COURSE:	MATH 305 Numerical Methods & Matrices	Spring 2025	
INSTRUCTOR:	Dr. TeBeest, Professor of Applied Mathematics		
REQUIRED:	In lieu of a text, instructor-provided notes are required during lectures.		
OPTIONAL:	Any edition of a text on Numerical Analysis/Methods by Burden and Faires.		
OFFICE:	AB 2-135 K MT RF 11:20–12:00 or by appt. (See my schedule.)	(810) 762-7926	
WEBSITE:	https://paws.kettering.edu/~ktebeest/math305/ kteb	peest@kettering.edu	

**ATTENDANCE:** Daily in-person attendance is required. Students shall arrive on time and remain for the full period. Students who miss part of a period may receive an unexcused absences. Students may incur a deduction of one percentage point from their course grade for every unexcused absence beyond two; this NOT allow for "days off" or "skip days." If you have COVID symptoms, you are to follow Kettering's Covid Guidelines. (See p. 7.)

<u>NOTE:</u> An **excused absence** is a legitimate, verifiable, documented absence resulting from illness or an officially sanctioned Kettering activity. (**Greek activities** are extracurricular and do **not** qualify.) Verifiable absences are not necessarily excused. A student who anticipates an **excused** absence should notify the professor in advance. Informing the professor of an absence does not make it excused. Excused absences must be verified via appropriate documentation (such as a physician's note).

A student with more than four unexcused absences might be administratively withdrawn from the course or might receive a failing grade in the course.

QUIZZES/HOMEWORK: Homework will be posted regularly on the Course Website.

- 1. You are required to *successfully* rework **each of my examples** *promptly* on your own. If you seek my help, you must bring these in your own handwriting with you.
- 2. You are expected to *successfully* complete **each assigned problem** *promptly*.
- 3. Quizzes will be posted on Blackboard (**Bb**). They must be completed by the due date. There will be no extensions.

I do not collect homework in this course. However, exam problems will be similar to class examples and assigned homework problems. Some homework problems require programming.

## YOU ARE RESPONSIBLE FOR CHECKING THE COURSE WEBSITE DAILY FOR ASSIGNMENTS AND ANNOUNCEMENTS.

**PROGRAMMING (CODING) ASSIGNMENTS:** Since this is a course in computational mathematics, there will be two or three programming (coding) assignments. These will be collected and graded.

- 1. All programming assignments will be written using **Maple** as the programming language.
- 2. All programming assignments will be worked in teams of 4. Exceptions shall be decided by the professor.
- 3. Each programming assignment is worth 50 points. Collectively they constitute 15% of your course grade.
- 4. These are due at the time and day stated. Because ample time is given to complete each project, projects submitted late will incur grade deductions as follows:

For example, a project submitted 5 hours late will incur a 9pt deduction. Completed projects shall be uploaded to Blackboard (Bb) by **one** responsible member of your team. **Both** the Maple code itself **AND** a pdf print version shall be uploaded to Bb. I will grade **ONLY** what is submitted.

- 5. Each team member will receive the same grade for the project. If the professor suspects that a student has not contributed fairly toward completing a project (examples include the testimony of teammates or a student with several absences), the student may receive a zero grade and the professor may require that student to complete subsequent, and possibly completely different, projects alone.
- 6. Members from different teams are **not** permitted to collaborate; doing so will subject the students from all teams involved to academic discipline. See "Academic Discipline."
- 7. See the supplemental handout, "Programming Assignments" for additional important rules and policies regarding these programming assignments.

**EXAMS:** There will be two (2) exams. Each student shall take the exams at the scheduled times. Students who miss an exam due to an <u>un</u>excused absence may **NOT** be allowed to make up the exam and may receive a grade of zero for that exam. Only students who miss an exam due to an excused absence may have an opportunity to make up the missed exam; that make-up exam may be given during the 9th week of the term and may be comprehensive. Each exam applies equally toward the student's course grade. Exams may contain questions pertaining to Maple.

**FINAL EXAM:** A final exam will be given at the term's end. **Each student shall take the final exam at the time scheduled by Administration.** (See pg. 6.) This exam may contain questions about Maple.

**<u>COURSE GRADING</u>**: The value of each item toward the course grade is given by the following weights:

Quizzes	5%
Projects 1	15%
Exam 1	25%
Exam 2	25%
Final Exam	30%

That is, let Q denote your total project score (in %), P denote your total project score (in %), E denote your total exam score (in %), and F denote your final exam score (in %). Then your **weighted** (scaled) **score** S will be

$$S = 0.05 Q + 0.15 P + 0.5 E + 0.3 F.$$
<sup>(1)</sup>

At the term's end, course grades will be assigned as follows (this is the weighted scale ("curve") for this course):

$95 \leq S \leq 100$	А
$91~\leq~S~<~95$	A–
$88 \leq S < 91$	B+
$85~\leq~S~<~88$	В
$82 \leq S < 85$	B–
$79 \leq S < 82$	C+
$76 \leq S < 79$	С
$73 \leq S < 76$	C–
$69 \leq S < 73$	D+
$64 \leq S < 69$	D
S < 64	F

Value S is **not** rounded. For example, a score S = 87.9 receives a letter grade of B since 87.9 is *less* than 88.

#### Note: the minimum passing grade on any graded item is 64%.

**Example:** Suppose you have scores of Q = 92% on quizzes, P = 91% on projects, E = 85% on exams, and F = 80% on the final exam. Then your weighted score would be S = 0.05 (92) + 0.15 (91) + 0.5 (85) + 0.3 (80) = 84.75 and your course grade would be B-.

**Extra Credit:** There is no means for obtaining "extra credit." This grading system provides the student with ample opportunity to demonstrate his or her mastery of the material.

**Contesting a Grade:** If the student believes that a problem was graded incorrectly, the student may ask the professor to review the grade on a specific problem. However, the request must be made **within one week after the graded item was returned to the class**. The professor might require the student to submit a written request to reconsider the grade and require the student to work the problem correctly. **This is NOT a means for obtaining extra credit.** The grade is still based on the work originally submitted — it is not based on the reworked problem.

## USE OF ELECTRONICS IN CLASS

All phones must be completely **turned off and stowed** *before* class begins and remain off during class. **Recording and photographic devices are strictly prohibited.** Laptops/tablets may be used during class **only** for the purpose of taking notes digitally. The use of electronic devices during class for anything other than taking notes may result in: 1) the student receiving an unexcused absence for that period, 2) the confiscation of the device, and/or 3) the student being administratively withdrawn from the course.

**Calculator:** You will need a simple scientific calculator in this course. However, any calculator on which text can be stored is prohibited during all exams. These include the **TI-Nspire** and the **HP-Prime**—these are forbidden during all exams. **(Do not ask—there will be no exceptions.)** 

Watches and phones must be stowed during exams. Any student with a phone or watch out during an exam may received a 0 on the exam, may receive an automatic F in the course, and may be reported to Administration for further disciplinary action.

#### STUDY JOURNAL

You shall keep a study journal and record in it **daily** to track your study habits. See the document **MATH**-**305** Journal on the Course Website for specific details. You may keep your journal in a "bluebook" or in a spreadsheet. I expect you to bring it and your homework with you any time you come to me for help.

#### AUDITING

- 1. No student may audit my course.
- 2. No student is permitted to change his or her registration in my course to an audit.

## Accommodations for Students with **Documented** Disabilities

The University will make reasonable accommodations for persons with documented disabilities. Such students need to register with the Wellness Center **every term** they are enrolled in classes. To be assured of having services when they are needed, students should **contact the Wellness Center during the first week of each term**. Note that it is the student's responsibility to arrange accommodations with each professor. For more information, refer to the Undergraduate Catalog or the Student Life web page. This information is also noted in the Student Handbook.

To increase the likelihood that you receive special accommodations when needed, students who request special accommodations due to a documented disability should make such arrangements with the Academic Success Center and with me at least 5 days before each in-class exam and at least 12 days before the final exam. Failure to do so may result in your not receiving special accommodations.

The inclusion of the following statements is mandated by the University Provost. Therefore they will be strictly enforced.

## ACADEMIC DISCIPLINE

## CODE of STUDENT CONDUCT and ACADEMIC INTEGRITY

Kettering University values academic honesty and integrity. Cheating, collusion, misconduct, fabrication, and plagiarism are serious offenses. Each student has a responsibility to understand, accept, and comply with the University's standards of academic conduct as set forth in our statement, "Ethics in the University" and "Academic Integrity" as well as policies established by individual professors. For more information, refer to the Undergraduate Catalog or the Student Life web page. This information is also noted in the Student Handbook.

Furthermore, students found in violation (e.g., cheating on an exam or assignment) may receive a score of zero on that item without recourse for making it up and may even receive a failing grade for the course without recourse for withdrawal. Incidents of cheating, academic dishonesty, or lying may be reported to Administrative Officials for further disciplinary action.

## ADDENDUM

#### What is considered cheating?

Examples of cheating include but are not limited to:

- 1. using projects (Programming Assignments) completed by students from previous terms,
- 2. collaborating on Programming Assignments with members from outside your team,
- 3. using codes or parts of codes from *any* source other than what is provided by the instructor or from assigned homework,
- 4. using unauthorized items during exams.

These **constitute cheating** and will be dealt with as such! Simply put—using any work that is not your own, or violating any of the stated policies, is cheating and subject(s) the students involved to academic discipline!

You will need a simple scientific calculator in this course. However, any calculator on which text can be stored is prohibited during all exams. These include the **TI-Nspire** and the **HP-Prime**—these are forbidden during all exams. (Do not ask—there will be no exceptions.) Watches must also be stowed during exams.

To maintain and enhance the national standing of Kettering University and the value of a Kettering University degree to you and all GMI/Kettering alumni, the Provost (the ranking academic officer at Kettering University) has instructed the faculty to enforce attendance requirements and standards of academic integrity among Kettering's student body. So be aware that these policies will be enforced. There will be no tolerance for cheating or lying in my courses.

## Reminder about Final Exams at Kettering University

More than a decade ago there was a period of several years during which students approached faculty with increasing frequency asking to take a final exam *before* its scheduled time because they "already made plane reservations" or were otherwise leaving campus the day of their final exam or even sooner. For example, some students made plane reservations that were to leave Detroit at 1:00 p.m. even though their final exam ran until noon.

This section is a reminder that during the Winter Term at Kettering University, final exams run during Week 11 from Thursday morning through noon Saturday, and that period constitutes an official part of the academic calendar. You are therefore expected to take your final exam for our course <u>at its scheduled time</u>.

I do not schedule our final exam — Administration does. Also, I will not know the time of our final exam until Administration publishes the final exam schedule on the University website. Consequently, if I were a student, I would not make any travel plans for the term's end until after the final exam schedule is published by Administration. You are to take the final exam for our course at its scheduled time. There will be NO EXCEPTIONS to this. I will not consider requests to take the final exam before the scheduled time simply because "travel arrangements were already made", "a family vacation was already planned", etc. As Kettering students, you know that final exams run during Week 11, and you know that you should take final exams seriously.

Also, if another instructor reschedules a final exam that results in a scheduling conflict with our final exam, then it is obviously **that instructor's responsibility**, *not mine*, to resolve the conflict with you.

# Kettering's COVID Guidelines

## Effective February 6, 2023

## • Face Covering

- 1. Masks remain an effective measure for enhanced personal protection against the spread of COVID-19, especially for individuals who have a compromised immune status, who are not up-to-date on their COVID-19 vaccinations, or who have an increased risk of contracting COVID-19.
- 2. Wearing a mask is optional in all areas on campus except at the Wellness Center.
- 3. Anyone may choose to wear a mask at any time.

## • Vaccinations & Boosters

Vaccinations and boosters are encouraged but not mandatory. The University does not provide them. You may obtain them at local area pharmacies.

## • Experiencing Symptoms or Testing Positive

- 1. **On Campus:** If you begin to experience symptoms while on campus, find a space to isolate yourself (empty room, etc.), and then contact the Wellness Center immediately at (810) 762-9650.
- 2. **Off Campus:** If you begin to experience COVID-19 symptoms or have tested positive for COVID-19 while off campus, then:
  - (a) Stay home and begin isolation/quarantine until provided with further advice from your physician and direction from the University.
  - (b) Notify the Wellness Center at (810) 762-9650.

## • Symptoms of COVID-19

See Kettering's COVID Guidelines for more details.

Questions? Email covid-19@kettering.edu or call the Wellness Center at (810) 762-9650.

I have read this policy in its entirety, and I understand what is expected of me.

Print Name: \_\_\_\_\_

Signature:	

Date: \_\_\_\_\_

Please upload your signed copy of this ENTIRE document to Blackboard before 11:59 p.m. on Wednesday of Week 1.