



### D203 Profile of A Learner

Profile of a Learner guides our efforts in creating educational experiences that are relevant, engaging, and impactful and outlines the key competencies and descriptors our community has identified as essential for our students: Adaptability, Communication, Critical Thinking, Learner's Mindset, Global Citizen.

### Department Mission

Mathematics is a universal language that allows us to make sense of fundamental principles, thoughts, ideas, patterns, problems, and phenomena surrounding us and to communicate our understanding and resolutions of these concepts to others. As a result, the mission of the mathematics department is to provide students the opportunity to experience and engage in the utility, power and beauty of mathematics as they become proficient in using and applying fundamental mathematical concepts and skills including: computation, critical thinking, reasoning, communication, and resourceful problem solving.

### Course Description

This course is intended for those students who have completed Calculus BC. The course extends the ideas and techniques of Calculus to three dimensions. Properties of vectors and graphing in 3-space are studied first, and provide the fundamentals for the remainder of the course. Vector-valued functions and their application to particle motion and curvature are studied in detail. Functions of several variables and related applications are then examined through the use of partial derivatives and multiple integrals. Topics in vector calculus including Green's Theorem, The Divergence Theorem and Stokes Theorem are studied. This course also includes the study of Linear Algebra with topics in geometric vectors and vector space, matrices and linear transformations, inner product space, eigenvalues and eigenvectors, the determinant functions, and formal methods of mathematical proof. A CAS (Computer Algebra System) graphing calculator is required.

### Units of Study:

#### Multivariable Calculus

- Geometry of Space
- Vector valued functions
- Functions of several variables
- Multiple Integrals
- Vector Analysis

#### Linear Algebra

- Matrices and Linear Equations
- Geometrical Vectors
- Determinants
- Vector Spaces and Inner Product Spaces
- Eigenvalues and Eigenvectors
- Linear Transformations

### Grade Calculation Definitions

Students will be provided with multiple and varied opportunities to demonstrate mastery of learning standards. Although varied in content, all courses will include examples of practice and evidence of learning:

- **Evidence of Learning:** Tasks or assessments where feedback is provided to the student and considered evidence of a student's level of proficiency on a given standard or skill. This may include, but is not limited to formative tasks that provide insights on areas for growth as well as summative tests, projects and/or performances.
- **Practice:** Tasks that are connected to course standards and learning targets that promote the development of skills and/or knowledge that will be assessed, but where feedback is not provided. This may include, but is not limited to daily readings, note taking, practice exercises and tasks essential to the learning process.

### Grading Disbursement

Semester grades for all classes (prior to the final exam) will be calculated by a weighted average. As part of the calculation for the overall semester grade, final exams/projects will not exceed 15% of the semester grade.



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|                          | <p>A = 100-90%, B = 89-80%, C = 79-70%, D = 69-60%, F = 59-0%</p> <p>Semester Grade:</p> <ul style="list-style-type: none"><li>• Coursework = 85% (Assessments = 95%, Skills Work 5%)</li><li>• Final Exam =15%</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Grading Practices        | <p>Grades communicate each student's progress toward mastery of goals/standards for the course.</p> <ul style="list-style-type: none"><li>• Infinite Campus Symbols/Comments:<ul style="list-style-type: none"><li>○ A score of "Missing" (M) will indicate an assessment has not been turned in and the comments section will include a specific date by which students can still submit. After that date, a zero (0) will be recorded.</li><li>○ Any score may also have a comment indicating the due date, turned in, late, reassessment eligibility including the timeline and/or reassessment final scores.</li><li>○ A zero indicates that no attempt was made by the student. If a legitimate attempt is made on an assessment and practice work has been completed in a consistent and timely manner (<i>completing 85% of practice listed in Infinite Campus.</i>), a score of 50% will be the lowest possible grade.</li></ul></li><li>• Late Work:<ul style="list-style-type: none"><li>○ Evidence of Learning work submitted after the original due date cannot be penalized more than a total of 10% and can be submitted for credit up to 5 days after the original due date.</li><li>○ Practice Work is not accepted for credit after the due date.</li></ul></li><li>• Other:<ul style="list-style-type: none"><li>○ No extra credit will be issued.</li></ul></li></ul> |
| D203 AI Belief Statement | <p>At Naperville North High School, we strive to build a learner's mindset in all students, developing qualities such as adaptability, communication, critical thinking, and global citizenship. Generative Artificial Intelligence (AI), offers new opportunities to engage with important technology relevant to the future that also raises significant educational considerations. AI tools provide unique ways to engage students in the learning process, hence we encourage our staff to guide students in using AI responsibly. Teachers have the authority to establish guidelines for AI use in their classrooms, setting clear expectations for how AI can be used on learning tasks. Concurrently, we recognize that reliance on AI risks replacing genuine student engagement and original thought, undermining the attributes we aim to cultivate. Striking a balance between leveraging AI tools effectively and maintaining educational standards is crucial to the learning experience of each student.</p>                                                                                                                                                                                                                                                                                                                                                             |
| Academic Integrity Code  | <p>District 203 students are challenged to address the academic process enthusiastically, diligently, and most importantly, honestly. It is the responsibility of our students, teachers, and administration to uphold the fundamental academic values of honesty, responsibility, fairness, respect and trust. The integrity of our district's academic programs is built upon these principles.</p> <p>Academic integrity violations include cheating, plagiarism, self-plagiarism or copy infringement, obtaining or providing an unfair advantage, using a writing service and/or AI in place of original work unless specifically authorized by staff, falsification of documents, unauthorized access to records, and inappropriate collaboration, whether intentional or unintentional. The classroom teacher and administration will collaborate and exercise professional judgment in determining academic integrity violations.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                            |



Technology  
Expectations

- **Cell phones:** Students will be expected to store their cell phones in a phone holder or designated classroom location throughout each class period as communicated by each teacher. Cell phones should not be seen or heard in the classroom setting. Appropriate use of cell phones is allowed during passing periods, during study halls, at lunch, before and after school. Please note that cell phone use is strictly prohibited in locker rooms and restrooms at all times.
- **Ear buds and headphones:** The use of ear buds and headphones is strictly prohibited in the classroom unless permission has been granted by the teacher. Ear buds and headphones should not be seen or heard in the classroom setting. For safety reasons, students should also be able to hear announcements, alerts, etc. at all times and, therefore, students are permitted to use one ear bud or headphone during passing periods, at lunch, before and after school.
- **District issued Chromebooks:** Students are required to use their District issued Chromebook and will not be permitted to use personal laptops or devices in the classroom setting. Student personal devices are not protected by district systems and put student safety and the safety of our network at risk. Additionally, student personal devices are not enabled with applications and programs necessary for administration of state and AP assessments.

Reassessment  
Policy

The purpose of reassessment is to allow students to demonstrate mastery of course standards in which they remain deficient. Higher reassessment grades will replace the original assessment score, but will not exceed 85%.

- Practice work is not eligible for reassessment.
- Evidence of Learning work may be eligible for reassessment. Refer to the chart below for eligibility:

|                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                            |
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| <input type="checkbox"/> The assessment included multiple opportunities for feedback and improvement in the process for the final product OR formative assessments are aligned to standards, allow students to practice in the same assessment format, and gain feedback for improvement before the summative assessment. | <input type="checkbox"/> There was timely and consistent completion of practice work and formative assessments.<br><input type="checkbox"/> A one-time performance on an assessment does not reflect the student's level of proficiency leading up to the assessment.<br><input type="checkbox"/> Summative assessment score is below 85%. |
| Not eligible for reassessment                                                                                                                                                                                                                                                                                             | Eligible for reassessment if all three statements above are true.                                                                                                                                                                                                                                                                          |

Reassessment Parameters:

- The reassessment opportunity will require designated learning experiences that demonstrate readiness as assigned by the teacher.
- Reassessments MUST be completed within 5 school days of the student receiving feedback unless otherwise determined by the instructor. The reassessment deadline should be communicated in an IC comment.
- The final reassessment score will be capped at 85%.

**Naperville North High School**  
**Multivariable Calculus w/ Linear Algebra**

**Department Chair: Tim Brown**

**Office: Room 206**

**Common Syllabus 2026/2027**

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**Student  
Communication**

- You are encouraged to communicate with their teacher regarding questions.
- Teachers make every effort to respond to emails and phone calls within 24 hours during the workweek.
- The best way to communicate with teachers is through email; however, if you haven't received a response within 48 hours, please resend the email or call their voicemail. Your email may have been filtered.

**Additional  
Resources for  
Support**

- You can utilize WIN or make an appointment with your teacher should you need additional instruction or support in learning material.
- You can attend peer tutoring in the Lit Center during lunch periods to receive extra support or to work on assignments.
- You can drop in to work with a peer tutor during lunch periods or before school in the Literacy Center.

**Parents or  
Guardians  
Partnership**

Naperville North believes in a collective partnership with parents/guardians which provides students the best opportunities for success.

Some ways parents/guardians can support their student's learning are:

- Actively check Infinite Campus for their student's grades.
  - Infinite Campus is a tool to progress monitor student work until the final course grade is posted.
  - Monthly progress grades are posted and represent the current grade of a student in the course at that moment in time.
- Discuss missing assignments, reiterate due dates, help organize folders, materials, assignment notebooks, and review upcoming projects and assessments.