Advanced Engineering Mathematics (MATH 271D) **Spring 2019**
Time: Tu/Th 8:30–9:45 AM **Place**: Aiken 110

Professor James Bagrow
Office: 206 Farrell Hall, Trinity Campus, 210 Colchester Ave.
Email: james.bagrow@uvm.edu

Office Hours: Wednesdays 8:30–11:30 AM, or by appointment.
Course website: http://bagrow.com/teaching/MATH271_S2019/
Textbook: Zill, *Advanced Engineering Mathematics*, 6e.

Topics:

- Introduction to Differential Equations (Chapter 1)
- First Order Differential Equations (Chapter 2)
- Linear Second Order Equations (Chapter 3)
- The Laplace Transform (Chapter 4)
- Matrices and Systems of Linear Equations (Chapter 8)
- Determinants (Chapter 8)
- Eigenvalues and Diagonalization (Chapter 8)
- Systems of Linear Differential Equations (Chapter 10)

Grades: There will be six graded homework assignments (15%), six quizzes (20%; the lowest quiz grade will be dropped), two midterm exams (20% each) and a final exam (25%).

- Homework will be assigned for each lecture. Half (approximately) of these homework assignments will be collected and graded; in-class quizzes will be based on the other half (see class calendar). All assignments are expected to be neatly written, well organized, and include your name; otherwise, assignments may be returned ungraded.

- **Late assignments** will be marked off 10% for every calendar day past due.

Remarks:

- Please refrain from using **electronic devices** (smartphones, tablets, laptops, etc.) in class. (Let me know if you require any assistive devices).

- It is **crucial** to do the homework assignments to prepare for the quizzes and exams.

- If you **miss an exam** without a valid reason you will be assigned a grade of zero. You must notify the instructor prior to the exam if a problem occurs. Missing an exam without prior contact and instructor's approval, even for a valid reason, will incur a severe grading penalty. Also, you must make arrangements immediately to make up the missed test. If you do not take the make-up test within a week, you will receive a zero as a score.

- The course Blackboard page will be used sparingly to convey grades and share files.

- I may convey important information to you via your UVM email account. If you do not use your uvm.edu account, please have mail from this account forwarded to an account you check frequently.

- When emailing me, please include **MATH 271D** in the subject line.

- Offenses against **academic integrity** are any acts which would have the effect of unfairly promoting or enhancing one's academic standing within the entire community of learners. Such acts are serious offenses, which insult the integrity of the entire academic community of the University. Any suspected violations of the policy will not be tolerated and all allegations will be forwarded to the Center for Student Ethics & Standards.

- In keeping with University policy, any student with a documented disability interested in utilizing accommodations should contact SAS, the office of Disability Services on campus. SAS works with students and faculty in an interactive process to explore reasonable and appropriate accommodations, which are communicated to faculty in an accommodation letter. All students are strongly encouraged to meet with their faculty to discuss the accommodations they plan to use in each course. A student's accommodation letter lists those accommodations that will not be implemented until the student meets with their faculty to create a plan. Contact SAS: A170 Living/Learning Center; 802-656-7753; access@uvm.edu; or https://www.uvm.edu/academicsuccess/student_accessibility_services

- Religious Holidays: Students have the right to practice the religion of their choice. If you need to miss class to observe a religious holiday, please submit the dates of your absence to me in writing by the end of the second full week of classes. You will be permitted to make up work within a mutually agreed-upon time.

Tentative Class Calendar:

		S	M	T	W	R	F	S	
JANUARY				1	2	3	4	5	
		6	7	8	9	10	11	12	
	01	13	14	15	16	17	18	19	-
	02	20	21	22	23	24	25	26	HW1 due Jan-22
FEBRUARY	03	27	28	29	30	31	1	2	Q1 on Jan-29 (HW2)
	04	3	4	5	6	7	8	9	HW3 due Feb-5
	05	10	11	12	13	14	15	16	Q2 on Feb-12 (HW4)
	06	17	18	19	20	21	22	23	**Exam 1 on Feb 21** No HW Feb-19
MARCH	07	24	25	26	27	28	1	2	HW5 due Feb-26
	08	3	4	5	6	7	8	9	Q3 on Mar-7 (HW6)
		10	11	12	13	14	15	16	
	09	17	18	19	20	21	22	23	HW7 due Mar-19
	10	24	25	26	27	28	29	30	Q4 on Mar-26 (HW8)
APRIL	11	31	1	2	3	4	5	6	**Exam 2 on Apr-2** No HW Apr-2
	12	7	8	9	10	11	12	13	HW9 due Apr-9
	13	14	15	16	17	18	19	20	Q5 on Apr-16 (HW10,11)
	14	21	22	23	24	25	26	27	HW12 due Apr-23
MAY	15	28	29	30	1	2	3	4	Q6 on Apr-30 (HW13)
		5	6	7	8	9	10	11	*Final*
		12	13	14	15	16	17	18	Lecture
		19	20	21	22	23	24	25	No classes
		26	27	28	29	30	31		Last day of classes
									Exam days

- See also: UVM Academic Calendar.