**MA-089 Fundamentals of Mathematics**

Course Syllabus and Calendar

**Section Information**

Section 01

On Campus

Monday-Thursday 09:30-10:45

Science Building Room 120

**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**

This course is a study of the fundamental concepts of high school mathematics, including arithmetic and algebra. This course is lecture-based and designed to provide the background necessary for advancement in mathematics. It includes 5 lecture hours weekly. This is the combined course of MA085A-B. Students must earn a grade of **C2 or higher** to enroll in MA110, MA115, or MA151. *Prerequisite:* Mathematics Placement Test

**COURSE CONTENT**

The following are the **18** topics that will be covered in this course.

* Topic 1 Whole Numbers
* Topic 2 Fractions
* Topic 3 Decimal Numbers
* Topic 4 Ratios and Proportions
* Topic 5 Percent
* Topic 6 Signed Numbers
* Topic 7 Operations and Variables
* Topic 8 Linear Equations
* Topic 9 Applications of Equations
* 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**

|  |  |  |
| --- | --- | --- |
| **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: Draw 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**

MA085A (yellow) and MA085B (green) Fundamentals of Mathematics workbooks **3rd edition.** Workbooks may be purchased at the UOG Triton Store. You can contact the UOG Triton Store at 671-735-2931 for more information or visit their website: https://store.uog.edu/

**GRADING INFORMATION**

Final letter grades demonstrating successful completion of MA089 will be **A2, B2, or C2. Grades of D2, D1, F2, F1 are *not* passing grades.** Students who receive D2 or F2 for MA089 will be required to retake MA089 or return to MA085B if switching from MA089 to MA085 in a subsequent term. Students who receive D1 or F1 will be required to retake MA089 or return to MA085A if switching from MA089 to MA085 in a subsequent term.

MA089 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% 486-540 points

B2 80-89% 432-485 points

C2 70-79% 378-431 points

D1/D2 60-69% 324-377 points

F1/F2 0-59% 0-323 points

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**

To determine whether students have achieved the course learning objectives, students will be evaluated and graded as follows. The total points available is **540**. Students will take 14 quizzes. Students will take 4 exams.

|  |  |  |
| --- | --- | --- |
| **Quiz/Exam** | **Content** | **Points** |
| Quiz 1-18 (No Quiz 5/9/13/18) | Topic 1-18 | 140 |
| Exam 1 | Topic 1-5 | 100 |
| Exam 2 | Topic 6-9 | 100 |
| Exam 3 | Topic 10-13 | 100 |
| Exam 4 | Topic 14-18 | 100 |
|  | **Total** | **540pts** |

To calculate your final grade, (1) add all the points on 14 quizzes and 4 exams, (2) divide by 540, (3) multiply by 100.

**ASSIGNMENT DESCRIPTIONS**

***Lectures:*** Each topic will be discussed face-to-face during the scheduled meeting times in SC120.

***Homework (Extra Credit):*** To encourage additional practice, students are encouraged to complete and submit homework. MA085A and MA085B workbooks (3rd edition) are required to complete the assigned homework problems. Students can earn 1-5 points toward exam score by completing the assigned homework relative to that exam. The percentage of completed homework assignments will determine the extra credit points awarded. Deadline to submit homework is the day of its corresponding exam.

***Quizzes:*** Each topic will be lectured, discussed, and evaluated. After each topic is covered, the corresponding topic quiz will be administered except for Topics 5, 9, 13, and 18. There will be a total of 14 quizzes. No make-up will be given for a missed quiz. Use of calculator and all notes and workbooks are prohibited from use on quizzes. See schedule for dates of quizzes.

***Exams:*** After every four or five topics there will be an exam. There will be a total of 4 exams. Use of calculator and all notes and workbooks are prohibited from use on exams. No make-up will be given for a missed exam. Very special circumstances for being allowed to make up an exam should be handled by immediate consultation with the instructor. Except for true emergencies, these special cases are arranged in advance with the instructor. See schedule for dates of exams.

***Final Exam:*** The final exam is cumulative and will include questions from ALL topics. Use of calculator and all notes and workbooks are prohibited from use on final exam. You will need to show all work for the exam. All students are required to take the final exam. The final exam does not count towards a student’s final grade, but all students are encouraged to do their best to demonstrate improvement from the beginning of the semester to the end. The final exam may be used to replace one of the four exams to improve student’s final grade.

**NO CALCULATORS OR OTHER ELECTRONIC DEVICES ARE ALLOWED FOR ANY QUIZ/EXAM**

***Attendance and Time Consideration:*** Attendance is needed to pass the course. Attendance and participation is 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 our discussions. Students who are absent must reach out to classmates or set an appointment with the instructor to discuss missed work.

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

***Tobacco-Free/Smoke-Free/Vape-Free Campus:*** University of Guam is a tobacco-free/vape-free campus. Thank you for not using tobacco/vape products on campus, and for helping make UOG a healthy learning and living environment. http://www.uog.edu/smoke-free-uog

***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.

***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).

***UOG Disabilities Policy/ADA Accommodation Services:*** 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.

***Statement of Unacceptable Conduct for Students, Staff, Faculty:***  The following will not be tolerated

* sexual harassment, intimidation, or discrimination,
* physical or verbal abuse,
* disparaging comments related to age, color, disability, gender, gender identity, gender expression, national origin,
* political affiliation, race, religion, sexual orientation, and/or veteran status,
* unwelcome physical contact,
* inappropriate nudity and/or sexual images, and or
* threatening or stalking

***Withdrawal from Course:*** Deadline for “Voluntary Withdrawal” is October 7. Deadline to submit “Petition to Withdraw” is December 9.

***CollegeNET Course Evaluations:*** Course evaluations will be available for students to complete from November 21-December 9. 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. Completion of course evaluation may be substituted as extra credit towards an exam per instructor’s discretion and upon proof of completion.

***Tutoring:*** Students are encouraged to schedule tutoring with the UOG Math Tutor Lab. Virtual and in person tutoring are available. Students can book an appointment at [www.uogmathlab.org](http://www.uogmathlab.org) For hours of operation or more information, call 671-735-2064 or email mathtutorlab@triton.uog.edu

**COURSE CALENDAR**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Week | Day | Date | Topic | Homework # | Quiz |
| 1 | Wednesday | August 17 | Syllabus, Schedule, Introduction |  |  |
| Thursday | August 18 | Diagnostic Exam |  |  |
| 2 | Monday | August 22 | Topic 1: Whole Numbers | 1 |  |
| Tuesday | August 23 | Topic 1: Whole Numbers | 2 & 3 |  |
| Wednesday | August 24 | Topic 2: Fractions | 4 | Quiz 1 |
| Thursday | August 25 | Topic 2: Fractions | 5 |  |
| 3 | Monday | August 29 | Topic 2: Fractions | 6 |  |
| Tuesday | August 30 | Topic 3: Decimal Numbers | 7 | Quiz 2 |
| Wednesday | August 31 | Topic 3: Decimal Numbers | 8 |  |
| Thursday | September 1 | Topic 3: Decimal Numbers | 9 |  |
| 4 | Monday | September 5 | NO CLASS: LABOR DAY | | |
| Tuesday | September 6 | Topic 4: Ratios and Proportions | 10 | Quiz 3 |
| Wednesday | September 7 | Topic 4: Ratios and Proportions | 11 |  |
| Thursday | September 8 | Topic 5: Percent | 12 | Quiz 4 |
| 5 | Monday | September 12 | Topic 5: Percent | 13 |  |
| Tuesday | September 13 | Exam 1 Review |  |  |
| Wednesday | September 14 | **Exam 1: Topic 1 – 5** | | |
| Thursday | September 15 | Topic 6: Signed Numbers | 14 |  |
| 6 | Monday | September 19 | Topic 6: Signed Numbers | 15 |  |
| Tuesday | September 20 | Topic 7: Operations and Variables | 16 | Quiz 6 |
| Wednesday | September 21 | Topic 7: Operations and Variables | 17 |  |
| Thursday | September 22 | Topic 7: Operations and Variables | 18 |  |
| 7 | Monday | September 26 | Topic 8: Linear Equations | 19 | Quiz 7 |
| Tuesday | September 27 | Topic 8: Linear Equations | 20 |  |
| Wednesday | September 28 | Topic 8: Linear Equations | 21 |  |
| Thursday | September 29 | Topic 9: Applications of Equations | 22 | Quiz 8 |
| 8 | Monday | October 3 | Topic 9: Applications of Equations | 23 |  |
| Tuesday | October 4 | Topic 9: Applications of Equations | 24 |  |
| Wednesday | October 5 | Exam 2 Review |  |  |
| Thursday | October 6 | Exam 2: Topic 6 – 9 | | |
| 9 | Monday | October 10 | NO CLASS: FANUCHÅNAN-FALL BREAK | | |
| Tuesday | October 11 |
| Wednesday | October 12 |
| Thursday | October 13 |
| 10 | Monday | October 17 | Topic 10: Polynomials | 1 |  |
| Tuesday | October 18 | Topic 10: Polynomials | 2 |  |
| Wednesday | October 19 | Topic 10: Polynomials | 3 |  |
| Thursday | October 20 | Topic 11: Factoring | 4 | Quiz 10 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Week | Day | Date | Topic | Homework # | Quiz |
| 11 | Monday | October 24 | Topic 11: Factoring | 5 |  |
| Tuesday | October 25 | Topic 11: Factoring | 6 |  |
| Wednesday | October 26 | Topic 12: Rational Expressions | 7 | Quiz 11 |
| Thursday | October 27 | Topic 12: Rational Expressions | 8 |  |
| 12 | Monday | October 31 | Topic 12: Rational Expressions | 9 |  |
| Tuesday | November 1 | Topic 13: More Equations | 10 | Quiz 12 |
| Wednesday | November 2 | NO CLASS: ALL SOUL’S DAY | | |
| Thursday | November 3 | Topic 13: More Equations | 11 |  |
| 13 | Monday | November 7 | Topic 13: More Equations | 12 |  |
| Tuesday | November 8 | Exam 3 Review |  |  |
| Wednesday | November 9 | Exam 3: Topic 10 – 13 | | |
| Thursday | November 10 | Topic 14: Linear Equations in Two Variables | 13 |  |
| 14 | Monday | November 14 | Topic 14: Linear Equations in Two Variables | 14 |  |
| Tuesday | November 15 | Topic 14: Linear Equations in Two Variables | 15 |  |
| Wednesday | November 16 | Topic 15: Systems of Linear Equations | 16 | Quiz 14 |
| Thursday | November 17 | Topic 15: Systems of Linear Equations | 17 |  |
| 15 | Monday | November 21 | Topic 15: Systems of Linear Equations | 18 |  |
| Tuesday | November 22 | Topic 16: Exponents | 19 | Quiz 15 |
| Wednesday | November 23 | Topic 16: Exponents | 20 |  |
| Thursday | November 24 | NO CLASS: THANKSGIVING BREAK | | |
| 16 | Monday | November 28 | Topic 17: Radical Expressions | 21 | Quiz 16 |
| Tuesday | November 29 | Topic 17: Radical Expressions | 22 |  |
| Wednesday | November 30 | Topic 17: Radical Expressions | 23 |  |
| Thursday | December 1 | Topic 18: Quadratic Equations | 24 | Quiz 17 |
| 17 | Monday | December 5 | Topic 18: Quadratic Equations | 25 |  |
| Tuesday | December 6 | Exam 4 Review |  |  |
| Wednesday | December 7 | Exam 4: Topic 14 – 18 | | |
| Thursday | December 8 | NO CLASS: OUR LADY OF CAMARIN DAY | | |

**FINALS WEEK**

**Tuesday, December 13, 2022, 10:00-11:50 am in Science Building Room 120. Final Exam will cover Topic 1-18.** During Final Exam Week, the class meets according to the Approved Exam Schedule. All UOG classes are required to meet during Final Exam Week.