

# MCR 6 – Learning Support for Precalculus I

Fall 2019 – Annandale Campus

Section C06N 38868

Mondays 1pm to 2:50pm in CN-213

## Instructor Information

### Instructor

Elizabeth Paige Highsmith

### Email

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### Phone

703-425-5181

### Office Location & Hours

CT336B

Office Hours: Mondays 11am to Noon

Tuesdays/Thursdays 10am to Noon

Appointment Hours: Wednesdays 12:30pm to 3:30pm

Fridays 11am to 1pm

**Note:** Appointment hours are treated like any other appointment. You must confirm with the instructor via email at least 24 hours prior. You cannot show up unannounced and expect to be seen.

## Course Materials

**(use the MTH-161 materials, they are the same)**

### Book

#### Book Name

Precalculus, Enhanced with Graphing Utilities, 7th edition

#### Author

Sullivan & Sullivan

#### Book Format Options

- **Hardcopy only**
- **Online version only (two options)**
  - Digital Copy of Book only
  - Digital Copy of Book with supporting MyMathLab software by Pearson
    - Must purchase access code and use Course ID: highsmith16365
- **Both Hardcopy and online version (Bundle) (Most expensive)**

#### Important information about access to the book

In this class, we will use the book for two purposes:

1. To read and learn the material in the chapters (i.e. supplement your class notes)
2. To work homework problems from the end of each section

It is up to each student to pick the book format that best fits their needs:

Hardcopy? Digital? Or both?

Options available in the NVCC Annandale bookstore

- Rent digital copy of the book only for \$59.99

- Buy digital copy of the book only for \$89.99.
- Buy MyMathLab software access code for \$95.15.

**Note:** The digital copy of the book does not include the MyMathLab software with all of its online help and resources. It is only the book.

**This class will not use MyMathLab for online homework.**

**Please talk to your instructor if you have any questions regarding the book and its planned use in this class.**

## Calculator

**Graphing calculator is required**

- Models TI-83, TI-83 Plus or TI-84 Plus are recommended. TI-89, TI-NSpire or any other calculator that does symbolic differentiation or integration on exams are not allowed.
- Desmos: We will also use/learn the online/app calculator called "desmos". This is a free resource.
  - To access desmos, visit [desmos.com/calculator](https://desmos.com/calculator) or download the app from the App Store or Google Play...for FREE!!!
  - To learn more about desmos and how to use it, visit <https://learn.desmos.com/graphing>

## Other Required Resources

**Two notebooks dedicated for Precalculus I only**

*(no other course notes should be in these notebooks)*

One notebook is used for class/lecture notes.

One notebook is used for homework.

- The homework notebook will be handed in for grading during each class test.
- Try to find a notebook that has folder pockets in order to hold loose leaf worksheets handed out by the instructor.

The instructor will hand out a "Notebook Guide" that shows how to properly format your work in these notebooks.

**Pencils with Erasers**

No pens allowed on graded work (i.e. homework, worksheets, tests).

## Course Information

### Course Description

Provides instruction for students who require minimum preparation for college-level Precalculus. Students in this course will be co-enrolled in MTH 161. Credits not applicable toward graduation and do not replace MTE courses waived. Successful completion of Precalculus I results in the prerequisite MTE modules being satisfied. Lecture 2 hours. Total 2 hours per week. 2 credits

### Course Purpose

To enable qualified students to enter into credit bearing courses sooner, with the appropriate support, and with equal or better success than those students meeting course prerequisite

requirements. The course provides support and enhancement of foundational and course content required of the credit course.

## Course Prerequisites/Corequisites

**Prerequisite:** Completion of any seven of the MTE modules 1-9

**Corequisite:** MTH 161: Precalculus I

## Course Objectives

The course objectives are the same as those listed in your MTH 161 course syllabus. Please refer to that document for a detailed list of learning objectives.

To achieve the learning objectives, the support course will cover appropriate topics such as those suggested below in both planned review and just-in-time remediation:

### Student Skills Topics

**Class activities may include:**

- Reviewing notes from class lectures
- Activities on taking good notes
- Analyzing personal time management
- Correcting textbook homework
- Predicting test questions
- Correcting tests
- Preparing for tests
- Asking good questions
- Exploring skills for using technology effectively

**Discussions may include the following topics:**

- Using a planner/electronic device to keep up with assignments
- What work needs to happen outside of classes
- How does one use class notes?
- Why and when is it important to read the text?
- What does the instructor mean when he/she asks me to show my work?

### Math Skills Topics

**Operations with fractions**

**Order of Operations**

**Exponents involving positive and negative bases**

**Laws of Exponents (including fractional and negative)**

**Domain and Range**

**Squaring binomials**

**Factoring**

**Simplifying radical expressions**

**Graphing linear equations and inequalities**

**Writing equations of lines given specific information**

**Solving first and second degree equations and inequalities**

**Quadratic Formula**

**Interval Notation**

**Evaluating expressions/functions for given values of variables**

**Solving radical and rational equations**

**Simplifying complex fractions**

## **Course Activities**

To achieve the objective of success in MTH 161, this course will provide students the opportunity to be highly engaged with the content and the instructor. It will include the following possible class activities:

- Use of board and students working in groups to talk through mathematics.
- Provide opportunity for students to make presentations.
- Provide opportunity to develop skills using software
- Use informal or formal assessments to gauge student needs.

You are required to have access to your MTH 161 textbook, notes, homework and tests during this class. Please bring them or have access to them!

## **Grading**

**Two components determine your grade:**

### **1. Attendance**

### **2. Participation**

The grades in this class are S (Satisfactory) or U (Unsatisfactory).

The grade in this course is not tied to your grade in MTH 161. No audits are given in this class.

If you drop or withdraw from MCR 6 and you have not completed the full prerequisite MTT material, then you must also drop or withdraw from the MTH 161 class.

### **Attendance**

Attending this class is very important. We will meet 15 times this semester (approximately 30 hours). You must earn 90% attendance to pass this course. What does this mean? You must attend a minimum of 13.5 classes (approximately 27 of the 30 hours) this semester to earn an S grade. You may miss one and a half MCR 6 classes with no grade penalty. There are no excused absences for any reason. If you miss more than one and a half classes, you will earn a U grade for the semester. My experience is that students who miss class often are putting their education at a low priority and that they are more likely to fail or withdraw from the course. On the other hand, regular attendance with active class participation usually results in a passing grade.

### **Participation**

Participating in this class is very important. Note that many of the class activities will require you to interact with your instructor and/or your classmates. You must actively participate in 90% of the

classes to earn an S grade. What does this mean? You must participate in a minimum of 13.5 classes (approximately 27 of the 30 hours) this semester to earn an S grade. If you do not actively participate in more than one and a half of the 15 classes, you will earn a U grade for the semester. Please note that missing a class automatically means that you will also not get a participation mark for the day. However, physically attending class is not enough. If you are not participating in activities or you are engaged with activities outside of what we are doing (like monitoring your phone), then you may also not get a participation mark for the day.

## Semester Schedule

### Important NVCC Dates

- September 5:** Census date: last day to drop with a tuition refund.
- September 6:** Parking enforcement on student "B" lots at 6am. Students are not required to display a permit while parked in a "B" lot after 3:45 p.m. on weekdays or anytime on weekends.
- October 1:** Last day to apply for Fall Graduation.
- October 14-15:** No classes. Fall break. College open.
- October 29:** Last day to withdraw without a grade penalty. Withdrawals after this date require documentation of mitigating circumstances and permission of the instructor and the academic dean.
- November 27:** No classes. College closes at noon.
- November 28 – December 1:** No classes. Thanksgiving Holiday.

### Class Schedule

The schedule is dynamic and will adhere to the MTH-161 schedule of learning objectives.

## Class Policies

### Honor Policy

At the end of each homework, worksheet, and test that is turned in for grading you will be expected to legibly sign and date the following statement:

*I hereby declare upon my word of honor that I have neither given nor received any help on this work.*

### No Cheating

If you are caught cheating on a test or exam or if you are caught violating the honor policy in any capacity, then you will fail the course. The instructor will report you to the college according to official college policies and rules.

### Follow All Directions

Do not make up your own rules or think the class policies do not apply to you. If you choose not to follow the rules/policies of the class, then you choose the associated consequence(s). You will not

talk your way out of the consequence(s). Do not ask for special treatment. All rules, policies and regulations will be applied equally and fairly to all students. Asking for special treatment (like extra credit or extra time for an assignment) is a form of academic dishonesty.

## Be On Time for Class

Class starts promptly at the time indicated on your SIS schedule. What does "on time" mean? The instructor expects you to be in your seat, ready to take notes promptly at that time. This means you should arrive to class at least 5 minutes early and be in your seat with all needed materials for class on your desk and ready to go (pencils, calculators, class handouts, notebooks, etc.). The instructor should not have to tell you to get out your calculator each class. Late is defined as arriving after the instructor has started lecturing for the day.

## Tardy Policy

If tardiness becomes a problem for any individual student, the instructor will implement a tardiness policy for that individual which will result in points being deducted from each Test. Being tardy will negatively affect your grade.

## No Using Social Media or Texting During Class

No using Wi-Fi devices for social media. No texting. If you are caught texting or using your Wi-Fi electronic device for social media purposes, the instructor will ask you to leave the class for the remainder of the class period for that day. If you continue to abuse this policy, the instructor will dismiss you from class and require you to visit the Dean of Student Services before returning to the classroom.

## Use of Desmos App is approved

The only approved use of phones and other Wi-Fi electronic devices is for Desmos: the free, online graphing calculator.

## No pens/No scribbling

Use of pens on worksheets/notebook homework/tests/final exam is prohibited. Scribbling with a pen or pencil on homework/tests is prohibited. You must use a pencil and erase mistakes or you will have 10 points deducted from your homework/test score. Write neatly. Try to give your instructor your best work each and every class.

## Communicate via email & Canvas

Communication via email is encouraged. The instructor will try to reply to email within 24 hours during the work week (Monday – Friday at Noon). If you email the instructor during the weekend, please wait until the next business day for a response. The instructor will try to respond to weekend email by noon on Mondays.

- Email the instructor if you plan on being absent from class.

In each email, include the following

- Your name somewhere in the email, preferably at the end...like a signature.
- Your class and your section number.

Do not treat communications to your instructor like an informal text to a friend or acquaintance. You will not receive a response. Treat emails as an official correspondence containing all needed information. (Going “old school”!)

## Helpful Resources on Class Material

It is the student’s responsibility to seek help at the first sign of “trouble” or lack of understanding. It is not wise to wait until the final exam to seek help. Here is a list of ways to get help:

- Visit the instructor during office hours
- Make an appointment with the instructor
- Visit the NVCC Annandale Tutoring Center in CG-405
- Google it or You Tube it
- Ask a friend of classmate who understands the material

## Notice to all students

- Leave excuses at the door.
- If you didn’t do your homework, just admit it and get it done.
- If you don’t understand the material, ask for help.
- If you didn’t study adequately for the test, resolve to do better next time.
- If you choose to break the class policies, you choose to accept the consequences.
- Repetition in Math is good. Work the same problem multiple times to understand the process of problem solving.
- The secret to learning math: focused practice, focused practice, focused practice, etc.
- You have 16 weeks to learn the material and earn your grades. Use all 16 weeks wisely.
- The instructor is in the classroom for you, to help you LEARN, THRIVE and GROW.
- The instructor wants you to succeed but can’t do the work for you.
- The instructor will bring 100% to each class and expects each student to do the same.

## NVCC Policies & Information

### Academic Integrity

When College officials award credit, degrees, and certificates, they must assume the absolute integrity of the work students have done; therefore, it is important that students maintain the highest standard of honor in their scholastic work.

The College does not tolerate academic dishonesty. Students who are not honest in their academic work will face disciplinary action along with any grade penalty the instructor imposes. Procedures for disciplinary measures and appeals are outlined at [www.nvcc.edu/students/handbook](http://www.nvcc.edu/students/handbook). In extreme cases, academic dishonesty may result in dismissal from the College. Academic dishonesty, as a general rule, involves one of the following acts:

- Cheating on an examination or quiz, including giving, receiving, or soliciting information and the unauthorized use of notes or other materials during the examination or quiz;

- **Buying, selling, stealing, or soliciting any material purported to be the unreleased contents of a forthcoming examination, or the use of such material;**
- **Substituting for another person during an examination or allowing another person to take the student's place;**
- **Plagiarizing, which means taking credit for another person's work or ideas. This includes copying another person's work either word-for-word or in substance without acknowledging the source;**
- **Accepting help from or giving help to another person to complete an assignment, unless the instructor has approved such collaboration in advance;**
- **Knowingly furnishing false information to the College; forgery and alteration or use of College documents or instruments of identification with the intent to defraud.**

## **Attendance Policy**

- **Attendance will be taken each class period and maintained as an official school record.**
- **Attendance and punctuality are important to the learning process.**
- **Any student who does not attend class by the Census Date will be administratively withdrawn.**
- **If you must be absent, contact the instructor, check Canvas (through MyNOVA) or a classmate to receive any assignments.**
- **You will be held responsible for all material missed and will be expected to take tests with the class unless prior arrangements are made.**
- **It is the student's responsibility to make sure that credit for attendance is given if he/she is absent when attendance is taken. The student must inform the instructor that very class day and cannot wait until the next class to inform the instructor.**

## **Attendance/Student Participation**

<https://catalog.nvcc.edu/content.php?catoid=2&navoid=86#attendance-student-participation>

**Education is a cooperative endeavor between the student and the instructor. Instructors plan a variety of learning activities to help their students master the course content. Students are expected to participate in these activities within the framework established in the class syllabus. Faculty will identify specific class attendance policies and other requirements of the class in the syllabus that is distributed at the beginning of each term. Successful learning requires good communication between students and instructors; therefore, in most cases, regular classroom attendance, or regular participation in the case of a nontraditional course format, is essential.**

**It is the student's responsibility to inform his/her instructor prior to an absence from class. Students are responsible for making up all coursework missed during an absence. In the event of unexplained absences, the instructor may withdraw a student administratively from the course.**

**If a student does not attend at least one class meeting or participate in an online class by the "last day to drop with a tuition refund" (census date), his/her class registration will be administratively deleted. This means that there will be no record of the class or any letter grade on the student's**



transcript. Furthermore, the student's class load will be reduced by the course credits, and this may affect his/her full-time or part-time student status. Tuition will not be refunded.

## Safety & Comfort

NOVA is a place for learning and growing. You should feel safe and comfortable anywhere on this campus. In order to meet this objective, you should:

- let your instructor, his/her supervisor, the Dean of Students or Provost know if any unsafe, unwelcome or uncomfortable situation arises that interferes with the learning process
- inform Campus Police-703-764-5000 if necessary
- inform the instructor within the first two weeks of classes if you have received a special needs or a disability accommodation that may affect your performance in this course. The Special Needs/Disabilities Counselors are in CA 112, 703-323-3200.

## Miscellaneous

### Special Needs

Students with documented disabilities may be eligible for accommodations in their classes. If you require such accommodations, contact a counselor for Disability Services. Please provide your instructor with proper documentation from the Counseling Center before the end of the second week of the classes so that appropriate accommodations can be arranged. All discussions are confidential. The Special Needs/Disabilities Counselors are in CA 112, 703-323-3200.

### Accommodation Forms

Forms should be presented at the beginning of the semester or as soon as possible. These forms are not retroactive. The accommodations begin after the instructor has received the form and has time and an opportunity to take appropriate measures to meet the accommodation.

### Emergency Procedures

You are strongly encouraged to sign up for NOVA Alert.

- NOVA Alert will send you text messages and/or email with timely updates about college closings. You can register for NOVA Alert at <http://alert.nvcc.edu>.

Please also check the NOVA website regularly. In addition, please go to our Canvas site for specific communication and supplemental assignments if a class is cancelled.

- For FAQ's, please see <http://www.nvcc.edu/depts/homepage/closing.htm#faq>

In case of emergency, please follow the emergency procedures as discussed on the first day of class and as posted in the classroom.

- You should have and be familiar with the procedures described online at [www.nvcc.edu/emergency/index.html](http://www.nvcc.edu/emergency/index.html)

### Weather Information

If the College is closed...

Please go to Canvas for specific communication and instruction for the course.

Also...

- A text alert will be sent to cell phones registered on NOVA Alert.
- A notice will also be posted on the College's home page.
- A notice will appear on the cable television station (channels 19, 25, 37 or 59).

Individuals may also call the College Call Center at 703-323-3000 or the NovaConnect Phone at 703-323-3770.

See <http://www.nvcc.edu/emergency/closing/>

### Facing Challenges

Students who face challenges securing food or housing that may affect their performance in this class/school are urged to contact the Dean of Students or your professor (if you feel comfortable).

Learn more about the Financial Stability Program at <https://blogs.nvcc.edu/wssn/about/>

## Study Tips for Math Classes/Tests

1. Study each section covered by the test.
2. Using the book and your notes, create an outline of topics covered
  - a. Write each section heading from the chapter on a piece of paper. Try to get a “big picture idea” of what the test is about.
  - b. Then narrow the focus of your studies.
    - i. Under each section heading, go through the book and write the sub-headings from each section.
    - ii. Using the book/notes as a guide, make sure you can do each type of problem contained in each sub-heading.
3. Work various sample problems from each section covered by the test. You can re-work problems from the book.
  - a. Do not just glance at the problems and think you know them. Math is not a passive subject or spectator sport. You have to actually work the problems step by step with paper and pencil.
  - b. Actually sit down and work them out from start to finish.
  - c. Work the same problem multiple times. Repetition in Math is good!
  - d. Once you can correctly work the problems from start to finish correctly without the aid of the book or your notes, then you are ready to move on.
4. Focus on what gives you the most trouble.
5. Look at time management by practicing the problems in a given class period (about 75 minutes).
6. Cramming the night before a math test is never a good idea.
  - a. Math is like a language that you have to practice over a period of time.
  - b. Take the time to work a few math problems every day that relate to your homework.
7. If you have used the same study habits for the previous tests and are not making the grades you want, change your study habits to get different, hopefully better, results.

**INSANITY is the doing the same thing over and over, but expecting different results!**

**If you want your grade to change, you have to change!**

## **Test Taking Tips for any Math Test**

1. Stay calm.
2. Think Positively.
3. Work the easy problems first, not necessarily in numerical/chronological order.
  - a. The test problems are not arranged easy to hard. There may be a hard problem followed by a very easy problem.
  - b. If one problem gives you trouble, move on and come back to it later.
  - c. Don't spend most of the test time working one problem and disregarding the rest of the test.
  - d. Once you have done all of the easy problems, go back and pick the "next easiest" problems. Keep doing this until you finish all of the problems.
4. If you have time remaining, never hand in a test with blank answers. An educated guess is always better than nothing.