Gateway STEM High School/University of Missouri – St. Louis

MATH 1035, TRIGONOMETRY
SYLLABUS

COURSE TITLE: Trigonometry/Math 1035
CREDIT: 2 credit hours
DATE: Spring 2023

INSTRUCTOR: Mr. Jasmin Cerić, MEd.
                  Room: 201 South
                  E-mail: jasmin.ceric@slps.org

TEXT: The textbook <u>Algebra and Trigonometry</u> by Blitzer 6th edition. The book is online and comes with your MyLab Math registration.

SOFTWARE: MyLab Math

COURSE DESCRIPTION: This course covers topics including study of trigonometric and inverse trigonometric functions with emphasis on trigonometric identities and equations. This course is intended for students planning to take MATH 1800.

PREREQUISITES: The course prerequisites are:
- Completed Gateway STEM High School AP/DC Application Form
- 11th or 12th grade standing at Gateway STEM High School with an overall 3.0 or higher GPA. 11th or 12th graders with an overall GPA of 2.5 – 2.99 must provide a recommendation letter from their principal OR school counselor AND their parent or legal guardian.
- The following academic requirements must also be met:
  - Math/ACT score of 22 **OR**
  - Math/ACT score of 21 with 3.0 GPA and completion of Algebra I, Algebra II with at least a B.
  - Math/ACT score of 20 with 3.0 GPA and completion of Algebra I, Algebra II with at least an A.

ACP ENROLLMENT: In order to receive Math 1035 credit through UMSL, each student will need to enroll through the ACP website found at http://umsl.edu/acp. We will do this as a class before the due date of _____.
To obtain 2 hours of credit through UMSL, you must pass this course with a "C" or above and can only receive those credits **if** you enroll online.

DISCLAIMER: This course is <u>TOUGH</u>. By signing up for this course, the student acknowledges that in order to obtain college credit, they will have to perform at college level. This includes having appropriate classroom behavior, completion of ALL homework assignments, and having a positive attitude about their classmates and their own learning.

<u>NO CALCULATORS ALLOWED FOR QUIZZES AND EXAMS (except if specifically needed for word problems involving tedious computation of trig functions)!</u>
The reason for this is that we have found that the use of such devices tends to exacerbate student weaknesses, particularly regarding basic skills. For that reason, you might consider not using one on your homework unless it's an absolute must.

TECHNOLOGY: This course uses a variety of technologies including many of the assignments being online only. It is imperative that if you are taking this course, that you have access to some sort of computer system which will allow you to gain online access. Throughout the course, we will make trips to the computer labs to give you time to work on assignments, but this will not be enough time for you to necessarily complete all of your assignments.

TOPICS:

Week 1	Angles and Radian measure, Right Triangle Trigonometry,
Week 2	Trigonometric functions around the unit circle, Trigonometric Functions of any angle
Week 3	Inverse trigonometric functions
Week 4	Verifying trigonometric identities, Sum and difference formula, Double angle formula, half-angle formula, power-reducing formula,
Week 5	Trigonometric equations
Week 6	The Law of sines, the Law of cosines
Week 7	Polar coordinates, Graph of polar equations, vectors
Week 8	Complex numbers in rectangular and polar forms, De Moivre's Theorem

OBJECTIVES:
Upon completion of Math 1035, the student should be able to
- ✓ Demonstrate an understanding of the properties of angles and of the basic trigonometric functions
- ✓ Prove and use trigonometric identities
- ✓ Identify important properties of the graphs of trigonometric functions
- ✓ Solve equations involving trigonometric functions
- ✓ Solve for missing lengths of angles of oblique triangles
- ✓ Use and describe inverse trigonometric functions
- ✓ Understand vectors and polar coordinates
- ✓ Link algebra and geometry using De Moivre's Theorem

CLASSROOM EXPECTATIONS/POLICIES:

The students in room 201 South are expected to:

1. *Respect the materials around you*. Show respect for the material we are learning, the materials available in class, and any material that comes into room 201 South. To show respect, use thoughtful and academic language, and contribute to discussions in a meaningful manner. Any disrespectful language or behavior will **NOT** be tolerated.
2. *Be ready to start when the bell rings*. This means being in your seat when the bell rings and remain in your seat unless excused by the teacher. All materials are to be gathered and ready to be used when the bell rings at the start of class. The restroom and water fountain are to be used during breaks.
3. *Remain on task throughout the entire class time*. Class time is from bell to bell. Students are expected to begin working when the initial class bell rings and will end work when the dismissal bell rings. Each class will be dismissed by the teacher.
4. *Food and Drinks are to be enjoyed during passing period and at lunch*. Food and drink are not to be consumed in the classroom during class time.

HOMEWORK: Most of the homework in this section will be submitted through MyLabPlus, which you should have access to as a student for this course.

WARNING: You must pay close attention to the due dates of your assignments. It is YOUR responsibility to get your work done on time.

LATE WORK POLICY: Late work will be accepted throughout this course. However, late work will only be accepted up to the unit test for each unit and at a maximum of 50% of the value of the assignment. Do your homework completely and on time and you won't even have to think about this.

ACADEMIC DISHONESTY: Plagiarism is defined as presenting as one's own the words, the work, or the opinions of someone else without proper acknowledgment. Students at Gateway STEM High School are expected to complete their own work, just as they would have to in the post-secondary and professional environment. Plagiarism will result in a zero on the assignment and a referral.

DATES TO REMEMBER:
Last Day to Drop (Spring 2023 2): April 1st , 2023

GRADE ASSIGNMENT: Grades will be determined on the following scale:
100-90 A, 89.9-80 B, 79.9-70 C, 69.9-60 D, Below 60 F

Assignment	Percentage of Grade
Homework, Quizzes, Projects	20%
Exams	60%
Final	20%

TRIGONOMETRY/MATH 1035

Course Syllabus Acknowledgement Form

Student and Parent/Legal Guardian Acknowledgement:

I have been provided with access to the course syllabus, understand what is expected of me, fully understand the course expectations and grading outline, and agree with the provision set forth in the syllabus.

This course is offered for dual credit through UMSL if your student registers online.

☐ Check this box if you have read and understand that this course is offered for college credit and that your student must register online to receive that credit.

_____   _____

Student Printed Name   Date

_____   _____

Student Signature   Email Address

_____   _____

Parent Printed Name   Date

_____   _____

Parent Signature   Email Address