# Grayson College Mathematics Department
# Faculty Instructor's Syllabus

**Please Note: Due to extenuating circumstances, including public health issues, course and testing delivery methods, instructional schedules, housing contracts, campus procedures and/or operating hours may be altered, interrupted and/or ceased for a limited or extended period of time. Such changes will be posted on the College website**

**Professor's Name:** **Kathy Johnson**

**Office Location:** HHS – 207

**Phone:** (903) 745-4400

**Email:** johnsonkat@grayson.edu

**Office Hours:** TBD
Or by appointment

Your instructor may be reached through the Canvas Inbox, email, or by phone; however, the easiest way to contact your instructor will be through the Inbox link in Canvas. You should receive a reply within 24 – 48 hours. Please resend your message should you not receive a reply within that timeframe. If you choose to contact me through johnsonkat@grayson.edu, please tell me your name and the class you are enrolled in the subject line of your email message. Please know that I will only respond to messages sent via **Canvas** or your **Viking email** account.

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**Course Title:** Precalculus

**Course Number:** MATH - 2312

**Course Description:**
In-depth combined study of algebra, trigonometry, and other topics for calculus readiness. A grade of C or better must be earned to progress to a math course that uses this course as a pre-requisite.

**Textbook and Required Material:**
Precalculus with Limits, Larson, 4th edition, Brooks/Cole, Cengage Learning Publishing, 2018.

ISBN-13: 9781337271189

You are REQUIRED to have an access code for WebAssign. The access code can be purchased from the Grayson College Bookstore or directly from Cengage.

**Remote or Online learners need basic technical skills to succeed.**
**Applications/tools you'll need:**

- Access to a computer or laptop (equipped with a webcam and microphone is preferred)
- Grayson email address
- Internet access (high-speed internet connections are best for accessing streamed lecture videos). If access to high-speed internet is a barrier, alternatives to view video content include; viewing in low definition setting, downloading video file to computer for later viewing, or reading lecture transcripts
- Access to word processing software such as Microsoft's Word
- Ability to convert a document to a PDF file format
- Access and ability to navigate Canvas

**Skills you'll need:**

- Ability to use a web browser to navigate the Internet
- Ability to check and disable popup blockers
- Ability to download and upload documents
- Ability to post discussions in Canvas
- Ability to attend Canvas Conferences at scheduled times

**Time Management:**
Take charge of your learning from the beginning of the course; allow no time for procrastination to set in. It is recommended that you:

- Log on to your course at least three or four times per week to stay on top of announcements, assignment due dates, and discussion forums
- Read the syllabus on the first day of the course; print off a hard copy or keep a digital copy on your mobile device to refer to throughout the course
- Record all dates for assignments, exams for the entire course in your calendar and add reminders

**Prerequisite(s):** MATH 1314 or the equivalent preparation.

**Corequisite(s):** NONE

**Credit Hours:** 3 **Lecture Hours:** 3 **Lab Hours:** 1

**Methods of Instruction:** Lecture/examples of problems, homework Q&A, videos (when applicable), online materials. This class will be taught in an online format with synchronous (live streaming) lectures. Students will be required to attend virtually each day of class. Students will be required to follow protocols set forth by Grayson College when attending class or appointments on campus.

**Other Required Course Materials:**
You must have a scientific calculator for this course. Graphing calculators are **NOT** allowed. I recommend the TI-30X IIS. You will **NOT** be allowed to use your cell phone or any other electronic device that can be used for any purpose other than as a calculator.

**Student Learning Outcomes:** *(Upon completion of this course, students should be able to do the following.)*

1. Demonstrate and apply knowledge of properties of functions.
2. Recognize and apply algebraic and transcendental functions and solve related equations.
3. Apply graphing techniques to algebraic and transcendental functions.
4. Compute the values of trigonometric functions for key angles in all quadrants of the unit circle measured in both degrees and radians.
5. Prove trigonometric identities.
6. Solve right and oblique triangles.

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**Method of Evaluation:** *(Grade will be determined by averaging the individual components using the scale shown below.)*

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|---|---|
| Warmups | 10% |
| Homework | 10% |
| Quizzes | 10% |
| Exams | 70% |

**Grading Scale:** **A =** 89.5 – 100 **B =** 79.5 – 89.4 **C =** 69.5 – 79.4 **D =** 59.5 – 69.4 **F =** 0 – 59.4

**Grade Posting:** Grades for each assignment will be posted in Canvas under the course Grades tab. These grades will be posted no later than 7 days after the posted due date. Because your quizzes and online assignments are auto-graded in WebAssign, you will receive immediate feedback on those assessments.

**Grading Rubric for Math Problems:**
The following table illustrates the way in which points will be deducted for errors made on assignments and exams.

| Percentage of total point value to be deducted | Description of error(s) |
|---|---|
| 0% - 30% | Minor Error<br>• Correct mathematical notation was not used.<br>• The sequence of steps was not written in a logical and organized manner.<br>• Variables were not identified.<br>• Units were not designated.<br>• The method of solution is correct, but there is a sign, arithmetic, copying, or similar minor error in the work.<br>• Correct grammar was not used when a verbal response was required. |
| 30% - 70% | Significant Error<br>• The method could have worked; a correct start was made, but a substantial error or errors led to the wrong conclusion.<br>• Poor notation, organization, or handwriting made it difficult to follow and understand for the reader.<br>• A correct method was started, but not completed. |
| 70% - 100% | Major Error<br>• Instructions were not followed.<br>• Method of solution was incorrect.<br>• Problem was left blank. |

**Diagnostic Reviews:**

All students taking MATH 2312 are required to complete the online math diagnostic reviews using WebAssign, an interactive online teaching and learning tool. Five (5) diagnostic reviews will be given over the first eight weeks of the course that cover various algebraic topics that should have been mastered prior to Precalculus. None of the diagnostic review scores are dropped.

**Please be aware that technical problems do sometimes occur. If WebAssign's website is unavailable, this does not excuse you from completing the assignment by the deadline.** Neither your instructor nor Grayson College may be held responsible for technical difficulties you may experience during the course. Complete your assignments in a timely manner to avoid last minute complications.

**Homework Policy:**

Homework is an essential part of this course. Math is a cumulative subject that requires frequent practice in order to develop your skills. If one topic is confusing, then the next topic is likely to be more confusing. The general rule of thumb is to spend two hours studying for every hour spent in class. This translates to six hours per week. Your proficiency with math and your success in this class will depend on active practice.

Textbook homework problems are also posted in Canvas for additional practice, but are not required to turn in for a grade.

Additional pencil/paper homework assignments will be assigned and posted in Canvas. These are required to turn in for a grade. There will be no make-ups for missed homework. Any missed assignments will receive a grade of zero. The lowest homework score will be dropped.

**Quiz Policy:**

All online quizzes must be completed using WebAssign. Nine (9) WebAssign quizzes will be given throughout the semester as chapter check-ups. There will be no make-ups for missed quizzes. Any missed assignments will receive a grade of zero. The lowest quiz score will be dropped.

**Please be aware that technical problems do sometimes occur. If WebAssign's website is unavailable, this does not excuse you from completing the assignment by the deadline.** Neither your instructor nor Grayson College may be held responsible for technical difficulties you may experience during the course. Complete your assignments in a timely manner to avoid last minute complications.

**Exam Policy:**

Exams 1 – 4 will be given in the classroom during normal lecture hours – observe the weekly schedule on the last page of this syllabus. The lowest exam grade will be replaced with the final exam grade if it is higher.

You will **NOT** be allowed to use your cell phone or any other electronic device that can be used for any purpose other than as a calculator on a test.

**Late Work Policy:**

All online work is due by the listed due dates in WebAssign and Canvas at 11:59PM.

**Make-up Policy:**

If you are absent the day of an exam, you should be prepared to take the exam the day you return to class.

Notice to the instructor must be given as soon as possible in order to take an exam early

**Attendance Policy:**

Academic success is closely associated with regular class attendance and course participation. All successful students, whether on campus or online, are expected to be highly self-motivated. All students are required to participate in courses regularly and are obliged to participate in class activities and complete and submit assignments following their faculty's instructions. Students taking courses during compressed semester timeframes such as mini-mester, summer sessions, and 8-week courses should plan to spend significantly more time per week on the course. Responsibility for work missed because of illness or school business is placed upon the student. Instructors are required to include in their syllabi the attendance policy for the courses(s) they teach. The college considers absences equal to or greater than 15% of the course's requirements to be excessive.

In order for students to be counted as having attended a class before the census date, the following guidelines are to be used:

- Physical attendance in class with an opportunity for instructor and student interaction
- Submission of an academic assignment
- Completion of an exam, interactive tutorial, or computer-assisted instruction
- Attendance at a study group assigned by the faculty
- Participation in an online discussion in the class
- Contact with a faculty member to ask a question

Attendance in this course will be taken for each class period. In the event face-to-face instruction is interrupted by unforeseen circumstances, instructors will take attendance weekly based on the guidelines mentioned above.

**Monitoring Online Activities:**

Student activity within systems they log into (such as Canvas) will be monitored regularly by the instructor of the class to ensure students are participating and meeting goals. Students are strongly encouraged to visit the class Canvas website throughout the week to consistently meet deadlines and review course materials.

**Professionalism, Etiquette, and Netiquette:**

Professionalism is a set of behavioral skills that are directly transferable to the workplace and that gives a graduate distinctive value. Professional skills enable a more seamless transition from college life to professional life, and include:

- Respect for all individuals, groups, and people.
- Ability to handle stressful situations with professionalism.
- Punctuality and organizational skills.
- Ability to network and establish new relationships.
- Ability to contribute positively to a diverse team.

When communicating with your instructor or classmates online (e.g. through email, discussion forums, or other applications), be as civil and professional as you would in face-to-face interactions:

- Be respectful to those with whom you may disagree and avoid any language that may be construed as angry, hateful, or inappropriate. Please understand that the use of all capital letters in a message indicates aggressive language.
- Respect the privacy of anything that is communicated to you in confidence (i.e. never forward private emails to others without the sender's consent or understanding).
- Always review your messages for clarity and tone before sending an email or posting in a discussion forum.

**Resource Material:**

Any student enrolled in this class has access to the Math Hub located in the Student Success Center, room SSC-200, and can be reached at (903) 463 – 8663. The lab is staffed with faculty and tutors; in addition, it offers free tutorial help, calculators, and a computer area to watch math videos or work on your online math homework. For more information on the Math Hub (including an orientation video, a video showing how to get to the Math Hub on the Denison campus and hours of operation) go to the following web site: https://www.grayson.edu/current-students/Academic%20Resources/student-labs/math-hub.html
Due to COVID-19 precautions, the Math Hub will restrict face-to-face tutoring to occur by appointment only. Virtual tutoring will be available through the Math Hub and UPSWING. Please see the announcement in Canvas for instructions on how to access these resources.

**Disabilities Services:**

The College is committed to meeting the special needs of disabled students and coordinates with agencies such as Texas Department of Assistive and Rehabilitative Services and Texas Department of Human Resources to provide appropriate accommodations.

Students with documented disabilities should contact the Disabilities Services Coordinator in the Success Center preferably before classes start or as early in the semester as possible. Once appropriate documentation for the disability is received, the Disability Services Coordinator will coordinate delivery of approved accommodations with students and their instructors. The College makes the following services available to students with documented disabilities: tutoring, note taking, sign language interpreting, special testing conditions, taped textbooks, scribes, special/modified equipment, and other appropriate services.

**Drop/Withdrawal Regulation:**

Under section 51.907 of the Texas Education Code, "an institution of higher education may not permit a student to drop more than six courses, including any course a transfer student has dropped at another institution of higher education." Please consult your instructor before you drop a course, and check the current Grayson Registration Guide for the last official day to drop/withdraw from a course.

**Drop/Withdrawal Procedure:**

To drop this course, you will need to do the following:

1. Attain a Drop/Add form from your instructor or the Admission's Office.
2. Turn in the completed Drop/Add from to the Admission's Office on or prior to the drop date.
3. Make sure your course withdrawal satisfies the college withdrawal policy.
4. You may receive an F if you do not finish this class and do not drop prior to the drop deadline.

**Religious Holy Days:**
Grayson College will allow students who are absent from class for the observance of a religious holiday to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence. The form for requesting absence for holy days may be obtained from the Vice President for Student Services. "Religious holy day" denotes a holy day observed by a religion whose places of worship are exempt from property taxation under section 11:20, Tax Code. A student who is excused under this section may not be penalized for the absence, but the instructor may appropriately respond if the student fails to satisfactorily complete the assignment or examination.

**Evaluation of Instruction:**
Grayson College seeks to improve the learning experience of all students. To assist in evaluating courses, students will be requested to complete an online evaluation-of-instruction near the end of the semester.

**Student Responsibility**
You have already made the decision to go to college; now the follow-up decisions on whether to commit to doing the work could very well determine whether you end up working at a good paying job in a field you enjoy or working at minimum wage for the rest of your life. Education involves a partnership that requires both students and instructors to do their parts. By entering into this partnership, you have a responsibility to show up for class, do the assignments and readings, be engaged and pay attention in class, follow directions, and put your best effort into it. You will get out of your experience here exactly what you put into it – nothing more and nothing less.

**Student Code of Conduct**
Students are expected and required to maintain classroom decorum that includes respect for other students and the instructor. Any student not following this rule will be warned in private and if there is no change in the behavior, the student will be asked to leave the class or receive disciplinary actions according to the Student Handbook - https://grayson.edu/current-students/Docs/Student-Handbook-20-21.pdf

Students are expected to have prompt and regular attendance, and an attitude that seeks to take full advantage of the educational opportunity.

Any behavior that disrupts the learning environment will not be tolerated. Disruptive behavior includes but is not limited to talking while another student or the professor is speaking. Cell phones should be turned off during class, this includes texting. If you truly have an emergency situation, put the phone in silent or vibrate mode and leave the room to answer if you must.

**Academic Integrity Policy**

The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrates a high standard of individual honor in his or her scholastic work.

Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, and the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts. Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable, and will be dealt with under the college's policy on plagiarism (see GC Student Handbook for details). Grayson College subscribes to turnitin.com, which allows faculty to search the web and identify plagiarized material.

Academic honesty will be ensured by the fact that 70% of your course grade will be earned while in a proctored and secured environment. If caught cheating (looking at another student's test, using notes within the test, or using an unauthorized software program) while taking a test in a proctored testing center you will be disciplined as follows:

- 1st offense will result in a grade of 0 for the exam in which the offense was committed along with a written letter to be added to his/her academic file.
- 2nd offense will result in a grade of F for the course along with a written letter to be added to his/her academic file and given to the dean of academics for further review.

**Plagiarism Policy**
Plagiarism is a form of scholastic dishonesty involving the theft of or fraudulent representation of someone else's ideas or words as the student's original work. Plagiarism can be intentional/deliberate or unintentional/accidental. Unintentional/Accidental plagiarism may include *minor* instances where an attempt to acknowledge the source exists but is incorrect or insufficient. Deliberate/Intentional plagiarism violates a student's academic integrity and exists in the following forms:

- Turning in someone else's work as the student's own (such as buying a paper and submitting it, exchanging papers or collaborating on a paper with someone else without permission, or paying someone else to write or translate a paper),
- Recycling in whole or in part previously submitted or published work or concurrently submitting the same written work where the expectation for current original work exists, including agreeing to write or sell one's own work to someone else,
- Quoting or copy/pasting phrases of three words or more from someone else without citation,
- Paraphrasing ideas without citation or paraphrasing incompletely, with or without correct citation, where the material too closely matches the wording or structure of the original,
- Submitting an assignment with a majority of quoted or paraphrased material from other sources, even if correctly cited, when original work from the student is expected,
- Copying images or media and inserting them into a presentation or video without citation,
- Using copyrighted soundtracks or video and inserting them into a presentation or video without citation,
- Giving incorrect or nonexistent source information or inventing source information,
- Performing a copyrighted piece of music in a public setting without permission,
- Composing music based heavily on someone else's musical composition.

**GC Title IX Policy**
GC policy prohibits discrimination on the basis of age, ancestry, color, disability, gender identity, genetic information, national origin, race, religion, retaliation, serious medical condition, sex, sexual orientation, spousal affiliation and protected veterans status.

Furthermore, Title IX prohibits sex discrimination to include sexual misconduct: sexual violence (sexual assault, rape), sexual harassment and retaliation.

For more information on Title IX, please contact:

- Dr. Molly M. Harris, Title IX Coordinator (903) 463-8714
- Ms. Logan Maxwell, Title IX Deputy Coordinator – South Campus (903) 415-2646
- Mr. Mike McBrayer, Title IX Deputy Coordinator – Main Campus (903) 463-8753
- Website: http://www.grayson.edu/campus-life/campus-police/title-ix-policies.html
- GC Policy Department: (903) 463-8777 – Main Campus (903) 415-2501 – South Campus
- GC Counseling Center: (903) 463-8730
- For Any On-campus Emergencies: 911

Grayson College campus-wide student policies may be found on our Current Student Page on our website: http://grayson.edu/current-students/index.html

**GC ALERT & EMERGENCY MANAGEMENT**
Current students of Grayson College, Faculty, Staff, and the general public can register to receive voice and email messages via GC Alert, the college's emergency notification system. This web-based service sends high-priority messages during urgent situations. Manage your contact profile to the service through GC Alert. You can update your contact information for receiving alerts, and you can add, delete, or update your devices. For more information, please visit the website at http://grayson.edu/campus-life/campus-police/emergency-management.html

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**Grayson College is not responsible for illness/injury that occurs during the normal course of classroom/lab/clinical experiences.**

**These descriptions and timelines are subject to change at the discretion of the Professor.**

**Grayson College campus-wide student policies may be found on our Current Student Page on our website:**
http://grayson.edu/current-students/index.html

**In case of inclement weather, emergency closings, or other unforeseen disruptions to scheduled classes, student must log onto their Canvas accounts for directions on where or how to continue their coursework.**

## Course Calendar for MATH – 2312 (Subject to Change)

| | |
|---|---|
| **Week 1** | Introduction<br>Section A.4: Rational Expressions<br>Section 1.4: Functions<br>Section 1.5: Analyzing Graphs of Functions<br>Section 2.7: Nonlinear Inequalities |
| **Week 2** | Section 4.1: Radian and Degree Measure<br>Section 4.2: Trigonometric Functions – The Unit Circle<br>Section 4.3: Right Angle Trigonometry<br>Section 4.4: Trigonometric Functions of Any Angle |
| **Week 3** | Section 4.5: Graphs of Sine and Cosine Functions<br>Section 4.6: Graphs of Other Trigonometric Functions |
| **Week 4** | Section 4.7: Inverse Trigonometric Functions<br>Section 4.8: Applications and Models<br>Review for Exam 1 |
| **Week 5** | **Exam 1 (A.4, 1.4, 1.5, 2.7, 4.1 – 4.8)**<br>Section 5.1: Using Fundamental Identities<br>Section 5.2: Verifying Trigonometric Identities |
| **Week 6** | Section 5.3: Solving Trigonometric Equations<br>Section 5.4: Sum and Difference Formulas<br>Section 5.5: Multiple-Angle and Product-to-Sum Formulas |
| **Week 7** | Section 6.1: Law of Sines<br>Section 6.2: Law of Cosines<br>Review for Exam 2 |
| **Week 8** | **Exam 2 (5.1 – 5.5, 6.1 – 6.2)**<br>Section 10.2: Introduction to Conics – Parabolas |
| **Week 9** | Section 10.3: Ellipses<br>Section 10.4: Hyperbolas |
| **Week 10** | Section 10.6: Parametric Equations<br>Section 10.7: Polar Coordinates<br>Section 10.8: Graphs of Polar Equations |
| **Week 11** | Review for Exam 3<br>**Exam 3 (10.2 – 10.4, 10.6 – 10.8)** |
| **Week 12** | Section 6.3: Vectors in the Plane<br>Section 6.4: Vectors and Dot Products<br>Section 7.4: Partial Fractions |
| **Week 13** | Section 9.1: Sequences and Series<br>Section 9.2: Arithmetic Sequences and Partial Sums |
| **Week 14** | Section 9.3: Geometric Sequences and Series<br>Review for Exam 4 |
| **Week 15** | **Exam 4 (6.3 – 6.4, 7.4, 9.1 – 9.3)**<br>Review for Final Exam |
| **Week 16** | **Comprehensive Final Exam** |