
| 16 | 17 | 18 | 19 |
| 6.1-1, 3, 9, 13, 15, 23, 25 | $\begin{aligned} & \mathbf{6 . 3 - 3}, 5,15,16,19,27, \\ & 30,31 \end{aligned}$ | 6.5-1, 3, 7, 9 | Exam V - 50 Minutes |
| 6.2-2, 3, 4, 7, 10, 11, 14 | 6.4-1, 3, 4, 7 | 6.5 - Continued |  |

To understand the course material it is absolutely essential that you do as many of the recommended problems as you can find time for. Mathematics is not a spectator sport! The previous listing highlights key material from the text. Solutions to the following problems are on reserve at Arthur Lakes Library. The software associated with the text can be found at: http://alamode.mines.edu/bdh.html

