**MA-085B Fundamentals of Mathematics**

Course Syllabus and Calendar

**Section Information**

Section 03

On Campus

Monday, Wednesday, Friday 11:00-12:20

Science Building Room 121

**Instructor Information**

Ms. Katrina Quinata

quinatak@triton.uog.edu (preferred)

Science Building Room 100

Monday-Friday 2:00-3:00pm

671-735-0317

**COURSE CATALOG DESCRIPTION**

MA085a-b is a two-semester sequence of courses that is a study of the fundamental concepts of high school mathematics, including arithmetic and algebra. Each course is lecture-based with laboratory sessions designed to provide the background necessary for advancement in mathematics. Each includes 3 lecture hours and 1.5 hours of laboratory for review/testing sessions weekly. MA085a includes whole, decimal, and signed numbers, fractions, ratios, percent, operations, equations, and inequalities. MA085b includes polynomials, factoring, rational and radical expressions, exponents, and quadratic equations. A student may successfully complete either the MA085a-b sequence or the MA089 course for non-degree-units (NDUs) but may not receive NDUs for completion of both MA085a-b and MA089. Grades for students in MA085a must be C1 or better to enroll in MA085b. Grades for students in MA085b must be C2 or better to enroll in MA 110, MA 115, or MA 151. Prerequisite: Mathematics placement test.

**COURSE CONTENT**

The following are the **9** topics that will be covered in this course.

* Topic 10 Polynomials
* Topic 11 Factoring
* Topic 12 Rational Expressions
* Topic 13 More Equations
* Topic 14 Linear Equations in Two Variables
* Topic 15 Systems of Linear Equations
* Topic 16 Exponents
* Topic 17 Radical Expressions
* Topic 18 Quadratic Equations

**STUDENT LEARNING OUTCOMES ALIGNMENT MATRIX**

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| --- | --- | --- |
| **Course Student Learning Outcomes** | **Math Program Learning Outcomes** | **Institutional Learning Outcomes** |
| SLO 1: Perform algebraic operations on integers, fractions, decimals, and expressions involving variables. | MA PR 1: Demonstrate critical thinking, problem solving skills and ability to use mathematical methods by identifying, evaluating, classifying, analyzing, synthesizing data and abstract ideas in various contexts and situations (at basic level) | ILO1: Mastery of critical thinking & problem solving  ILO2: Mastery of quantitative analysis (at basic level) |
| SLO 2: Generate graphs of linear equations, inequalities, and systems of equations. | MA PR 1: Demonstrate critical thinking, problem solving skills and ability to use mathematical methods by identifying, evaluating, classifying, analyzing, synthesizing data and abstract ideas in various contexts and situations (at basic level) | ILO1: Mastery of critical thinking & problem solving  ILO2: Mastery of quantitative analysis (at basic level) |
| SLO 3: Use algebraic representations to solve real-life applications and problems. | MA PR 1: Demonstrate critical thinking, problem solving skills and ability to use mathematical methods by identifying, evaluating, classifying, analyzing, synthesizing data and abstract ideas in various contexts and situations (at basic level) | ILO1: Mastery of critical thinking & problem solving  ILO2: Mastery of quantitative analysis (at basic level) |

**COURSE REQUIREMENTS**

**REQUIRED TEXTS**

Fundamentals of Mathematics Workbook **3rd edition** [MA085B: Green]. You may purchase your workbook at the Triton Bookstore. Please visit <https://store.uog.edu/about> for more information.

**GRADING INFORMATION**

Final letter grades demonstrating successful completion of MA085B will be **A2, B2, or C2. Grades of D2 or F2 are *not* passing grades.** Students who receive D2 or F2 will need to retake MA085B.

MA085B is a non-degree unit course. Students do not earn credit towards degree for this course, and it does not affect GPA.

**COURSE FINAL GRADES**

A2 90-100%

B2 80-89%

C2 70-79%

D2 60-69%

F2 0-59%

UW: Unofficial withdrawal assigned by Registrar. Student stopped attending classes and did not submit required documents to the Admissions & Records office.

W: Withdrawal assigned by Registrar. Student stopped attending classes and submitted required documents to the Admissions & Records office.

**GRADE CATEGORIES: ASSIGNMENTS AND PERCENTAGES**

Topic tests is 80% of your final grade. Cumulative Final Exam is 20% of your final grade.

**ASSIGNMENT DESCRIPTIONS**

Students are expected to complete exercise problems in the workbook and other assignments given for extra practice. During class, students will be highly encouraged to work with one another while still being responsible for their own learning and doing all his/her own work.

***Attendance/Lecture:***ATTENDANCE IS REQUIRED to pass the course. More than six (6) absences, EXCUSED OR UNEXCUSED, garner an automatic failure for this course. Attendance and participation are of the utmost importance. Satisfactory participation means that you are willing to share your thought processes, questions, and solutions with the class, that you support your classmates by listening and thoughtfully reacting to their ideas, and that you come prepared to the class so that you can actively participate in class discussions.

***Homework/ Assignment:*** To encourage additional practice, students are encouraged to complete and submit homework. MA085B workbook (3rd edition) is required to complete the assigned homework problems. Students can earn 1 extra credit point for each completed assigned homework toward test score. Deadline to submit homework is the next class day after being assigned.

***Tests:*** There will be 9 topic tests. Each test will cover a single topic. After each topic is covered, the corresponding topic test will be administered on the Friday class—Tutoring/Testing Workshop Session. **Students can take a test of the same topic only once a day** (but can take different topic tests within a day.) **Students will have up to TWO scheduled chances to take each topic test and can take these tests only on the scheduled dates** (see course schedule.) **The instructor will record the best score out of the two trials.** No more than two tests can be taken a day. There are certain Fridays when both a first attempt test and retake are scheduled. Students must decide for themselves if they want to take either one or both. If both are to be attempted, students must complete both tests in the scheduled 80 minutes of class time; no extra time will be given. Show all work for credit. Box your final answer. If your process is incorrect but you magically got the right answer, it is still wrong. Highest scores for topic tests is 80% of final grade for the course.

**NO CALCULATORS OR OTHER ELECTRONIC DEVICES DURINGS TESTS AND FINAL EXAM**

***Final Exam:*** The final exam is cumulative and will include questions from all 9 topics. Show all work for credit. Box your final answer. If your process is incorrect but you somehow got the right answer, it is still wrong. All students are required to take the final exam. The final exam is 20% of final grade for the course.

**Course, Program, and University Policies and Other Information**

***Student Responsibility:*** You are expected to spend a ***minimum*** of *1- 1½ hours of outside study for each hour inside the classroom.* Do not commit the two cardinal sins in a mathematics course: **falling behind and leaving questions unanswered**. Both will complicate your life and cause a lot of unnecessary stress.

Remember, to succeed in any math class, you will need to put in the appropriate amount of time outside of class. Work as many practice problems as you can, write down questions you have as you read or work problems, and ask questions. You will feel a sense of confidence and accomplishment for all problems you complete and attempt. Practice is the best way to build your math intuition and ensure you have a solid foundation. **Your grade is a direct reflection of the amount of time you put into this class.**

**The following are some important notes concerning student responsibilities**:

* It is your responsibility to attend class. Do not fall behind. If you do, make sure you catch up.
* It is your responsibility to know when tests and final exam are scheduled.
* It is your responsibility to keep hold of any documents/assignments/tests submitted.
* It is your responsibility to keep an accurate record of your graded work. I will keep a copy on my gradebook.
* It is your responsibility to keep, read and know the contents of this syllabus.

***Your Math Resources:*** There are resources available to you if you need extra help with any of the course material.

* **Your instructor!** Make an appointment to meet with me.
* **Mathematics Tutor Lab**: Students are encouraged to schedule *free* tutoring with the UOG Math Tutor Lab. Students can book an appointment at www.uogmathlab.org. For more information and any updates, please email [mathtutorlab@triton.uog.edu](mailto:mathtutorlab@triton.uog.edu) or visit their website.

***Academic Integrity Policy:*** Academic Integrity is about performing in your role as a student in ways that are honest, trustworthy, respectful, responsible, and fair (see www.academicintegrity.org for more information). As a student, you will complete your academic assignments in the manner expected by the instructor. In line with the goal of developing ethical professionals, students must adhere to honesty on quizzes, exams and assignments. Absolutely no credit/points will be granted for work where cheating (quizzes/exams) and plagiarism are observed. Academic dishonesty, including but not limited to cheating and plagiarism may result in suspension or expulsion from the University. Refer to the UOG Student Handbook and Code of Conduct for more information (<https://www.uog.edu/helpline/policies-procedures>).

***Notification of Rights Under FERPA:***The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. These rights for students, parents and school officials can be viewed at <http://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html>

***UOG Disabilities Policy/ADA Accommodation Service:*** The University is committed to providing an inclusive and welcoming environment for all members of our community. Federal and local laws protect the University community from any act of sex discrimination. Such acts violate the essential dignity of our community members. If you need assistance with EEO (Equal Employment Opportunity) and/or Title IX concerns, please contact the Director of EEO/ADA & TITLE IX Office at 671-735-2244, 671-735-2971, TDD 671-735-2243 or eeo-ada@triton.uog.edu.

For individuals covered under the ADA {Americans with Disabilities Act), if you are a student with a disability requiring academic accommodation(s), please contact the Student Counseling and Advising Service Accommodations Office to discuss your confidential request. Please provide an accommodation letter from the Disability Support Services/Student Counseling and Advising Service Accommodation counselor. To register for academic accommodations, please contact or visit the Student Center, Rotunda Office #6, disabilitysupport@triton.uog.edu or telephone/(TDD) 671-735-2460.

***CollegeNet Course Evaluations:*** Course evaluations will be available for students to complete during the three-week period before the semester ends. Fanuchånan-Fall 2022 course evaluations will be available from **11/21/2022 – 12/09/2022**. You can access the course evaluations by going to the University of Guam’s website, click on the yellow Login button, select “CollegeNet Course Evaluations” You will need to know your Webadvisor/Self-Service username.

**COURSE CALENDAR**

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| MoN | WED | FRI |
| *Aug 15* | *Aug 17*  *Introductions* | *Aug 19*  *NO CLASS* |
| *Aug 22*  *Topic 10*  *POLYNOMIALS* | *Aug 24*  *Topic 10*  *POLYNOMIALS* | *Aug 26*  *NO CLASS* |
| *Aug 29*  *Topic 10*  *POLYNOMIALS* | *Aug 31*  *Topic 11*  *FACTORING* | *Sept 2*  ***Test 10*** |
| *Sept 5*  *Labor Day* | *Sept 7*  *Topic 11*  *FACTORING* | *Sept 9*  ***Test 10R*** |
| *Sept 12*  *Topic 11*  *FACTORING* | *Sept 14*  *Topic 12*  *RATIONAL EXPRESSIONS* | *Sept 16*  ***Test 11*** |
| *Sept 19*  *Topic 12*  *RATIONAL EXPRESSIONS* | *Sept 21*  *Topic 12*  *RATIONAL EXPRESSIONS* | *Sept 23*  ***Test 11R***  ***Test 12*** |
| *Sept 26*  *Topic 13*  *MORE EQUATIONS* | *Sept 28*  *Topic 13*  *MORE EQUATIONS* | *Sept 30*  ***Test 12R*** |
| *Oct 3*  *Topic 13*  *MORE EQUATIONS* | *Oct 5*  *Topic 14*  *LINEAR EQUATIONS IN TWO VARIABLES* | *Oct 7*  ***Test 13*** |
| *Oct 10*  *Fall Break* | *Oct 12*  *Fall Break* | *Oct 14*  *Fall Break* |

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| MoN | WED | FRI |
| *Oct 17*  *Topic 14*  *LINEAR EQUATIONS IN TWO VARIABLES* | *Oct 19*  *Topic 14*  *LINEAR EQUATIONS IN TWO VARIABLES* | *Oct 21*  ***Test 13R***  ***Test 14*** |
| *Oct 24*  *Topic 15*  *SYSTEMS OF LINEAR EQUATIONS* | *Oct 26*  *Topic 15*  *SYSTEMS OF LINEAR EQUATIONS* | *Oct 28*  ***Test 14R*** |
| *Oct 31*  *Topic 15*  *SYSTEMS OF LINEAR EQUATIONS* | *Nov 2*  *All Souls’ Day* | *Nov 4*  ***Test 15*** |
| *Nov 7*  *Topic 16*  *EXPONENTS* | *Nov 9*  *Topic 16*  *EXPONENTS* | *Nov 11*  *Veterans’ Day* |
| *Nov 14*  *Topic 16*  *EXPONENTS* | *Nov 16*  *Topic 17*  *RADICAL EXPRESSIONS* | *Nov 18*  ***Test 15R***  ***Test 16*** |
| *Nov 21*  *Topic 17*  *RADICAL EXPRESSIONS* | *Nov 23*  *Topic 17*  *RADICAL EXPRESSIONS* | *Nov 25*  *Thanksgiving Break* |
| *Nov 28*  *Topic 18*  *QUADRATIC EQUATIONS* | *Nov 30*  *Topic 18*  *QUADRATIC EQUATIONS* | *Dec 2*  ***Test 16R***  ***Test 17*** |
| *Dec 5*  *Topic 18*  *QUADRATIC EQUATIONS* | *Dec 7*  *REVIEW DAY/*  *COURSE EVALUATION* | *Dec 9*  ***Test 17R***  ***Test 18*** |

**FINALS WEEK**

**Wednesday, December 14, 2022, 10:00-11:50 am in Science Building Room 120. Final Exam will cover Topic 10-18.** During Final Exam Week, the class meets according to the Approved Exam Schedule. All UOG classes are required to meet during Final Exam Week.