# MTH 267 Differential Equations Syllabus Spring 202410 Week Course 

## INSTRUCTOR INFORMATION

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## INSTRUCTIONAL MATERIALS

Textbook: W. Kohler and L. Johnson, Elementary Differential Equations with Boundary Value Problems, ${ }^{\text {nd }}$ Edition
Calculator: Almost any
Software:
MyOpenMath Online Homework: https://www.myopenmath.com/ Octave (any version) or other software to carry out numerical calculations.
Course ID: 213533
Enrollment key: mth267
GRADING/EVALUATION
A student's final grade is determined through a variety of assessments

| Grading Criteria |  |
| :--- | :--- |
| Introductory Assignments | $2 \%$ |
| MyOpenMath Homework | $13 \%$ |
| MyOpenMath Quizzes | $10 \%$ |
| Three (3) Tests | $55 \%$ |
| Final Exam (Proctored) | $20 \%$ |


| Last date to complete test: |  |
| :--- | :--- |
| Test 1 | March 21 |
| Test 2 | April 11 |
| Test 3 | May 1 |
| Final Exam | May 3 |
|  |  |

Introductory Assignments: You must complete all the introductory assignments by the end of the first week or you will be withdrawn for non-participation in the course. The introductory assignments are

1. The Introductory Quiz in Canvas
2. The Introductory Email
3. The Introductory MyOpenMath Forum Post
4. Entering Answers in MyOpenMath

## Tests.

1. There will be three (3) tests administered through the MyOpenMath homework software.
2. The tests must be taken in a proctored environment such as our testing centers
3. You will have 90 minutes to complete the test.
4. You may bring one $3 \times 5$ index card to the test. Your score will decrease proportional to how much larger than $3 x 5$ your index card is.
5. You may use a calculator but you MAY NOT use any of the symbolic abilities your calculator may have. This includes but is not limited to graphing and solving of equations of any type.
6. You MUST submit all your work that you wrote while you were taking the test. Work should be neat and legible, and problems should be numbered so that I can easily see which work goes with which problem. The work should be complete as if you were solving the question in an inclass environment. It is not "notes" or "scratch work".
7. There will be no make-up tests. Any missed test will receive the score of " 0 ".
8. Tests may be taken early.
9. The average on all tests will count as $55 \%$ of the course grade

Final Exam. There will be one comprehensive final due by the last day of class. The final exam must be taken in a proctored environment such as our testing centers. The testing procedures are the same as for the tests. The final will count as $20 \%$ of the course grade.

## HOMEWORK

Giving your best effort on homework is the single best thing you can do to help you learn mathematics. As such, the homework will be submitted through the MyOpenMath software and will count for a significant portion of the grade. (13\%) The homework is due the day before the test with the same material. There are additional homework problems in the textbook that are not collected for a grade but you are still responsible for knowing how to complete them. Some are duplicated in the software but many are not.

## QUIZZES

There are quizzes in the MyOpenMath software and will count for $10 \%$ of the grade. The quiz questions are very similar to the homework questions but you will not have only 2 attempts to complete them.

## CALCULATOR:

A scientific calculator is recommended. If you own a calculator do not buy a new one. If you do not own a calculator don't spend a lot of money on one. I recommend the TI-30X IIS calculator.

## EMAIL POLICY

If you send me an e-mail always use your NRCC issued email address. Be sure that your email client includes your name in the header. You should always include a descriptive subject line that includes the course number. Please remember to use complete sentences and follow the rules of grammar. The Purdue OWL website (click) has excellent information about creating a professional email. I communicate through email to your NRCC issued address. I WILL NOT be replying to email that does not conform to these requirements. I do reply to email within 24 hours during the week. Weekends may be longer.

## TESTING INFORMATION, Spring 2024

The test problems are similar to those used as examples in lectures, found in MyOpenMath, practiced in classwork, and given in the test topics documents. The number and difficulty of problems is similar to that of tests given to face-to-face classes.

The best way to prepare for tests in this course is to

1. Watch the videos that are in MyOpenMath, pausing to take notes and work examples.
2. Do the homework assignments in MyOpenMath using the resources there for help as needed.
3. Use Similar Question with the homework exercises until notes or outside help are no longer needed to solve the problems successfully.
4. Plan to spend an average of $1-1.5$ hours a day in a semester-long class, $2.5-3.5$ hours a day in a 7 -week class, and $1.5-2.5$ hours a day in a 10 -week class including weekends.

The tests and the final are taken in an NRCC testing center or with an approved proctor.

- Arrive at least 2 hours before the testing center closes and bring a photo ID with your name \& a recent photo on it.
- Bring your own writing utensil and eraser. You may not use a cell phone calculator or a computer calculator.
- You may bring one $3 x 5$ index card to the test. Your score will decrease proportional to how much larger than $3 \times 5$ your index card is.
- The tests are administered through the MyOpenMath homework software. .
- The testing center staff or proctor will provide paper for your work. They will collect your test work when you finish the test. Be sure to write your name on each sheet of paper you use. Be sure to write neatly and number each problem.

All problems on tests and final exam are reviewed by me. I will compare your work to your answer. As I review your hand-written work I make the following adjustments to your exam score.

- Incorrect answers with no work, major errors in the work, work missing steps that cannot be reasonably done in my head, or work using methods inconsistent with the scope of this course receive little or no credit.
- Incorrect answers with complete work showing minor error(s) receive partial credit.
- Correct answers with full support of work receive full credit.
- Correct answers with partial support of work may only receive partial credit.
- Correct answers with no work will receive partial or no credit.

Note: Some problems do not have or need work to be shown. These include multiple-choice and fill-in-the-blank questions.

## MYOPENMATH STUDENT REGISTRATION:

1. Enter https://www.myopenmath.com/ in your Web Browser.

2a. If you already have an account, you can $\log$ on and go to "enroll in a new class".


2b. If you are a new student to the system, register as a new student
myOpenMath
Welcome
Welcome
Student Self Study
Free and Open
Students
Are you a student looking to study mathematics on your own, and want to do exercises with
immediate feedback as you work through a free and open textbook? Then read more about our self
study courses.
Instructors
Are you an instructor who wants to adopt an open textbook, who feels online interactive homework
is valuable, but doesn't want their students to have to pay an additional fee? Then read more about
using MyOpenMath in the classroom.
Getting Started
If you already have an account, you can log on using the box to the right.
If you are a new student to the system, register as a new student
If you are an instructor, you can request an instructor account
3. Enter the course information. Enter your Course ID and Enrollment Key exactly as provided by your instructor (See Page 1) and click "Submit". Your course information should appear. If not, contact your instructor to verify the correct Course ID.

## Enroll in a Course

Select the course you'd like to enroll in

| My teacher gave me a course ID (enter below) |
| :--- |
| Course ID: |
| Enrollment Key: |

Sign Up
4. Verify that you are in the right class by returning the main page.

Elementary Differential Equations with Boundary Value Problems 2E Kohler and Johnson

| Chapter | Section | Homework Problems |
| :--- | :---: | :--- |
| Chapter $\mathbf{1}$ | 1.2 | $4,9,15,16,17,19,23$ |
| $(2$ lessons) | 1.3 | $1,2,4,14-19$ |


| Chapter 2 | 2.01 | $1-10,13,14,15$ |  |
| :--- | :--- | :--- | :---: |
|  | 2.02 | $1,4,6,12,15,18,19,21,26,28,29,32,36,40$ |  |
|  | 2.03 | $1,3,4,11,13,14$ |  |
|  | 2.04 | $5,7,8,13,15$ |  |
|  | 2.05 | $5-8,11$ |  |
|  | 2.06 | $2,5,9,15,27,30$ |  |
|  | 2.09 | $1,2,4,11,12$ |  |
|  | 2.10 | $1,2,3,12$ |  |
| Test 1 | Chapter 1 and 2 |  |  |


| Chapter 3 <br> (13 lessons) | 3.01 | 3,11, 13 |
| :---: | :---: | :---: |
|  | 3.02 | 1, 2, 3, 4, 10, 15, 16, 19 |
|  | 3.03 | 1, 2, 3, 7, 13, 18 |
|  | 3.04 | 1, 2, 3, 6, 9, 14, 15 |
|  | 3.05 | 1, 3, 5, 6, 12, 22, 26 |
|  | 3.06 | 2, 3, 8, 12 |
|  | 3.07 | 1, 6, 10 |
|  | 3.08 | 1, 3, 4, 5, 14, 16, 17, 19, 41 |
|  | 3.09 | 1, 2, 3, 9, 16 |
|  | 3.10 | 1, 4, 7, 13 |
|  | 3.11 | 3, 7, 18, 20 |
|  | 3.12 | 1, 2, 3, 5, 6, 8, 17 |
| Test 2 | Chapter 3 |  |


| Chapter 5 <br> (14 lessons) | 5.01 | $1-4,7,8,11,12,17,19,21,23,35,37,39$ |
| :---: | :---: | :---: |
|  | 5.02 | $1,3,5,7,9,13,15,17,25,26,27,29,39,42,45$ |
|  | 5.03 | 1, 3, 5, 9, 10, 11, 13, 19, 21, 23 |
|  | 5.04 | $1,5,8,10,11,13,14,15,24,25,26$ |
|  | 5.06 | 3, 4, 5, 7 |
|  | 5.07 | 1 (a),(b), 13, 15, 17 |
| Test 3 | Chapter 5 |  |

