

Winter 2016
Math 377: Differential Equations 2
Bouillon 210, 9:00 - 9:50 MWF,
occasional Wednesdays Bouillon 103

Instructor: Dr. Jim Bisgard

Office: Bouillon 118

Phone: 963-2823

E-mail: bisgardj@cwu.edu

Webpage: <http://www.cwu.edu/~bisgardj/teaching.html>

Office Hours: M-F 10:00 - 10:50, and by appointment.

Course Goals: The goal of the course is to introduce you to the ideas of systems of differential equations: how to use analytic, graphical and/or numerical methods to investigate the solutions of systems of differential equations, as well as how to derive systems differential equations to describe phenomena in different sciences. More precisely, we will study systems of linear first order equations, and how to describe the behavior of their solutions using the language of linear algebra. In addition, we will explain the behavior of nonlinear systems near their equilibria. Finally, we will introduce Laplace transforms and use them to solve differential equations. If time allows, we may cover some topics from the calculus of variations and its application to boundary value problems.

Required Text: Noonburg, Virginia W.;

Ordinary Differential Equations: From Calculus to Dynamical Systems; published by MAA

1 Grades/Exams/Homework

- Grades

Grades will be calculated using the following weighting system:

Exams: 55% total, broken up as follows: 15% for each mid-term and 25% for the final;

Homework: 45%;

and the following scale:

	87 – 89.9 : B+	77 – 79.9 : C+	67 – 69.9 : D+	below 60 : F
93 – 100 : A	83 – 86.9 : B	73 – 76.9 : C	63 – 66.9 : D	
90 – 92.9 : A–	80 – 82.9 : B–	70 – 72.9 : C–	60 – 62.9 : D–	

- Exams

There will be two exams during the course of the quarter, and a final exam. The exams during the quarter will be Friday, January 29 and Friday, February 19. The final exam is cumulative, and will be Monday, March 14 (8 - 10 am).

- Homework

We will have weekly homework assignments. They will be handed out on Wednesday, and be due the following Wednesday **at noon**. To do some of the problems, you might need to use a computer. You may work with your classmates on homework (and in fact, I encourage you to do this!), but you should write your solutions using your own words. In addition, your homework must be neat and legible, and written using complete sentences where appropriate.

- Late Policy

Homework is due at noon on its due date. Homework handed in after that time on its due date will lose 5 points immediately, and 5 more points for every 24 hours after. That means: if you hand in homework at 12:30 on Wednesday, you can earn at most 20 out of 25 on your homework. If you hand in your homework on Thursday at 12:30 pm, you can earn at most 15 out of 25, since over 24 hours will have passed.

2 Important Dates

January 11 - Last Day for Add/Drop

January 29 - Mid-term Exam #1

February 19 - Mid-term Exam #2

February 19 - uncontested withdrawal deadline

March 14 - final exam

3 Legalese/Fine Print

Central Washington University is committed to creating a learning environment that meets the needs of its diverse student body. If you anticipate or experience any barriers to learning, discuss your concerns with the instructor. Students with disabilities should contact Disability Services to discuss a range of options to removing barriers, including accommodations. Student Disability Services is located in Hogue 126. Call (509) 963-2214 or email ds@cwu.edu for more information.