MATH103: College Mathematics (3 Credits)

2013 Spring Session 1 is from Jan 14, 2013 to Mar 7, 2013

MCAS Iwakuni on Mon, Tue, Wed, and Thu from 4:40PM - 5:55PM

Faculty Contact Information:

- Robert Laurie
- Telephone: DSN: (0827) 21-5447 or (315) 253-3392 or (0827) 21-4171
- E-mail: rlaurie@asia.umuc.edu
- Office Hours: By appointment before or after class is usually best time. Please email an appointment request at least 24 hours before you would like to meet with me.

Course Introduction

College Mathematics is designed to show you how mathematics can be applied to your life in interesting, enjoyable, and meaningful ways. This course focuses on problem-solving and critical thinking strategies that offer you the skill-building and practice essential at this level. This course integrates the applications and the technology you need to develop an appreciation of mathematics through your college career and beyond.

Course Description

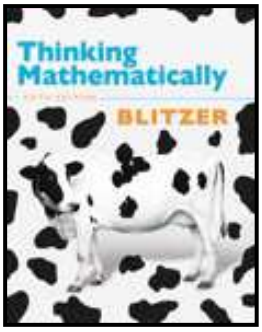
MATH 103 College Mathematics is 3 credits.
Recommended prerequisite: Placement into Math 012 or by approval of the math department. This course is not intended for students planning to take MATH 107 or higher-numbered mathematics courses and does not serve as a prerequisite for these courses. This course focuses on data driven applications and the development of critical thinking skills related to mathematics. Topics include problem solving, equations, inequalities, linear systems, graphs, functions, consumer mathematics, financial management, probability and statistics.

Course Outcomes

After completing this course, students should be able to:

1. Perform and execute basic arithmetic operations and simplify expressions involving exponents and square roots.
2. Demonstrate mastery of algebraic skills.
3. Recognize and apply mathematical concepts to real-world situations.
4. Efficiently use relevant technology.
5. Demonstrate understanding of the concepts of functions and related applications.
6. Identify and solve problems in finance.
7. Demonstrate proficiency in basic concepts and procedures related to descriptive statistics.
8. Calculate probabilities, and use and apply the normal distribution

Course Materials:



1. MATH103 Course Pack: ISBN: 9781408258316
   a. Textbook: Thinking Mathematically, Robert Blitzer, 5th ed., (2011), Pearson Education
   b. Student Solutions Manual for Thinking Mathematically, 5th ed., (2010), Pearson Education
   c. MyMathLab (Internet access required to utilize but optional)
2. Any Scientific calculator with two line algebraic display:
   Recommended: Texas Instrument TI-30X IIS (solar) or IIB (battery), (< $15)

Grading Information and Criteria:

The following table lists the assessment items and the point distribution for this class. There will be no "extra credit" available for this class – only the assessment items listed below.

Activities	Amount	Points	Weight
3 x Tests (75 min.)	3 @ 50 pts.	150	1/2
Final Exam - Part 1 (75 min.)	50 pts.	50	1/6
Final Exam - Part 2 (75 min.)	50 pts.	50	1/6
Homework & Attendance	50 pts.	50	1/6
Total		300	1/1

Grade	Percent
A	100.0 to 90.0%
B	89.9 to 80.0%
C	79.9 to 70.0%
D	69.9 to 60.0%
F	< 60%

Tests:

A total of three tests lasting one class will be administered in class that will cover specific material in the textbook. The exams are closed book and will be similar to the homework so it is important that you do all assigned homework problems. You will need to use your scientific calculator on tests and the final exam.

Final Exam:

A standardized comprehensive final exam is required in this course. This exam will include the topics and skills covered in the required readings, lectures, and class discussions. The 150 minute common final exam will be split into two parts due to our 75 minute class period. The final exam is closed-note and closed-book. A formula sheet will be provided. You will need to use your scientific calculator, pencils, and an eraser.

Homework:

Read the sections before class and work through all example problems to learn problem solving methods and procedures. Attempt to do the assigned homework problems listed and bring to class. Check odd numbered problems with answers in back of textbook and detailed solution in Solutions Manual. It is important to solve the problems before reviewing the solutions. The key to success in mathematics is working problems. The more problems you work, the better you will become at working them. Practice doing the sequential steps in solving the example and assigned problems to learn the algorithms and mathematical concepts. Students do best when study sessions are between 30 to 60 minutes instead of long cram sessions. It is better to do 3 one-hour study sessions than 1 three-hour study session. Allow enough time to complete the

required assignments without getting stressed. You will be given a numerical score for each homework assignment, from 0 through 10, indicating your perceived effort in amount of solving the problems. No homework will be accepted after the test is given covering that content.

Additional Information:

Work Load

The University of Maryland expects students will need about 12 hours a week outside of class time preparing for classes and tests. Although each student has a different background, goals and study habits, most students will need to spend roughly that amount of time in order to succeed. However, for math challenged students you may need to allocate more time.

Incompletes

Students can only receive a grade of Incomplete if they have completed at least 60% of their assigned work and their average grade for work completed is at least a C (70%). You must request that this grade be given, and receive permission from me, your instructor. If your missing assignment has not been submitted within the time frame agreed by your instructor, your grade of Incomplete will automatically revert to an F.

Recitation Sessions:

In addition to the scheduled class meetings, College Mathematics includes a two-hour Recitation session each week. During these sessions, I will be available to provide you with individual support and tutoring. This service is available to you free of charge. The recitation sessions will likely be Monday and Wednesday immediately after class from 6 to 7pm.

MyMathLab:

This online resource has been bundled with your textbook and provides you with the opportunity to:

1. Work through unlimited tutorial exercises correlated to the exercises in the textbook.
2. Receive a personalized study plan focused on areas in which you need practice.
3. Access a multimedia textbook with links to learning aids such as animations and videos.
4. Use online tools, such as a discussion board or virtual classroom, to communicate with other students to better understand the material

To access this resource, go to http://www.mymathlab.com and use the username and password provided in your textbook bundle. This service requires Internet and a computer. MyMathLab may be useful, but is not required for the course. Do the homework problems to be successful.

Strategies for Success:

Staying on Schedule

It is important to keep pace with the course schedule, assigned readings, and homework. Those who fall behind or fail to attempt the example and homework problems may find themselves falling behind schedule and have difficulties with the material. Try to incorporate the skills and methods learned in this course in everyday life. It is the best way to learn.

Attendance:

Your tuition buys you admission to the scheduled show and there are no second showings. Class attendance is mandatory and understanding each lesson depends on understanding the previous lesson. To understand what goes on in class you must be there. Missing class and then expecting

to find out what went on from someone else does not work in Math. Mathematics is NOT a spectator sport. It takes effort, desire, determination, discipline, and time management.

Fourteen points will be allocated for attendance. You will loose 2 points per absence and 1 point for being late. You may write me an email with a 4 sentence grammatically correct explanation and makeup plan for each absence or tardiness to consider it excused.

Class Discussions:

You are encouraged to participate in class discussions and to ask questions during class. Doing this will enhance your learning and success in this class. For example, if you find any problems difficult or unsolvable, ask questions concerning those problems in recitation sessions.

Reading Assignments:

It is important that you read the assigned textbook chapters prior to the class meetings. This will ensure that you come to class meetings with at least an initial understanding of the material and will give you the best chance of success.

Course Schedule

This is a tentative schedule for the course covering an 8 week session. It may be modified by the instructor as circumstances deem necessary. Please review the sections prior to the class.

Week	Sections	Assigned Chapters, Quizzes. and Exams
1	Summary Chapter 5	Summarize course, examine syllabus, and describe resources. *Topics:* order of operations, signed numbers, fractions, exponents, scientific notation, greatest common factor, scientific calculator arithmetic operations, least common multiple, number theory prime numbers, decimals, graphs, tables, charts.
2	6.1 ~ 6.4	*Topics:* applied problems, ratios, proportions, solve linear equations, algebraic expressions.
3	6.5 ~ 7.1	**Test 1** *Topics:* polynomials, linear inequalities, solving quadratic equations, rectangular coordinate system and graphs.
4	7.2 ~ 7.6	*Topics:* graphing linear and quadratic equations, recognizing types of functions and their graphs, definition of functions, applied probability in modeling using functions.
5	8.1 ~ 8.5	**Test 2** *Topics:* simple interest, annuities, compound interest, mortgages, installment loans, percent.
6	11.1~ 11.7	*Topics:* approaches to probabilities, probability rules and applied problems, counting rules, combination, and permutations.
7	Chapter 12 Chapter 1	**Test 3** *Topics:* frequency distributions and graphs, measures of central tendency, measures of dispersion, normal distribution, z-scores, and applications, scatter plots, correlation, and regression.
8	Review Final Exam	Final Examination at start of second class Week 8.

UMUC Asia Administrative Policies, Procedures and Practices

Ordering Course Materials:

Textbooks can be ordered online at the Asia Web site, http://webtext.asia.umuc.edu/. Books ordered from any other source will be at the student's own risk. UMUC Asia cannot be responsible for problems encountered when textbooks are ordered from sources outside of the Asia Web site.

Contact Information (Japan Area):

- For administrative assistance contact please contact your local Enrollment Specialist Office:
  - Japan Regional Enrollment Office: ojapan@asia.umuc.edu
  - Atsugi: atsugi@asia.umuc.edu
  - Camp Fuji: fuji@asia.umuc.edu
  - Camp Zama: zama@asia.umuc.edu
  - Iwakuni: iwakuni@asia.umuc.edu
  - Misawa: misawa@asia.umuc.edu
  - Sasebo: sasebo@asia.umuc.edu
  - Yokosuka: yokosuka@asia.umuc.edu
  - Yokota yokota@asia.umuc.edu
- For Academic Advising Support contact: japanadvisors@asia.umuc.edu
- For GoArmyEd issues contact: GoArmyEd@asia.umuc.edu
- For WebTycho assistance on workdays contact: tycho@asia.umuc.edu
- For WebTycho assistance on Saturdays and Sundays: http://support.umuc.edu/
- For MyUMUC help visit UMUC 360 Helpdesk - http://support.umuc.edu/
- Support for UMUC Asia students is also available by phone at 225-3680 (DSN) or 81-42-552-2510 Ext. 5-3680 (international comm.), Monday - Friday 7:30 a.m. - 4:30 p.m. (JST).

Plagiarism:

Ask your professor about his/her plagiarism policies. Here is a great source for further guidance on how to avoid plagiarism: UMUC's Online Writing Center "How to Avoid Plagiarism"

The University has a license agreement with Turnitin, a service that helps prevent plagiarism from Internet resources. The professor may be using this service in this class by either requiring students to submit their papers electronically to Turnitin or by submitting questionable text on behalf of a student. If you or the professor submit part or all of your paper, it will be stored by Turnitin in its database throughout the term of the University's contract with Turnitin. If you object to this temporary storage of your paper, you must let the professor know no later than two weeks after the start of this class. Please Note: If you object to the storage of your paper on Turnitin, the professor may utilize other services to check your work for plagiarism.

Students With Disabilities:

Reasonable accommodations are available for students who have disabilities and are enrolled in any program offered at UMUC. For more information, students should contact the Director, Student Affairs or e-mail SADirector@asia.umuc.edu.

Academic Policies:

Academic Policies are not course specific and are therefore created and housed separately from this document. You may access and print Academic Policies by going to this link http://www.umuc.edu/policies/academicpolicies/aa15025.cfm.

Caveat:

UMUC Asia syllabi are tentative and subject to change, if necessary. Changes will be announced with as much notice as possible.