

# Syllabus – Differential Geometry – Spring 2026

## Instructor and Class Information

<b>Instructor</b>	Dr. Vince Guingona <a href="mailto:vguingona@towson.edu">vguingona@towson.edu</a> YR 226
<b>Class Times</b>	Monday, Wednesday, and Friday, 9:00am – 9:50am
<b>Office Hours</b>	Monday, 2:00pm – 3:00pm Tuesday, 9:00am – 10:30am Friday, 11:00am – 12:00pm Or by appointment
<b>Final Exam</b>	Friday, May 15, 8:00am – 10:00am

## Course Information

**Prerequisites:** MATH 265 and MATH 275.

**Course Description:** Curvatures of curves and surfaces in three-dimensional Euclidean space, geodesics, invariants, mappings, and special surfaces.

**Course Objectives:** In this course, we study the differential properties of curves and surfaces in Euclidean space, such as arc length, geodesics, tangents, normal, orientability, and curvature. This is *not* a proof-based class, so assessments will instead focus more on computation, though an understanding of definitions, theorems, and proofs is required for this course.

**Textbook:** “Elementary Differential Geometry” Second Edition by Andrew Pressley, ISBN 9781848828919.

**Calculator Policy:** The use of calculators on quizzes and exams is prohibited.

## Grading Policy

Your course grade will be based on the following assessments:

<b>Component</b>	Homework	Attendance	Quizzes	Exam 1	Exam 2	Exam 3	Final Exam
<b>Value</b>	5%	5%	20%	15%	15%	15%	25%

The course score will then be used to determine your course grade from the table below.

<b>Precent</b>	0-59	60-66	67-69	70-76	77-79	80-82	83-86	87-89	90-92	93-100
<b>Grade</b>	F	D	D+	C	C+	B-	B	B+	A-	A

## Exams, Quizzes, and Homework

**Exams:** There is a total of three midterm exams, each worth 15% of your overall course grade. Exams will fall on Wednesdays and cover the entire class period. The exact date and coverage of each exam can be found on the *Timeline*. The use of external resources during exams, including notes, calculators, cell phones, computers, smart watches, and so on, are prohibited.

**Quizzes:** During the weeks on which there is no exam, we will have a 15-minute quiz at the beginning of class. There is a total of 10 quizzes, each worth 2% of your overall course grade, for a total of 20%. The exact date and coverage of each quiz can be found on the *Timeline*. As with exams, the use of external resources during quizzes is prohibited.

**Homework:** There will be weekly homework assignments posted on Blackboard. These will be due at the beginning of class on Mondays and should be submitted in person. There is a total of 14 homework assignments throughout the semester, worth a total of 5% of your overall course grade. You may work with other students on your homework assignments, but each student must turn in their own hand-written copy in their own handwriting. Typed copies of the homework will not be accepted, nor will electronically submitted copies.

## Academic Integrity Policy

Exams and quizzes are to be completed strictly individually using only a pen or pencil on paper provided by the instructor. The use of any other resource is prohibited. Students are expected to be familiar with TU's [Student Academic Integrity Policy](#), especially the sections that define plagiarism, cheating and complicity (II.B-II.E) and describe the possible grade penalties (V.C). You may work with other students in the course on homework assignments, but each student must submit their own version. The use of generative AI (*e.g., ChatGPT, Copilot, or Gemini*) on homework assignments is prohibited.

## Class Attendance and Absence Policy

**Attendance Expectations:** Students are expected to attend all classes. Regular attendance helps students understand course material and meet expectations. If you are absent from class, it is your responsibility to get any missed information from your classmates.

### Excusable Absences:

- Health absences due to illness or injury when the student is unable to attend class. For repeated illness or long-term injury which prevents course completion, students may be advised to seek a medical withdrawal for that course. For illness-related absences, students are encouraged to contact the Student Outreach and Support office for additional assistance and resources.

- Wellness: Students may take one excused general wellness day to be excused from one class session per course. Students may not use a wellness day during the final exam period.
- Religious observance where the nature of the observance prevents the student from attending class.
- Participation in University activities at the request of university authorities (*e.g.*, intercollegiate athletics, conference/s, dance company, *etc.*).
- Compelling, verifiable circumstances beyond the control of the student.

Students should inform the instructor about absences as early as possible. Documentation may be required for certain types of absences (*e.g.*, participation in university activities), but generally, medical documentation for short-term illnesses is not needed. Please remember that misrepresenting the cause of an absence is a violation of academic integrity and can lead to serious consequences.

Any absence of the type not listed above is an unexcused absence. Assessments missed due to an unexcused absence will be given a grade of zero. Unexcused absences count against the attendance grade (which is 5% of your overall course grade). Although excused absences will not count against your attendance grade, a student who misses a total of ten or more classes, either excused or unexcused, is encouraged to work with [the Student Outreach and Support Office](#) to determine a best course of action, such as to withdraw from the course.

## Make-Up Work

Late homework assignments will not be accepted, and no make-up quizzes will be given. Under certain circumstances, these assessments may be exempted, meaning that the grade will simply not be a part of your grade record.

**Exams:** If you have an excused absence for the day of an exam, please contact me as soon as possible to arrange a make-up exam. All make-up exams must be completed within one week of the original test date. Please note that make-up exams will not be the same as the original exam given in class and may be more difficult.

**Quizzes:** If you have an excused absence for the day of a quiz, you will be exempted from that quiz. You may be exempted from at most four quizzes in this manner; further missing quizzes will be given a grade of zero. In this case, I encourage you to work with [the Student Outreach and Support Office](#) to determine the best course of action.

**Homework:** If you have an excused absence that covers the entire duration (from the day it is assigned to the day it is due) of a homework assignment, you will be exempted from that assignment.

## Course Repeat Policy

Per Towson University's Course Repeat Policy, when a course is repeated, students will receive credit for the course only once. The higher of the two grades earned will be calculated in the GPA. The lower grade will remain on the record with a repeat excluded message. Students may not make a third or subsequent attempt of a course without prior approval of the [Academic Standards Committee](#).

- [Course Repeat Policy in the Undergraduate Catalog](#)

## Students with Disabilities Policy

Per Towson University's [Policy for Providing Reasonable Accommodations to Individuals with Disabilities](#), students with disabilities are encouraged to register with [Accessibility and Disability Services](#). Students who suspect that they have a disability but do not have documentation are encouraged to contact ADS for advice on how to obtain appropriate evaluation. A memo from ADS authorizing your accommodation is needed before any accommodation can be provided.

## Title IX Policy

Per Towson University's [Policy on Sexual Harassment and Other Sexual Misconduct](#), TU is committed to ensuring a safe, productive learning environment on our campus that does not tolerate sexual misconduct, including harassment, stalking, sexual assault, sexual exploitation, or intimate partner violence as outlined in the policy. It is important for you to know that there are resources available if you or someone you know needs assistance. You may speak to a member of the university administration, faculty, or staff, but keep in mind that they have an obligation to report the incident to the Title IX Coordinator. If you want to speak to someone who is permitted to keep your disclosure confidential, please seek assistance from the TU Counseling Center.

## Reporting Hate Crimes and Bias Incidents

Per Towson University's [Policy and Procedures for the Reporting of Hate Crimes and Bias Incidents](#), TU prohibits all students, staff, and faculty from committing or engaging in any hate crimes as defined under state and federal law, or any acts of bias, hate, or prejudice exhibited in conduct that is in violation of another University policy on campus, on University property, at University sponsored events, or when engaged in University activities and business on or off campus.

The University must receive notice to respond effectively to alleged Hate Crimes or Bias Incidents in the University Community. Please report or file a complaint of a Hate Crime or Bias by:

### *Reporting to Towson University Police*

[Towson University's Police Department](#) will determine if incidents are criminal in nature. In cases of hate crimes, individuals can be punished with fines and/or imprisonment. Felony offenses demonstrated to be motivated by bias are subject to enhanced penalties.

### *Contacting the Office of Inclusion and Institutional Equity*

[The Office of Inclusion and Institutional Equity](#) strives to foster a culture of integrity that values shared responsibility as a critical element of an inclusive, equitable, and diverse community.

## Statement on Classroom Climate

Towson University fosters a climate that is grounded in respect for all individuals, enriches the educational experience of students, supports positive classroom and workplace environments, promotes excellence, and cultivates the intellectual and personal growth of the entire university community. Should you feel that you are experiencing a negative classroom environment, please reach out to the Mathematics Department at [math@towson.edu](mailto:math@towson.edu).