$\frac{M379 \text{ Spring } 2000}{\text{Syllabus}}$

INSTRUCTOR: Dr. Hundley OFFICE: Olin 234 OFFICE HOURS: T-F, 10-11AM. If you can't make these times, feel free to schedule a different time. You may also stop by anytime my office door is open, or email me. OFFICE PHONE: 527-5151 EMAIL: hundledr@whitman.edu

- 1. COURSE INFO: Math 379, Mon: 10-11AM, WF: 11-12
- TEXT: Elementary Differential Equations, Sixth Edition. Boyce, W. E. and DiPrima, R. C., 1997.

NOTE: You can also use the version with Boundary Value Problems, same edition. We aren't using the full text this semester because the publisher is putting together a new edition. The only difference between the sixth edition books is the addition of more material at the end, which we won't be covering. This is a classic textbook in the field of ODEs, so you'll want to keep it on your shelf far after our class!

The first third of the course will be over first order differential equations, chapters 2 and 3. Much of chapter two will be review from Calculus IV, so we will be going through it rather quickly.

The second third of the course will be over Laplace Transforms (Chapter 6) and systems of differential equations (Chapter 7). Chapters 7 and 9 will use a lot of what we did in Linear Algebra.

Finally, we will look at topics from chapters 9 and 5. See the attached preliminary calendar.

- 3. Technological Assistance: Graphing/Programmable calculators are allowed and encouraged. Calculators that can perform symbolic algebra will *not* be allowed on exams. We will be using MAPLE periodically to help us visualize certain concepts. The relevant commands and descriptions will be provided to you.
- 4. Grading Criteria.
 - Exams. There will be two exams (February 25 and April 14), and a Final Exam. The exam dates will not change, so make your plans accordingly. The last exam will be the Final Exam, which we will take at the published time. Exams will make up 65% of the overall class grade.

- Quizzes. There will be a short daily quiz (beginning on Wednesday, January 26th) over the previous day's material. These quizzes cannot be made up, and I will drop the three lowest quiz scores (so you can miss three quizzes with no penalty). Quizzes will make up 15% of your overall class grade.
- Homework. This is the most important aspect of this course, and will account for the remaining 20% of your score. Below are the details for submitting homework:
 - Prepare the starred problems on the attached Schedule.
 - Group work is encouraged, but each member must write up and turn in their own work.
 - Homework will NOT be accepted late.
 - These homework solutions should be clear, precise, and should fully explain your thinking- just as you would write an english paper or a chemistry lab.
 - You may only write on the front of the paper, the left-hand edge should be smooth (No spiral notebook paper!), and it should be stapled.
 - Homework is submitted each Wednesday, covering the previous week's homework. For example, on January 26th, the homework for sections 1.1 and 2.1 will be due.
 - Scoring will be on a scale of 0-4: 4.0=A, 3.0=B, 2.0=C, 1.0=D, 0.0=F.
 - NOTE: I will answer questions from the homework anytime except on the day that it is due.

Grading:

90-100%=A, 80-89%=B, 70-79%=C, 60-69%=D, 59 and below=F

I will use the plus/minus grading only sparingly in those borderline cases.

- 5. Help! I encourage you to come see me. If you can't make it during office hours, either email me if you have short questions, or make an appointment.
- 6. Academic Honesty. Academic standards will be *strictly* adhered to as outlined in the College's policies. This means that cheating will not be tolerated. Looking at another student's exam or quiz (whether or not you mean to copy answers) while taking it will be considered cheating. *Please don't test this policy!* Students caught cheating for the first time will fail the exam or quiz during which the cheating took place, and the Dean of Students will be notified. Continuation of this behavior will lead to an automatic failing grade for the course, and may include other administrative action.