



**UNIVERSITY
OF GUAM**

**Unibetsedåt
GUAHAN**

College of Natural and Applied Sciences

Mathematics and Computer Science

Course: Developmental Mathematics – MA-085/LII, Level 2 (3 non-degree units)

Semester: Spring 2016

Meetings: TTH 16:00 – 17:20 and 17:30 – 18:50 at SC120
F 14:00 – 15:20 and 15:30 – 16:50 at SC120

Instructor: R. Velasco

Email: rlvelasco.uog@gmail.com

Catalog Description:

This course is a study of the fundamental concepts of high school mathematics, including arithmetic and algebra. This course is **lecture-based** with laboratory sessions designed to provide the background necessary for advancement in mathematics. It includes 3 lecture hours and 1½ hours of laboratory for review/testing sessions weekly.

Grades for Level II are A2, B2, C2, D2, or F2. Students must earn a grade of C2, B2 or A2 before they can exit MA085 and enroll in MA110, MA115, or MA151.

Prerequisite: Mathematics Placement Test.

This course will be offered each semester as:

MA085/LII FUND OF MATH II (Level II students only).

Level I Students must earn a grade of C1, B1, or A1 before they can exit Level I and take MA085, Level II.

Required Text:

Developmental Mathematics, 4th edition, Johnston, Willis, and Hughes (for Levels 1 & 2)

Class Format:

Class size is 20 - 25. Students will be expected to read the book and work out exercise problems for extra practice. During the class students will work in groups on problems. Group problem solving is the primary method of instruction for this class. You will work in groups of 3 to 4 each class meeting on an assignment. Each student in the group must do all his/her own work. Since you are working in a group, you are responsible for helping each other out, however you are also responsible for your own learning.

Attendance:

ATTENDANCE IS REQUIRED in order to pass the course. More than six (6) absences, **EXCUSED OR UNEXCUSED**, garner an **automatic failure** for this course. Attendance will also be taken during testing days.

Given the student-centered nature of this course, attendance and participation is of the utmost importance. Satisfactory participation means that you are willing to share your thought process, 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.

All cell phones and other electronic devices must be placed on SILENT before class begins.

Tests:

It is recommended that students score at least an 80% on chapter tests to pass with at least a C1 for Level 1 students or at least C2 for Level 2 students (See Final Semester Grade Table 1 below for the grade percentage breakdown). Students in both levels have to take **all** chapter tests and the final exam in order to pass the class. Students will be allowed two weeks to take make-up tests after each chapter test is given.

In addition, students who are still having a difficult time obtaining a mean grade of at least a 77% on the chapter tests even after taking the make up for each test will be allowed to take an Optional Cumulative Make-up Test 1 and/or an Optional Cumulative Make-up Test 2 (for both Level I and Level II students). Instructors must use the results of the optional make-up tests to the benefit of the student's final grade for both Level I and Level II students. See details in the "Evaluation Options for Evaluation of Grades".

Tests will be administered on the Friday Tutoring/Testing Workshop Sessions. There will also be Tutoring/Testing Workshop Sessions from 2 pm – 4 pm, Monday – Thursday.

NO CALCULATORS OR OTHER ELECTRONIC DEVICES ARE ALLOWED.

Please bring picture ID when you take a test.

During the test time there will be tutors available during Tutoring/Testing Workshop Sessions.

More testing information will be forthcoming.

Evaluation:

Every chapter will be lectured, discussed, and tested within two to three weeks. There will be lecture and discussion in the class for each chapter covered and the chapter test will be administered within a week or two (some within 3 weeks).

Evaluation Options for Evaluation of Grades:

- (1) Option 1 (Students who do not take the Optional Cumulative Make-up Tests 1 and/or 2):
In this Option, the computation for the final numerical % breakdown is as follows (See Item 4 below for the chapters covered):
 - (a) Mean grade for all chapter tests required for the level = 80% of the final semester grade.
 - (b) The remaining 20% will be allotted to the Final Exam for the level.
- (2) Option 2 (Students who DO take the Optional Cumulative Make-up Tests 1 and/or 2):

In this Option, instructors must use the Optional Cumulative Make-up Test 1 or 2 to determine the student's final numerical grade, but only if it benefits the student. Furthermore, students may take the Optional Cumulative Make-up Test if and only if they have taken the chapter tests covered in the Cumulative Make-up Tests (See Item 4 for the chapters covered). Finally, students can take the Cumulative Make-up only once and must do so within a week after the last chapter test in the cumulative make-up being taken is administered.

- Level II Students:
 - (a) The Optional Cumulative Make-up Test 1 will cover Test 11 – Test 14. The score on this make-up test will drop up to two test scores that are less than what the student made in the individual tests for Test 11 – Test 14. The mean score is then computed for Test 11 – Test 14. Note that instructors cannot use the midterm score if it is less than all of the individual test scores made by the student for Test 11 – Test 14. Students need to take the Cumulative Make-up Test 1 within a week after Topic Test 14 is first administered and can only take it once.
 - (b) The Optional Cumulative Make-up Test 2 will cover Test 15 – Test 19. The score on this make-up test will drop up to two test scores that are less than what the student made in the individual tests for Test 15 – Test 19. Similarly, instructors cannot use the midterm score if it is less than all of the individual test scores made by the student for Test 15 – Test 19. Students need to take the Cumulative Make-up Test 2 within a week after Test 19 is first administered and can only take it once.
 - (c) The final numerical grade is determined by computing 80% of the mean grade computed in (a) and (b). The remaining 20% will be allotted to Final Exam Level 2.

- (3) The letter grade after the final numerical grade is computed using either Option 1 or Option 2 is given in Table 1 below:

Table 1

Level 1	Level 2	Option 1 or Option 2 Computed Numerical Mean Grade
A1	A2	93% - 100%
B1	B2	85% - 92%
C1	C2	77% - 84%
D1	D2	70% - 76%
F1	F2	≤ 69%

- (4) Tests/Chapters Covered:

MA085 Level II Tests with Chapters/Tests Covered:

- (1) Test 11 (CH 8) - Polynomials
- (2) Test 12 (CH 11A) – Factoring 1
- (3) Test 13 (CH 11B) – Factoring 2
- (4) Test 14 (CH 12A) - Rational Expressions 1
Optional Cumulative Make-up Test 1 (Test 11 – Test 14)
- (5) Test 15 (CH 12B) - Rational Expressions 2
- (6) Test 16 (CH 14) - Systems of Linear Equations
- (7) Test 17 (Ch 15A) - Exponents and Radicals 1

- (8) Test 18 (CH 15B) - Exponents and Radicals 2
- (9) Test 19 (CH 16) - Quadratic Equations
- Optional Cumulative Make-up Test 2 (Test 15 – Test 19)**
- (10) Test 20: Final Exam Level II (Cumulative Final Exam for Level II)

Curriculum Mapping:

Course SLOs	Math PLOs	UOG ILOs	Method of Assessment
SLO 1	MA PR 1 (at basic level)	ILO 1,2 (at basic level)	Tests, Group work discussions
SLO 2	MA PR 1 (at basic level)	ILO 1,2 (at basic level)	Tests, Group work discussions
SLO 3	MA PR 1 (at basic level)	ILO 1,2 (at basic level)	Tests, Group work discussions

Student Learning Outcomes (SLOs)

SLO 1: Perform algebraic operations on integers, fractions, decimals and expression involving variables.

SLO 2: Generate graphs of linear equations, inequalities, and systems of equations.

SLO 3: Use algebraic representations to solve real-life applications and problems.

Program Learning Outcomes (PLOs)

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.

MA PR 2: Exhibit a sound conceptual understanding of the nature of mathematics, and demonstrate advanced mathematical skills in mathematical analysis, modern algebra and other mathematical discipline(s).

MA PR 3: Argue and reason using mathematics, read, create and write down logically correct mathematical proofs, use exact mathematical language and communicate mathematics efficiently orally, in writing and using information technology tools.

MA PR 4: Apply abstract thinking, mathematical methods, models and current practices in the sciences, including state-of-the-art mathematical software, to solve problems in theoretical mathematics or in a diverse area of mathematical applications.

MA PR 5: Show maturity in mathematical knowledge and thinking that prepares and encourages students to pursue graduate studies in mathematics or in related fields.

MA PR 6: Demonstrate an appreciation of and enthusiasm for inquiry, learning and creativity in mathematical sciences, a sense of exploration that enables them to pursue lifelong learning and up-to-date professional expertise in their careers through various areas of jobs, including governmental, business or industrial jobs in mathematics, related sciences, education or technology.

Institutional Learning Outcomes (ILOs)

ILO 1: Mastery of critical thinking & problem solving

ILO 2: Mastery of quantitative analysis

ILO 3: Effective oral and written communication

ILO 4: Understanding & appreciation of culturally diverse people, ideas & values in a democratic context

ILO 5: Responsible use of knowledge, natural resources, and technology

ILO 6: An appreciation of the arts & sciences

ILO 7: An interest in personal development & lifelong learning

Special Accommodations:

If you are a student with a disability who will require an accommodation(s) to participate in this course, please contact me privately to discuss your specific needs. You will need to provide me with documentation concerning your need for accommodation(s) from the EEO/ADA Office. If you have not registered with the EEO/ADA Office, you should do so immediately at 735-2244/2971/2243 (TTY) to coordinate your accommodation request.

Academic dishonesty:

All assignments and tests must be your own work. The term “plagiarism” includes, but is not limited, to, the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials. Plagiarizing in your essay or cheating on tests will be punished with a mark of 0. If a plagiarized essay is not replaced with original work I will assign you a grade of F for the course. There will be no make up for tests. If you are not sure what plagiarism is and how to avoid it in using sources for your work, see www.indiana.edu/~wts/pamphlets/plagiarism.shtml— but be careful when paraphrasing not to change the meaning of scientific information. Answers you write on the tests must come only from in your head or the information supplied in the test papers; anything else is cheating. The term “cheating” includes, but is not limited to: (1) use of any unauthorized assistance in taking quizzes, tests, or examinations, e.g., looking at other students’ answers, using crib notes (including electronic), getting information from another person via any kind of communication; (2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; or (3) the acquisition, without permission, of tests or other academic material belonging to a member of the University faculty or staff. If you need to use an electronic translator, you must discuss this with me in advance.

Tobacco-free/Smoke-free campus:

UOG is a tobacco-free campus. Thank you for not using tobacco products on campus, and for helping make UOG a healthy learning and living environment.

**MA085/LII
Spring 2016
Course Schedule***

*Course syllabus and course schedule subject to change at the discretion of the instructor.

Dates	Tuesday	Thursday	Friday
Jan. 19, 21, 22	NO CLASSES	Course Syllabus CH 8 Polynomials	NO CLASSES
Jan. 26, 28, 29	CH 8 Polynomials	CH 8 Polynomials	CH 8 TEST
Feb. 2, 4, 5	CH 11A Factoring 1	CH 11A Factoring 1	<i>CH 8 Make-Up 1</i>
Feb. 9, 11, 12	CH11A Factoring 1	CH 11B Factoring 2	CH 11A TEST <i>CH 8 Make-Up 2</i>
Feb. 16, 18, 19	CH 11B Factoring 2	CH 11B Factoring 2	CH 11B TEST <i>CH 11A Make-Up 1</i>
Feb. 23, 25, 26	CH 12A Rational Expressions 1	CH 12A Rational Expressions 1	<i>CH 11A Make-Up 2</i> <i>CH 11B Make-Up 1</i>
Mar. 1, 3, 4	CH 12A Rational Expressions 1	CH 12B Rational Expressions 2	CH 12A TEST <i>CH 11B Make-Up 2</i>
Mar. 8, 10, 11	NO CLASSES	CH 12B Rational Expressions 2	<i>CH 12A Make-Up 1</i>
Mar. 15, 17, 18	CH 12B Rational Expressions 2	CH 14 Systems of Linear Equations	CH 12B TEST <i>CH 12A Make-Up 2</i>
Mar. 29, 31, Apr. 1	CH 14 Systems of Linear Equations	CH 14 Systems of Linear Equations	CH 14 TEST <i>CH 12B Make-Up 1</i>
Apr. 5, 7, 8	CH 15A Exponents and Radicals 1	CH 15A Exponents and Radicals 1	<i>CH 12B Make-Up 2</i> <i>CH 14 Make-Up 1</i> <i>Optional Cume Test 1</i>
Apr. 12, 14, 15	CH 15A Exponents and Radicals 1	CH 15B Exponents and Radicals 2	CH 15A TEST <i>CH 14 Make-Up 2</i>
Apr. 19, 21, 22	CH 15B Exponents and Radicals 2	CH 15B Exponents and Radicals 2	CH 15B TEST <i>CH 15A Make-Up 1</i>
Apr. 26, 28, 29	CH 16 Quadratic Equations	CH 16 Quadratic Equations	<i>CH 15A Make-Up 2</i> <i>CH 15B Make-Up 1</i>
May 3, 5, 6	CH 16 Quadratic Equations	CH 16 Test <i>CH 15B Make-up 2</i>	<i>CH 16 Make-Up 1</i> <i>Optional Cume Test 2</i>
May 10, 12, 13	Final Exam Review	MA 085/LII FINAL EXAM <i>Last Day of Class</i>	NO CLASSES



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College of Natural and Applied Sciences

Mathematics and Computer Science

Course: MA085/LII-16: Fundamentals of Mathematics, Level II (3 non-degree units)

Semester: Spring 2016

Meetings: (Lecture) TTH: 09:30-10:50 at SC120
(Tutoring/Testing Workshop Session) F: 09:30-10:50 at WB#1

Instructor: Michael Herreros, B.S. Mathematics

Email: herreros.michael@gmail.com

Office hours: By appointment

Catalog Description:

This course is a study of the fundamental concepts of high school mathematics, including arithmetic and algebra. This course is **lecture-based** with laboratory sessions designed to provide the background necessary for advancement in mathematics. It includes 3 lecture hours and 1½ hours of laboratory for review/testing sessions weekly. Grades for Level I are A1, B1, C1, D1, or F1. Grades for Level II are A2, B2, C2, D2, or F2.

Students must earn a grade of C2, B2 or A2 before they can exit MA085 to enroll in MA110, MA115, or MA151.

Prerequisite: Mathematics Placement Test

Level I students must earn a grade of C1, B1, or A1 before they can exit Level I and take MA085, Level II.

Text:

Fundamentals of Mathematics Workbook (Level I: Yellow, Level II: Green)

Class Format:

Class size is 20-25. Students will be expected to read the book and work out exercise problems for extra practice. During the class students will work in groups on problems. Group problem solving is the primary method of instruction for this class. You will work in groups of 10-15 each class meeting on an assignment. Each student in the group must do all his/her own work. Since you are working in a group, you are responsible for helping each other out, however you are also responsible for your own learning.

Attendance:

ATTENDANCE IS RECOMMENDED in order to pass the course. More than six (6) absences, EXCUSED OR UNEXCUSED, garner an automatic failure for this course.

Given the student-centered nature of this course, attendance and participation is of the utmost importance. Satisfactory participation means that you are willing to share your thought process, 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.

***All cell phones and other electronic devices must be turned OFF before class begins.**

Tests:

Every chapter (topic) is scheduled to be lectured, discussed, and tested within two to three weeks. There will be lecture and discussion in the MW (or TTh) class for each chapter covered. After each chapter is covered, the corresponding chapter Test will be administered on the Friday class--Tutoring/Testing Workshop Session. There will also be (optional) Tutoring/Testing Workshop Sessions for MTWTh (**Time & Room TBA**). **Students can take a Test of the same chapter only once a day** (can take different chapter Tests within a day). Bring picture ID when taking Tests.

It is recommended that students score at least a 75%, preferably 80% on each chapter Test to pass with at least a C1 or C2 (see Table in the next page for the grade percentage breakdown). **Students will have TWO chances to take each chapter Test.; instructor will record the best score out of two trials.**

There will be two Optional Cumulative Make-up Tests during the Tutoring/Testing Workshop Sessions on the specific Friday. See *Schedule* and *Evaluation* below for details.

***NO CALCULATORS OR OTHER ELECTRONIC DEVICES ARE ALLOWED FOR TESTS.**

Evaluation:

There are two options for evaluation of the numerical grades.

Option 1 (Students who do not take the Optional Cumulative Make-up Tests)

Mean of chapter Tests	80%	← Level I (Test 1-9)	Level II (Test 11-19)
Final Exam	20%	← (Test 10)	(Test 20)

Option 2 (Students who DO take the Optional Cumulative Make-up Tests)

Students may take Optional Cumulative Make-up Test (1 and/or 2) only if they have taken **all four (or five)** chapter Tests covered in the Cumulative Make-up Tests corresponding as in the following table.

Chapter Test	Cumulative Make-up Test
Test 1-4	Level I: Make-up Test 1
Test 5-9	Level I: Make-up Test 2
Test 11-14	Level II: Make-up Test 1
Test 15-19	Level II: Make-up Test 2

Students can take each Cumulative Make-up Test only once on the specific Friday (see Schedule). The score on the Optional Cumulative Make-up Test will replace the corresponding individual (**up to two**) Test scores if and only if Make-up Test score is greater than the individual Test. See the following table for examples:

	Test 1	Test 2	Test 3	Test 4	Level I: Make-up 1
Original score	60	70	80	90	
Adjusted score	60	70	80	90	55
	65	70	80	90	65
	75	75	80	90	75
	85	85	80	90	85

The numerical grade in Option 2 is computed same as in Option 1 (chapter Tests 80%, Final Exam 20%).

Final Letter Grade

Level I	Level II	Numerical Grade
A1	A2	93-100%
B1	B2	85-92%
C1	C2	77-84%
D1	D2	70-76%
F1	F2	0-69%

Curriculum Mapping:

Course SLOs	Math PLOs	UOG ILOs	Method of Assessment
SLO 1	MA PR 1 (at basic level)	ILO 1,2 (at basic level)	Tests, Group work discussions
SLO 2	MA PR 1 (at basic level)	ILO 1,2 (at basic level)	Tests, Group work discussions
SLO 3	MA PR 1 (at basic level)	ILO 1,2 (at basic level)	Tests, Group work discussions

Student Learning Outcomes (SLOs)

SLO 1: Perform algebraic operations on integers, fractions, decimals and expression involving variables.

SLO 2: Generate graphs of linear equations, inequalities, and systems of equations.

SLO 3: Use algebraic representations to solve real-life applications and problems.

Program Learning Outcomes (PLOs)

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.

MA PR 2: Exhibit a sound conceptual understanding of the nature of mathematics, and demonstrate advanced mathematical skills in mathematical analysis, modern algebra and other mathematical discipline(s).

MA PR 3: Argue and reason using mathematics, read, create and write down logically correct mathematical proofs, use exact mathematical language and communicate mathematics efficiently orally, in writing and using information technology tools.

MA PR 4: Apply abstract thinking, mathematical methods, models and current practices in the sciences, including state-of-the-art mathematical software, to solve problems in theoretical mathematics or in a diverse area of mathematical applications.

MA PR 5: Show maturity in mathematical knowledge and thinking that prepares and encourages students to pursue graduate studies in mathematics or in related fields.

MA PR 6: Demonstrate an appreciation of and enthusiasm for inquiry, learning and creativity in mathematical sciences, a sense of exploration that enables them to pursue lifelong learning and up-to-date professional expertise in their careers through various areas of jobs, including governmental, business or industrial jobs in mathematics, related sciences, education or technology.

Institutional Learning Outcomes (ILOs)

ILO 1: Mastery of critical thinking & problem solving

ILO 2: Mastery of quantitative analysis

ILO 3: Effective oral and written communication

ILO 4: Understanding & appreciation of culturally diverse people, ideas & values in a democratic context

ILO 5: Responsible use of knowledge, natural resources, and technology

ILO 6: An appreciation of the arts & sciences

ILO 7: An interest in personal development & lifelong learning

Special Accommodations:

If you are a student with a disability who will require an accommodation(s) to participate in this course, please contact me privately to discuss your specific needs. You will need to provide me with documentation concerning your need for accommodation(s) from the EEO/ADA Office. If you have not registered with the EEO/ADA Office, you should do so immediately at 735-2244/2971/2243 (TTY) to coordinate your accommodation request.

Disclaimer:

This syllabus is subject to change.



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College of Natural and Applied Sciences

Mathematics and Computer Science

Course: MA085/LII-18: Fundamentals of Mathematics, Level II (3 non-degree units)

Semester: Spring 2016

Meetings: (Lecture) TTH: 11:00-12:20 at SC120
(Tutoring/Quiz) F: 11:00-12:20 at WB#1

Instructor: Michael Herreros, B.S. Mathematics

Email: herreros.michael@gmail.com

Office hours: By appointment

Catalog Description:

This course is a study of the fundamental concepts of high school mathematics, including arithmetic and algebra. This course is **lecture-based** with laboratory sessions designed to provide the background necessary for advancement in mathematics. It includes 3 lecture hours and 1½ hours of laboratory for review/testing sessions weekly. Grades for Level I are A1, B1, C1, D1, or F1. Grades for Level II are A2, B2, C2, D2, or F2.

Students must earn a grade of C2, B2 or A2 before they can exit MA085 to enroll in MA110, MA115, or MA151.

Prerequisite: Mathematics Placement Test

Level I students must earn a grade of C1, B1, or A1 before they can exit Level I and take MA085, Level II.

Text:

Fundamentals of Mathematics Workbook (Level I: Yellow, Level II: Green)

Class Format:

Class size is 20-25. Students will be expected to read the book and work out exercise problems for extra practice. During the class students will work in groups on problems. Group problem solving is the primary method of instruction for this class. You will work in groups of 10-15 each class meeting on an assignment. Each student in the group must do all his/her own work. Since you are working in a group, you are responsible for helping each other out, however you are also responsible for your own learning.

Attendance:

ATTENDANCE IS RECOMMENDED in order to pass the course. More than six (6) absences, EXCUSED OR UNEXCUSED, garner an automatic failure for this course.

Given the student-centered nature of this course, attendance and participation is of the utmost importance. Satisfactory participation means that you are willing to share your thought process, 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.

***All cell phones and other electronic devices must be turned OFF before class begins.**

Quizzes and Tests:

The primary assessment tools for the evaluation of learning outcomes and for grades are assignments, quizzes, and tests. Assignments will not be collected. Quizzes will be announced a day before administered. Tests will be announced approximately a week before the test is administered. You have only one chance to take each Quiz. If you miss a Quiz, your point for that Quiz is zero. TWO lowest Quiz scores will be dropped. The main purpose of the Quiz is to let you prepare for the "bigger" Tests. Do not worry too much about your low score on a single Quiz. There will also be (optional) Tutoring Sessions for MTWTh (**Time & Room TBA**).

***NO CALCULATORS OR OTHER ELECTRONIC DEVICES ARE ALLOWED FOR TESTS OR QUIZZES.**

Grades:

The total number of points available is 400. Grades will be no lower than those set forth in the following table. Students work is usually graded on a partial credit basis. Students written solutions must include all work needed in order to solve problems. Points will be deducted (or given none) for omitting any work even if the answer is correct.

Quizzes	25% or (100pts)
Test 1	25% or (100pts)
Test 2	25% or (100pts)
Test 3	25% or (100pts)
Total	400 points

Each quiz is worth 10 points. I will drop the two lowest quiz scores. No make-up for tests or quizzes.

Final grade:

A =	360 -400 points
B =	320 – 359 points
C =	280 – 319 points
D =	240 – 279 points
F =	0 – 239 points

Course Policies:

- (1) Attendance ... **RECOMMENDED TO ATTEND CLASSES!!!**
- (2) Assignments:

The three most important ways to learn mathematics are to **DO PROBLEMS, DO PROBLEMS, AND DO PROBLEMS**. Reading the text and listening to lectures, even with complete understanding, cannot substitute for solving problems on your own. Work all of the assigned problems.

- (3) Make-up policy

There will be **NO MAKE-UP** quizzes, **NO MAKE-UP** in-class exams. **I DON'T BELIEVE IN MAKE-UP ANYTHING!** If you cannot be present to take a quiz or an exam, you will need to see me to **let me know the reason why you cannot**.

- (4) Students responsibility

You are expected to be on time for each class (barring unforeseen circumstances). Please keep tardiness and absences to a minimum. If you are absent, it is your responsibility to pick up anything handed out or passed back during your absence, and in a timely manner. Please see me before or after class--or during office hours--to obtain these items, though--not during the day's lesson.

- (5) It is your responsibility to keep hold of any supplemental material distributed in class. It is also your responsibility to hold on to homework, quizzes and tests passed back to you. Do not assume I always have additional copies of previous handouts, quizzes or tests (or accompanying answer keys) available.
- (6) It is your responsibility to keep an accurate record of your graded work.
- (7) Once we begin class I expect you to be present for the full class period. Leaving after the first 10 minutes or arriving right at the end of class is not only of no benefit, it's unduly disruptive. If you are ill, PLEASE stay home and take care of the more important business of getting yourself well. If you are exhausted, PLEASE go home and get in the needed rest, for sleeping in class isn't going to help you learn the day's lesson. PLEASE give me, your fellow classmates, and the learning environment itself the same consideration and respect you yourself would wish and expect.
- (8) NO LAPTOPS, NO CELL PHONES, ..., NO DEVICE THAT CAN BE USED TO ACCESS THE INTERNET!!! I want to see your work not someone else's work. This rule will be strictly enforced during quizzes and exams!!!
- (9) **All quizzes and exams are closed book, closed notes, closed neighbor, ..., CLOSED EVERYTHING UNLESS I OTHERWISE SAY SO!!!** There will be 3 announced in-class exams. Recall: NO MAKE UP QUIZ AND NO MAKE UP EXAM EVER-EVER-EVER!!!
- (10) It is your responsibility to keep, read and know the contents of this syllabus.
- (11) **Finally, it is your responsibility to email your instructor at herreromichael@gmail.com. You will need to do this so that instructor can forward you assignments, additional materials, etc.**

Curriculum Mapping:

Course SLOs	Math PLOs	UOG ILOs	Method of Assessment
SLO 1	MA PR 1 (at basic level)	ILO 1,2 (at basic level)	Tests, Group work discussions
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SLO 3	MA PR 1 (at basic level)	ILO 1,2 (at basic level)	Tests, Group work discussions

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ILO 7: An interest in personal development & lifelong learning

Special Accommodations:

If you are a student with a disability who will require an accommodation(s) to participate in this course, please contact me privately to discuss your specific needs. You will need to provide me with documentation concerning your need for accommodation(s) from the EEO/ADA Office. If you have not registered with the EEO/ADA Office, you should do so immediately at 735-2244/2971/2243 (TTY) to coordinate your accommodation request.

Disclaimer:

This syllabus is subject to change.

UOG Station, Mangilao, Guam 96923

Telephone: (671) 735-2825 Fax: (671) 734-4582

A Land Grant Institution Accredited by the Western Association of Schools and Colleges



Course: MA085/LI-02: Fundamentals of Mathematics, Level I (3 non-degree units)

Semester: Spring 2016

Meetings: (Lecture) TTH: 08:00-09:20 at SC121

(Tutoring/Testing Workshop Session) F: 08:00-09:20 at WB#3

Instructor: Marianne Pineda

Email: mpin7eda@gmail.com

Office hours: By appointment only

Catalog Description:

This course is a study of the fundamental concepts of high school mathematics, including arithmetic and algebra. This course is **lecture-based** with laboratory sessions designed to provide the background necessary for advancement in mathematics. It includes 3 lecture hours and 1½ hours of laboratory for review/testing sessions weekly. Grades for Level I are A1, B1, C1, D1, or F1. Grades for Level II are A2, B2, C2, D2, or F2. Students must earn a grade of C2, B2 or A2 before they can exit MA085 to enroll in MA110, MA115, or MA151. Prerequisite: Mathematics Placement Test

Level I students must earn a grade of C1, B1, or A1 before they can exit Level I and take MA085, Level II.

Recommended Text:

1. Fundamentals of Mathematics Workbook (Level I: Yellow) **[REQUIRED]**
2. Developmental Mathematics, 4th edition, by Johnston, Willis, and Hughes **[OPTIONAL]**

Curriculum Mapping:

Course SLOs	Math PLOs	UOG ILOs	Method of Assessment
SLO 1	MA PR 1 (at basic level)	ILO 1,2 (at basic level)	Tests, Group work discussions
SLO 2	MA PR 1 (at basic level)	ILO 1,2 (at basic level)	Tests, Group work discussions
SLO 3	MA PR 1 (at basic level)	ILO 1,2 (at basic level)	Tests, Group work discussions

Student Learning Outcomes (SLOs)

SLO 1: Perform algebraic operations on integers, fractions, decimals and expression involving variables.

SLO 2: Generate graphs of linear equations, inequalities, and systems of equations.

SLO 3: Use algebraic representations to solve real-life applications and problems.

Program Learning Outcomes (PLOs)

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.

MA PR 2: Exhibit a sound conceptual understanding of the nature of mathematics, and demonstrate advanced mathematical skills in mathematical analysis, modern algebra and other mathematical discipline(s).

MA PR 3: Argue and reason using mathematics, read, create and write down logically correct mathematical proofs, use exact mathematical language and communicate mathematics efficiently orally, in writing and using information technology tools.

MA PR 4: Apply abstract thinking, mathematical methods, models and current practices in the sciences, including state-of-the-art mathematical software, to solve problems in theoretical mathematics or in a diverse area of mathematical applications.

MA PR 5: Show maturity in mathematical knowledge and thinking that prepares and encourages students to pursue graduate studies in mathematics or in related fields.

MA PR 6: Demonstrate an appreciation of and enthusiasm for inquiry, learning and creativity in mathematical sciences, a sense of exploration that enables them to pursue lifelong learning and up-to-date professional expertise in their careers through various areas of jobs, including governmental, business or industrial jobs in mathematics, related sciences, education or technology.

Institutional Learning Outcomes (ILOs)

ILO 1: Mastery of critical thinking & problem solving

ILO 2: Mastery of quantitative analysis

ILO 3: Effective oral and written communication

ILO 4: Understanding & appreciation of culturally diverse people, ideas & values in a democratic context

ILO 5: Responsible use of knowledge, natural resources, and technology

ILO 6: An appreciation of the arts & sciences

ILO 7: An interest in personal development & lifelong learning

Class Format:

Class size is 20-25. Students will be expected to read the book and work out exercise problems for extra practice. During the class, the instructor will lecture and go over the concepts. At the end of the lecture, students will work in groups to solve problems. Group problem solving is the primary method of instruction for this class. You will work in groups of 2 – 4 each class meeting on an assignment. Each student in the group must do all his/her own work. Since you are working in a group, you are responsible for helping each other out, however you are also responsible for your own learning.

Attendance:

ATTENDANCE IS REQUIRED in order to pass the course. More than six (6) absences, EXCUSED OR UNEXCUSED, garner an **automatic failure** for this course.

Given the student-centered nature of this course, attendance and participation is of the utmost importance. Satisfactory participation means that you are willing to share your thought process, 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.

***All cell phones and other electronic devices must be turned OFF before class begins.**

Tests:

Every chapter (topic) is scheduled to be lectured, discussed, and tested within two to three weeks. There will be lecture and discussion in the Tuesday and Thursday class for each chapter covered. After each chapter is covered, the corresponding Chapter Test will be administered on the Friday class--Tutoring/Testing Workshop Session. There will also be (optional) Tutoring/Testing Workshop Sessions for MTWTh **(Time & Room TBA)**. **Students can take a Test of the same chapter only once a day** (can take different chapter Tests within a day). **Bring picture ID when taking Tests.** Students will be allowed 1 week to take make-up tests after each chapter test is given.

It is recommended that students score at least a 77%, preferably 80% on each chapter Test to pass with at least a C1 or C2 (see Table in the next page for the grade percentage breakdown). **Students will have THREE chances to take each chapter Test.; instructor will record the best score out of three trials.**

There will be two Optional Cumulative Make-up Tests during the Tutoring/Testing Workshop Sessions on the specific Friday. See *Schedule* and *Evaluation* below for details.

***NO CALCULATORS OR OTHER ELECTRONIC DEVICES ARE ALLOWED FOR TESTS.**

Evaluation:

There are two options for evaluation of the numerical grades.

Option 1 (Students who do not take the Optional Cumulative Make-up Tests)

		Level I
Mean of chapter Tests	80%	← (Test 1-9)
Final Exam	20%	← (Test 10)

Option 2 (Students who DO take the Optional Cumulative Make-up Tests)

Students may take Optional Cumulative Make-up Test (1 and/or 2) only if they have taken **all four (or five)** chapter Tests covered in the Cumulative Make-up Tests corresponding as in the following table.

Chapter Test	Cumulative Make-up Test
Test 1-4	Level I: Make-up Test 1
Test 5-9	Level I: Make-up Test 2

Students can take each Cumulative Make-up Test only once on the specific Friday (see Schedule). The score on the Optional Cumulative Make-up Test will replace the corresponding individual (**up to two**) Test scores if and only if Make-up Test score is greater than the individual Test. See the following table for examples:

	Test 1	Test 2	Test 3	Test 4	Level I: Make-up 1
Original score	60	70	80	90	
Adjusted score	60	70	80	90	55
	65	70	80	90	65
	75	75	80	90	75
	85	85	80	90	85

The numerical grade in Option 2 is computed same as in Option 1 (chapter Tests 80%, Final Exam 20%).

Final Letter Grade

Level I	Numerical Grade
A1	93-100%
B1	85-92%
C1	77-84%
D1	70-76%
F1	0-69%

Tests/Chapters Covered:

MA085 Level I Chapters/Tests Covered:

- (1) Test 1 - Whole Numbers
- (2) Test 2 - Fractions
- (3) Test 3 - Decimals
- (4) Test 4- Ratio, Proportion and Percent
- Optional Cumulative Make-up Test 1 (Test 1 – Test 4)**
- (5) Test 5 - Integers
- (6) Test 6 - Arithmetic Operations/Evaluating Algebraic Expressions
- (7) Test 7 - Expressions and Equations (+ Inequalities)
- (8) Test 8 - Applied Problems (Word Problems)
- (9) Test 9 - Linear Equations in Two Variables (+ Inequalities)
- Optional Cumulative Make-up Test 2 (Test 5 – Test 9)**
- (10) Test 10: Final Exam Level 1 (Cumulative Final Exam for Level I)

Note: Test 7---Introduce polynomials but only to add/subtract them.

Special Accommodations:

If you are a student with a disability who will require an accommodation(s) to participate in this course, please contact me privately to discuss your specific needs. You will need to provide me with documentation concerning your need for accommodation(s) from the EEO/ADA Office. If you have not registered with the EEO/ADA Office, you should do so immediately at 735-2244/2971/2243 (TTY) to coordinate your accommodation request.

Academic dishonesty:

All assignments and tests must be your own work. The term “plagiarism” includes, but is not limited, to, the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.

Cheating on tests will be punished with a mark of 0. There will be no make up for tests. Answers you write on the tests must come only from in your head or the information supplied in the test papers; anything else is cheating. The term “cheating” includes, but is not limited to: (1) use of any unauthorized assistance in taking quizzes, tests, or examinations, e.g., looking at other students’ answers, using crib notes (including electronic), getting information from another person via any kind of communication; (2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; or (3) the acquisition, without permission, of tests or other academic material belonging to a member of the University faculty or staff. If you need to use an electronic translator, you must discuss this with me in advance.



Course: MA085/LI-04: Fundamentals of Mathematics, Level I (3 non-degree units)

Semester: Spring 2016

Meetings: (Lecture) TTH: 09:30-10:50 at SC121
(Tutoring/Testing Workshop Session) F: 09:30-10:50 at WB#3

Instructor: Marianne Pineda

Email: mpin7eda@gmail.com

Office hours: By appointment only

Catalog Description:

This course is a study of the fundamental concepts of high school mathematics, including arithmetic and algebra. This course is **lecture-based** with laboratory sessions designed to provide the background necessary for advancement in mathematics. It includes 3 lecture hours and 1½ hours of laboratory for review/testing sessions weekly. Grades for Level I are A1, B1, C1, D1, or F1. Grades for Level II are A2, B2, C2, D2, or F2. Students must earn a grade of C2, B2 or A2 before they can exit MA085 to enroll in MA110, MA115, or MA151. Prerequisite: Mathematics Placement Test

Level I students must earn a grade of C1, B1, or A1 before they can exit Level I and take MA085, Level II.

Recommended Text:

1. Fundamentals of Mathematics Workbook (Level I: Yellow) **[REQUIRED]**
2. Developmental Mathematics, 4th edition, by Johnston, Willis, and Hughes **[OPTIONAL]**

Curriculum Mapping:

Course SLOs	Math PLOs	UOG ILOs	Method of Assessment
SLO 1	MA PR 1 (at basic level)	ILO 1,2 (at basic level)	Tests, Group work discussions
SLO 2	MA PR 1 (at basic level)	ILO 1,2 (at basic level)	Tests, Group work discussions
SLO 3	MA PR 1 (at basic level)	ILO 1,2 (at basic level)	Tests, Group work discussions

Student Learning Outcomes (SLOs)

SLO 1: Perform algebraic operations on integers, fractions, decimals and expression involving variables.

SLO 2: Generate graphs of linear equations, inequalities, and systems of equations.

SLO 3: Use algebraic representations to solve real-life applications and problems.

Program Learning Outcomes (PLOs)

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.

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Institutional Learning Outcomes (ILOs)

ILO 1: Mastery of critical thinking & problem solving

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ILO 3: Effective oral and written communication

ILO 4: Understanding & appreciation of culturally diverse people, ideas & values in a democratic context

ILO 5: Responsible use of knowledge, natural resources, and technology

ILO 6: An appreciation of the arts & sciences

ILO 7: An interest in personal development & lifelong learning

Class Format:

Class size is 20-25. Students will be expected to read the book and work out exercise problems for extra practice. During the class, the instructor will lecture and go over the concepts. At the end of the lecture, students will work in groups to solve problems. Group problem solving is the primary method of instruction for this class. You will work in groups of 2 – 4 each class meeting on an assignment. Each student in the group must do all his/her own work. Since you are working in a group, you are responsible for helping each other out, however you are also responsible for your own learning.

Attendance:

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***All cell phones and other electronic devices must be turned OFF before class begins.**

Tests:

Every chapter (topic) is scheduled to be lectured, discussed, and tested within two to three weeks. There will be lecture and discussion in the Tuesday and Thursday class for each chapter covered. After each chapter is covered, the corresponding Chapter Test will be administered on the Friday class--Tutoring/Testing Workshop Session. There will also be (optional) Tutoring/Testing Workshop Sessions for MTWTh **(Time & Room TBA)**. **Students can take a Test of the same chapter only once a day** (can take different chapter Tests within a day). **Bring picture ID when taking Tests.** Students will be allowed 1 week to take make-up tests after each chapter test is given.

It is recommended that students score at least a 77%, preferably 80% on each chapter Test to pass with at least a C1 or C2 (see Table in the next page for the grade percentage breakdown). **Students will have THREE chances to take each chapter Test.; instructor will record the best score out of three trials.**

There will be two Optional Cumulative Make-up Tests during the Tutoring/Testing Workshop Sessions on the specific Friday. See *Schedule* and *Evaluation* below for details.

***NO CALCULATORS OR OTHER ELECTRONIC DEVICES ARE ALLOWED FOR TESTS.**

Evaluation:

There are two options for evaluation of the numerical grades.

Option 1 (Students who do not take the Optional Cumulative Make-up Tests)

		Level I
Mean of chapter Tests	80%	← (Test 1-9)
Final Exam	20%	← (Test 10)

Option 2 (Students who DO take the Optional Cumulative Make-up Tests)

Students may take Optional Cumulative Make-up Test (1 and/or 2) only if they have taken **all four (or five)** chapter Tests covered in the Cumulative Make-up Tests corresponding as in the following table.

Chapter Test	Cumulative Make-up Test
Test 1-4	Level I: Make-up Test 1
Test 5-9	Level I: Make-up Test 2

Students can take each Cumulative Make-up Test only once on the specific Friday (see Schedule). The score on the Optional Cumulative Make-up Test will replace the corresponding individual (**up to two**) Test scores if and only if Make-up Test score is greater than the individual Test. See the following table for examples:

	Test 1	Test 2	Test 3	Test 4	Level I: Make-up 1
Original score	60	70	80	90	
Adjusted score	60	70	80	90	55
	65	70	80	90	65
	75	75	80	90	75
	85	85	80	90	85

The numerical grade in Option 2 is computed same as in Option 1 (chapter Tests 80%, Final Exam 20%).

Final Letter Grade

Level I	Numerical Grade
A1	93-100%
B1	85-92%
C1	77-84%
D1	70-76%
F1	0-69%

Tests/Chapters Covered:

MA085 Level I Chapters/Tests Covered:

- (1) Test 1 - Whole Numbers
- (2) Test 2 - Fractions
- (3) Test 3 - Decimals
- (4) Test 4- Ratio, Proportion and Percent
- Optional Cumulative Make-up Test 1 (Test 1 – Test 4)**
- (5) Test 5 - Integers
- (6) Test 6 - Arithmetic Operations/Evaluating Algebraic Expressions
- (7) Test 7 - Expressions and Equations (+ Inequalities)
- (8) Test 8 - Applied Problems (Word Problems)
- (9) Test 9 - Linear Equations in Two Variables (+ Inequalities)
- Optional Cumulative Make-up Test 2 (Test 5 – Test 9)**
- (10) Test 10: Final Exam Level 1 (Cumulative Final Exam for Level I)

Note: Test 7---Introduce polynomials but only to add/subtract them.

Special Accommodations:

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Cheating on tests will be punished with a mark of 0. There will be no make up for tests. Answers you write on the tests must come only from in your head or the information supplied in the test papers; anything else is cheating. The term “cheating” includes, but is not limited to: (1) use of any unauthorized assistance in taking quizzes, tests, or examinations, e.g., looking at other students’ answers, using crib notes (including electronic), getting information from another person via any kind of communication; (2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; or (3) the acquisition, without permission, of tests or other academic material belonging to a member of the University faculty or staff. If you need to use an electronic translator, you must discuss this with me in advance.

Course: MA085/LI-11: Fundamentals of Mathematics, Level I (3 non-degree units)
Semester: Spring 2016
Meetings: **Lecture:** MW: 17:30-18:50 at SC121
Tutoring/Testing Workshop Session: F: 15:30-16:50 at SC121
Instructor: Ms. Katrina Quinata, B.S. Mathematics
Telephone: 735-2825
Email: katrinamquinata@gmail.com
Office hours: By appointment
TA: _____

Catalog Description:

This course is a study of the fundamental concepts of high school mathematics, including arithmetic and algebra. This course is **lecture-based** with laboratory sessions designed to provide the background necessary for advancement in mathematics. It includes 3 lecture hours and 1½ hours of laboratory for review/testing sessions weekly. Grades for Level I are A1, B1, C1, D1, or F1. Grades for Level II are A2, B2, C2, D2, or F2.

Level I students must earn a grade of **C1, B1, or A1** before they can exit Level I and take MA085, Level II.

Students must earn a grade of C2, B2 or A2 before they can exit MA085 to enroll in MA110, MA115, or MA151.

Prerequisite: Mathematics Placement Test

Text:

Fundamentals of Mathematics Workbook (Level I: Yellow, Level II: Green)

Class Format:

Class size is 20-25. Students will be expected to read the book and work out exercise problems for extra practice. During the class students will work in groups on problems. Group problem solving is the primary method of instruction for this class. You will work in groups of 2-4 each class meeting on an assignment. Each student in the group must do all his/her own work. Since you are working in a group, you are responsible for helping each other out, however you are also responsible for your own learning.

Attendance:

ATTENDANCE IS REQUIRED in order to pass the course. More than six (6) absences, EXCUSED OR UNEXCUSED, garner an automatic failure for this course.

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***All cell phones and other electronic devices must be turned OFF before class begins.**

Tests:

Every chapter (topic) will be lectured, discussed, and tested within two to three weeks. There will be lecture and discussion in the MW class for each chapter covered. After each chapter is covered, the corresponding chapter Test will be administered on the Friday class – Tutoring/Testing Workshop Session. There will also be (optional) Tutoring/Testing Workshop Sessions for MTWTh (**Time & Room TBA**). **Students can take a Test of the same chapter only once a day** (can take different chapter Tests within a day). Bring picture ID when taking Tests.

It is recommended that students score at least a 75%, preferably 80% on each chapter Test to pass with at least a C1 or C2 (see Table in the next page for the grade percentage breakdown). **Students will have THREE chances to take each chapter Test; instructor will record the best score out of three trials.**

There will be two Optional Cumulative Make-up Tests during the Tutoring/Testing Workshop Sessions on the specific Friday. See *Schedule* and *Evaluation* below for details.

***NO CALCULATORS OR OTHER ELECTRONIC DEVICES ARE ALLOWED FOR TESTS.**

Evaluation:

There are two options for evaluation of the numerical grades.

Option 1 (Students who do not take the Optional Cumulative Make-up Tests)

Mean of chapter Tests	80%	← Level I (Test 1-9)	Level II (Test 11-19)
Final Exam	20%	← (Test 10)	(Test 20)

Option 2 (Students who DO take the Optional Cumulative Make-up Tests)

Students may take Optional Cumulative Make-up Test (1 and/or 2) only if they have taken **all four (or five)** chapter Tests covered in the Cumulative Make-up Tests corresponding as in the following table.

Chapter Test	Cumulative Make-up Test
Test 1-4	Level I: Make-up Test 1
Test 5-9	Level I: Make-up Test 2
Test 11-14	Level II: Make-up Test 1
Test 15-19	Level II: Make-up Test 2

Students can take each Cumulative Make-up Test only once on the specific Friday (see Schedule). The score on the Optional Cumulative Make-up Test will replace the corresponding individual (**up to two**) Test scores if and only if Make-up Test score is greater than the individual Test. See the following table for examples:

	Test 1	Test 2	Test 3	Test 4	Level I: Make-up 1
Original score	60	70	80	90	
Adjusted score	60	70	80	90	55
	65	70	80	90	65
	75	75	80	90	75
	85	85	80	90	85

The numerical grade in Option 2 is computed same as in Option 1 (chapter Tests 80%, Final Exam 20%).

Final Letter Grade

Level I	Level II	Numerical Grade
A1	A2	93-100%
B1	B2	85-92%
C1	C2	77-84%
D1	D2	70-76%
F1	F2	0-69%

Curriculum Mapping:

Course SLOs	Math PLOs	UOG ILOs	Method of Assessment
SLO 1	MA PR 1 (at basic level)	ILO 1,2 (at basic level)	Tests, Group work discussions
SLO 2	MA PR 1 (at basic level)	ILO 1,2 (at basic level)	Tests, Group work discussions
SLO 3	MA PR 1 (at basic level)	ILO 1,2 (at basic level)	Tests, Group work discussions

Student Learning Outcomes (SLOs)

SLO 1: Perform algebraic operations on integers, fractions, decimals and expression involving variables.

SLO 2: Generate graphs of linear equations, inequalities, and systems of equations.

SLO 3: Use algebraic representations to solve real-life applications and problems.

Program Learning Outcomes (PLOs)

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.

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MA PR 3: Argue and reason using mathematics, read, create and write down logically correct mathematical proofs, use exact mathematical language and communicate mathematics efficiently orally, in writing and using information technology tools.

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MA PR 5: Show maturity in mathematical knowledge and thinking that prepares and encourages students to pursue graduate studies in mathematics or in related fields.

MA PR 6: Demonstrate an appreciation of and enthusiasm for inquiry, learning and creativity in mathematical sciences, a sense of exploration that enables them to pursue lifelong learning and up-to-date professional expertise in their careers through various areas of jobs, including governmental, business or industrial jobs in mathematics, related sciences, education or technology.

Institutional Learning Outcomes (ILOs)

ILO 1: Mastery of critical thinking & problem solving

ILO 2: Mastery of quantitative analysis

ILO 3: Effective oral and written communication

ILO 4: Understanding & appreciation of culturally diverse people, ideas & values in a democratic context

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ILO 7: An interest in personal development & lifelong learning

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*****SYLLABUS SUBJECT TO CHANGE*****

Course Contacts:

Name: _____	Name: _____	Name: _____
E-mail: _____	E-mail: _____	E-mail: _____
Phone: _____	Phone: _____	Phone: _____

UOG Station, Mangilao, Guam 96923

Telephone: (671) 735-2825 Fax: (671) 734-4582

A Land Grant Institution Accredited by the Western Association of Schools and Colleges

Course: MA085/LI-12: Fundamentals of Mathematics, Level I (3 non-degree units)
Semester: Spring 2016
Meetings: **Lecture:** TTh: 17:30-18:50 at SC121
Tutoring/Testing Workshop Session: F: 15:30-16:50 at Warehouse B Room 3
Instructor: Ms. Katrina Quinata, B.S. Mathematics
Telephone: 735-2825
Email: katrinamquinata@gmail.com
Office hours: By appointment
TA: Dennis Favo, ddfavo@hotmail.com

Catalog Description:

This course is a study of the fundamental concepts of high school mathematics, including arithmetic and algebra. This course is **lecture-based** with laboratory sessions designed to provide the background necessary for advancement in mathematics. It includes 3 lecture hours and 1½ hours of laboratory for review/testing sessions weekly. Grades for Level I are A1, B1, C1, D1, or F1. Grades for Level II are A2, B2, C2, D2, or F2.

Level I students must earn a grade of **C1, B1, or A1** before they can exit Level I and take MA085, Level II.

Students must earn a grade of C2, B2 or A2 before they can exit MA085 to enroll in MA110, MA115, or MA151.

Prerequisite: Mathematics Placement Test

Text:

Fundamentals of Mathematics Workbook (Level I: Yellow, Level II: Green)

Class Format:

Class size is 20-25. Students will be expected to read the book and work out exercise problems for extra practice. During the class students will work in groups on problems. Group problem solving is the primary method of instruction for this class. You will work in groups of 10-15 each class meeting on an assignment. Each student in the group must do all his/her own work. Since you are working in a group, you are responsible for helping each other out, however you are also responsible for your own learning.

Attendance:

ATTENDANCE IS REQUIRED in order to pass the course. More than six (6) absences, EXCUSED OR UNEXCUSED, garner an automatic failure for this course.

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***All cell phones and other electronic devices must be turned OFF before class begins.**

Tests:

Every chapter (topic) will be lectured, discussed, and tested within two to three weeks. There will be lecture and discussion in the TTh class for each chapter covered. After each chapter is covered, the corresponding chapter Test will be administered on the Friday class – Tutoring/Testing Workshop Session. There will also be (optional) Tutoring/Testing Workshop Sessions for MTWTh (**Time & Room TBA**). **Students can take a Test of the same chapter only once a day** (can take different chapter Tests within a day). Bring picture ID when taking Tests.

It is recommended that students score at least a 75%, preferably 80% on each chapter Test to pass with at least a C1 or C2 (see Table in the next page for the grade percentage breakdown). **Students will have THREE chances to take each chapter Test; instructor will record the best score out of three trials.**

There will be two Optional Cumulative Make-up Tests during the Tutoring/Testing Workshop Sessions on the specific Friday. See *Schedule* and *Evaluation* below for details.

***NO CALCULATORS OR OTHER ELECTRONIC DEVICES ARE ALLOWED FOR TESTS.**

Evaluation:

There are two options for evaluation of the numerical grades.

Option 1 (Students who do not take the Optional Cumulative Make-up Tests)

Mean of chapter Tests	80%	← Level I (Test 1-9)	Level II (Test 11-19)
Final Exam	20%	← (Test 10)	(Test 20)

Option 2 (Students who DO take the Optional Cumulative Make-up Tests)

Students may take Optional Cumulative Make-up Test (1 and/or 2) only if they have taken **all four (or five)** chapter Tests covered in the Cumulative Make-up Tests corresponding as in the following table.

Chapter Test	Cumulative Make-up Test
Test 1-4	Level I: Make-up Test 1
Test 5-9	Level I: Make-up Test 2
Test 11-14	Level II: Make-up Test 1
Test 15-19	Level II: Make-up Test 2

Students can take each Cumulative Make-up Test only once on the specific Friday (see Schedule). The score on the Optional Cumulative Make-up Test will replace the corresponding individual (**up to two**) Test scores if and only if Make-up Test score is greater than the individual Test. See the following table for examples:

	Test 1	Test 2	Test 3	Test 4	Level I: Make-up 1
Original score	60	70	80	90	
Adjusted score	60	70	80	90	55
	65	70	80	90	65
	75	75	80	90	75
	85	85	80	90	85

The numerical grade in Option 2 is computed same as in Option 1 (chapter Tests 80%, Final Exam 20%).

Final Letter Grade

Level I	Level II	Numerical Grade
A1	A2	93-100%
B1	B2	85-92%
C1	C2	77-84%
D1	D2	70-76%
F1	F2	0-69%

Curriculum Mapping:

Course SLOs	Math PLOs	UOG ILOs	Method of Assessment
SLO 1	MA PR 1 (at basic level)	ILO 1,2 (at basic level)	Tests, Group work discussions
SLO 2	MA PR 1 (at basic level)	ILO 1,2 (at basic level)	Tests, Group work discussions
SLO 3	MA PR 1 (at basic level)	ILO 1,2 (at basic level)	Tests, Group work discussions

Student Learning Outcomes (SLOs)

SLO 1: Perform algebraic operations on integers, fractions, decimals and expression involving variables.

SLO 2: Generate graphs of linear equations, inequalities, and systems of equations.

SLO 3: Use algebraic representations to solve real-life applications and problems.

Program Learning Outcomes (PLOs)

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.

MA PR 2: Exhibit a sound conceptual understanding of the nature of mathematics, and demonstrate advanced mathematical skills in mathematical analysis, modern algebra and other mathematical discipline(s).

MA PR 3: Argue and reason using mathematics, read, create and write down logically correct mathematical proofs, use exact mathematical language and communicate mathematics efficiently orally, in writing and using information technology tools.

MA PR 4: Apply abstract thinking, mathematical methods, models and current practices in the sciences, including state-of-the-art mathematical software, to solve problems in theoretical mathematics or in a diverse area of mathematical applications.

MA PR 5: Show maturity in mathematical knowledge and thinking that prepares and encourages students to pursue graduate studies in mathematics or in related fields.

MA PR 6: Demonstrate an appreciation of and enthusiasm for inquiry, learning and creativity in mathematical sciences, a sense of exploration that enables them to pursue lifelong learning and up-to-date professional expertise in their careers through various areas of jobs, including governmental, business or industrial jobs in mathematics, related sciences, education or technology.

Institutional Learning Outcomes (ILOs)

ILO 1: Mastery of critical thinking & problem solving

ILO 2: Mastery of quantitative analysis

ILO 3: Effective oral and written communication

ILO 4: Understanding & appreciation of culturally diverse people, ideas & values in a democratic context

ILO 5: Responsible use of knowledge, natural resources, and technology

ILO 6: An appreciation of the arts & sciences

ILO 7: An interest in personal development & lifelong learning

Special Accommodations:

If you are a student with a disability who will require an accommodation(s) to participate in this course, please contact me privately to discuss your specific needs. You will need to provide me with documentation concerning your need for accommodation(s) from the EEO/ADA Office. If you have not registered with the EEO/ADA Office, you should do so immediately at 735-2244/2971/2243 (TTY) to coordinate your accommodation request.

SYLLABUS SUBJECT TO CHANGE

Course Contacts:

Name: _____	Name: _____	Name: _____
E-mail: _____	E-mail: _____	E-mail: _____
Phone: _____	Phone: _____	Phone: _____

UOG Station, Mangilao, Guam 96923

Telephone: (671) 735-2825 Fax: (671) 734-4582

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