Math2A Differential Equations
Summer 2025, Section 20, CRN 13843

INSTRUCTOR INFORMATION

Instructor	MISAKO VAN DER POEL
Email	**van_der_poelmisako@fhda.edu** Please following the format of the subject line stated below. **"Math 2A-20: _____"** You write your inquiry after the colon.
Class Hour	**Monday - Thursday: 5:30pm–7:45pm at S57**

For this course, **all you need to do is**:
1. **Attending** all classes, joining on time, and staying for the entire class.
2. Reading Study sheet and Power Point posted in Canvas:
3. Completing Homework assignments in **MyOpenMath**.
4. Taking two Exams and Final Exam at our classroom.

For Assignments, you need to:
1. Upload your signed **student contract** in Canvas "**Assignments**" by July 6.
2. Complete **homework assignments** in **MyOpenMath.**
3. Take two **exams** and **final exam** in class**.**
4. Upload your completed **score sheet** in Canvas "**Assignments**" by Aug 6.

You are expected to attend all classes and check our Canvas page to see announcements and week module regularly.

PREREQUISITES
MATH 1D or MATH 1DH (with a grade of C or better).

MATERIALS (Cost free materials)
- A First Course in Differential Equations with Modelling Applications, 11th edition, by Zill
- Elementary Differential Equations with Boundary Values Problems by William Trench
- Use of **MyOpenMath is required** to complete homework.

CALCULATORS
The TI-83, TI-83 plus, TI-84, or TI-84 plus are recommended for the students.
NO calculator is allowed for Final Exam.
Free online graphing tool such as https://www.desmos.com/ or https://www.wolframalpha.com/ .

CANVAS
You are expected to check our Canvas page frequently to see
- **Modules:** A new module will be created every week, and all the lectures and the assignments will be listed in each module.
- **Files:** Formula Sheets or any documents will be posted in the Files tab.
- **Announcements:** Emergencies, date change, change of plans, and etc.

READING and WATCHING VIDEOS
In general, you should do the assigned reading section or watching video before the topics come up in class or in the homework. Throughout the quarter, I'll always assume that you've done all of the reading section or watching video.

ALL ASSIGNMENTS

Late Submission = Zero Credit

Regardless of why you missed it**;**

- **Late submissions are not acceptable**, and there is **no exception**.
- **Do not ask for any extensions**.
- Submission of each homework and any assignment is due at **11:59pm** on each due date.

HOMEWORK

- Homework will be assigned in MyOpenMath weekly and **no late work** will be accepted.
- You will have at most 3 versions of each problem and three attempts are allowed for each problem . (This means that you will have at most 9 attempts on each homework problem.)
- **No extensions** will be granted.
- **Three homework assignments** with lowest percentage will be **dropped**.
- Submissions are due at **11:59pm** on each due date.

To create an account in MyOpenMath follow these steps:

- Click here: https://www.myopenmath.com/
- Click "Register as a new student"
- Course Name: Math2A-20 Summer 2025
- Use Course ID: **279103**
- Use Enrollment Key: **da2a20**

EXAMS

- There will be **two** exams (**120 min**-exams) in class.
- Each exam is worth **150 points**.
- All the exams are **closed-book.**
- You may use **one 8.5 X 11 inch sheet of handwritten notes (one side**).
- **NO calculator** is allowed.
- **NO phones**, and **other aids** are allowed.
- There are **no dropped exams.**
- If the percentage of the lowest of your exam scores is lower than that of your final exam score, then the **percentage** of the lowest exam will be replaced by that of your final exam. (Note that the final exam score will NOT be replaced in this manner).

Missed Exam: There are **no make-up exams**, regardless of why you missed it**.** If you are unable to take the exam at the scheduled time due to illness or an emergency, then your percentage from the final exam will be used to compute your score for the missed exam. If a second exam is missed, you will get a zero.

FINAL EXAMS

- There will be a mandatory comprehensive final exam worth **200 points**.
- Final exam must be taken on August 7, Thursday at 5:30pm-7:30pm.
- The final will cover all the material discussed during the quarter.
- Missing the final will result in a grade of "F" for the course.
- It is **closed book**.
- You may use **one 8.5 X 11 inch sheet of handwritten notes (both sides**).
- **NO calculator** is allowed.
- **NO phones**, and **other aids** are allowed.
- There are **no make-up final exams**, regardless of why you missed it**.**

GRADES

Your grade will be based upon the total points earned, according to the following:

Homework-MyOpenMath	100 pts
Two Exams (150 pts each)	300 pts
Final Exam (200 pts)	200 pts
Total	**600 pts**

Points		Percentage	Points		Percentage
558 – 600	**A**	93%-100%	408 – 431	**C**	68%-71.9%
540 – 557	**A-**	90%-92.9%	390 – 407	**C-**	65%-67.9%
510 – 539	**B+**	85%-89.9%	372 – 389	**D+**	62%-64.9%
480 – 509	**B**	80%-84.9%	348 – 371	**D**	58%-61.9%
450 – 479	**B-**	75%-79.9%	330 – 347	**D-**	55%-57.9%
432 – 419	**C+**	72%-74.9%	Below 330	**F**	Below 55%

TIME COMMITMENT

The De Anza College catalog advises students to do at least two hours studying outside of class for each credit hour. That means you should be spending at least four and one half hours on each homework assignment (reviewing the notes, reading the textbook, doing the homework problems, watching videos related to the course material, etc.).

STUDENT RESPONSIBILITIES

1. It is your responsibility to keep up with the material even if you miss class.
   Note: I will not answer any Math questions over email.
2. Students are responsible for any material covered and any announcements made in their Absence. It is your responsibility to find and use all materials posted in CANVAS.
3. You are expected to attend all classes. If you miss class, please send me an email explaining the reason.
4. It is your responsibility to submit all assignments on time.
   Note: There are no make-ups and no extensions will be granted.
5. If you plan on dropping the class, it is your responsibility to use "MyPortal" online, or contact Admissions and Records office.
6. It is your responsibility to record all the scores you have earned, using a "Score Sheet."
7. Please type "**Math2A-20**" in the subject line when you contact me by email.
   Your email will not be read without the course and section number in the subject line.

TUTORIAL HELP

- **SSC tutoring links and schedules:** go to the SSC homepage and click on the yellow link to add yourself to **SSC Resources Canvas**. Once there, click on Modules then the SSC area for your course. https://www.deanza.edu/studentsuccess/
- **Support for online learning:** If you'd like to speak with someone about motivation and organization strategies for online classes, we encourage you to talk with a peer tutor or SSC staff member. We get it and are going through the same things, so let's support each other!
- **Need after-hours or weekend tutoring?** See the Online Tutoring page for information about NetTutor (via Canvas) or Smarthinking (via MyPortal).

ACADEMIC MISCONDUCT

Academic dishonesty will not be tolerated. If a student is found cheating on an exam, plagiarizing on writing assignments, or violating other codes of academic integrity, he or she will receive a failing grade for the course and may be reported to the college for an appropriate action. See section on Academic integrity in your current schedule of classes catalog.
Please refer to https://www.deanza.edu/policies/academic_integrity.html

DISABILITY SUPPORT SERVICES

For information or questions about eligibility, support services or accommodations to disability (physical or learning disability) see contacts below:
Disability Support Service (DSS): Student Services Building (408) 864-8753;TTY (408) 864-8748
Educational Diagnostic Center (EDC): Learning Center West 110; (408) 864-8839
Special Education Division: 864-8407; www.deanza.edu/specialed
The application process can be found here: https://www.deanza.edu/dsps/dss/applynow.html

SUMMER 2025 **Math 2A Tentative Course Schedule**

Week 1 **Jun30 – July3**	Introduction Section 1.1: Definitions and Terminology 2 Section 1.2: Initial-Value Problems 13 Section 2.1: Solution Curves Without a Solution 36 Section 2.2: Separable Equations 46 Section 2.3: Linear Equations 54
Week 2 **July 7 – 10**	Section 2.4: Exact Equations 63 Section 2.5: Solutions by Substitutions 71 Section 3.1: Linear Models 84 Section 3.2: Nonlinear Models 95 Section 3.3: Modeling with Systems of First-Order DEs 106
Week 3 **July 14 - 17**	**Exam 1 (Ch 1, 2 & 3)** on **July 14 (5:30pm-7:30pm)** Section 4.1: Preliminary Theory Linear Equations 117 Section 4.2: Reduction of Order 129 Section 4.3: Homogeneous Linear Equations with Constant Coefficients 132 Section 4.4: Undetermined Coefficients-Superposition Approach 139
Week 4 **July 21 – 24**	Section 4.5: Undetermined Coefficients-Annihilator Approach 149 Section 4.6: Variation of Parameters 156 Section 4.7: Cauchy-Euler Equations 162 Section 4.9: Solving Systems of Linear DEs by Elimination 180 Section 4.10: Nonlinear Differential Equations 185
Week 5 **July 24 – 31**	**Exam 2 (Ch 4)** on **July 24 (5:30pm-7:30pm)** Section 5.1: Linear Models: Initial-Value Problems 193 Section 6.1: Review of Power Series 232 Section 6.2: Solutions About Ordinary Points 238 Section 7.1: Definition of the Laplace Transform 274 Section 7.2: Inverse Transforms and Transforms of Derivatives 281
Week 6 **Aug 4 -7**	Section 7.3: Operational Properties I 289 Section 7.4: Operational Properties II 301 Section 7.5: The Dirac Delta Function 312 **Final Exam** on **Aug 7** at **5:30pm – 7:30pm**

IMPORTANT DAYS TO REMEMBER

Sunday July 6	Last day to add quarter-length classes
Sunday July 6	Last day to drop .

Student Learning Outcome(s):

- Construct and evaluate differential equation models to solve application problems.
- Classify, solve and analyze differential equation problems by applying appropriate techniques and theory.

Office Hours: