Course: MA165 Precalculus (5 credits)
Semester: Fall 2015
Meetings: MTWTh 1100-1215, 1400-1515
Rooms: WH#3, SOE117 (respectively)

Instructor: Frank Blas
Office: Warehouse B, Room 9
Telephone: 735-2831
Email: blasf@uguam.uog.edu
Website: http://www.maulegman.weebly.com

Office hours: MTWTh: 10-11am, MT:12:30 - 1330
or by appointment
(subject to change with advance notice)

Catalog Description:
Topics include algebraic, exponential and logarithmic functions; systems of equations and inequalities; trigonometry; sequences and series. A student may receive credit for either the MA161a-b sequence or the MA165 course, but not a combination of the two.


Rationale for Course:
Satisfies general education requirements. Required for STEM (science, technology, engineering, mathematics) majors. Prepares students for calculus and other upper level mathematics courses, as well as courses in other STEM disciplines such as physics, pre-engineering, chemistry, and biology.

Prerequisites:
Grade of C or better in MA115, or placement into MA165.

Calculator:
You are required to have a scientific calculator, and a graphing calculator is highly recommended. Students are expected to have a working scientific calculator for quizzes and tests, for those times when a calculator will be allowed. No electronic calculators on tablets, smartphones, or laptops permitted during testing periods. No calculator swapping is permitted during testing periods, and you are still expected to show all required work to receive full credit.

Attendance:
Your attendance in class is encouraged and is directly related to your grade (see Evaluation below). Please inform the instructor if you will be absent. We will run into occasions when we
absolutely cannot make it to class. I am subject to those environmental and familial setbacks too. However, we must make it a point to attend all class sessions on time.

**Moodle: (under construction)**

I will be using Moodle to post the syllabus and any additional course documents and handouts. I will also use this as a place where you can see which topics we are covering each week, and to post any announcements made in class (like quiz and test dates). **Be sure to create a Moodle account and use an email address that you check regularly so that you will receive notifications of any new posts for our class.** You will need an enrollment key to access the course within Moodle, which will be given out in class, or you can contact me via email to request the enrollment key.

**Evaluation:**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Component Description</th>
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</thead>
<tbody>
<tr>
<td>50%</td>
<td>Quizzes <em>(twice a week, Tues. and Thurs., will drop four lowest scores)</em></td>
</tr>
<tr>
<td>50%</td>
<td>Chapter Tests <em>(Chpt 1 &amp; 2 combined, 3&amp;4 likewise, 5 and beyond test after each chapter, will drop two lowest test scores)</em></td>
</tr>
</tbody>
</table>

100% Total percentage

Letter grades will be assigned as follows:

- 90 – 100% A
- 80 – 89% B
- 70 – 79% C
- 60 – 69% D
- 0 – 59% F

Tests are given at the end of each chapter or chapter cluster. Dates for quizzes and tests will be announced in class, and posted to Moodle after class.

**Make-up policy:**

There will be no make-up quizzes or tests unless you contact the instructor IMMEDIATELY for extenuating circumstances. For example, you have to go off-island, you will be hospitalized or under serious medical treatment, deployment, etc.

**Homework, and Quizzes:**

Homework problems will be assigned for each class meeting but will not be collected and graded. **Quiz problems will be based on class discussion or taken directly from the homework problems assigned.** You may need to do additional problems from the textbook to fully master a topic, even if those problems were not assigned. You should ask homework questions at all class meetings or during my office hours. Keep in mind that quizzes and tests are based on class discussion and homework problems.

**Student Responsibility:**

You are expected to spend 1-2 hours of outside study for each hour inside the classroom. Do not commit the two cardinal sins in a mathematics course: **falling behind and leaving unanswered questions unanswered.** Both will complicate your life and cause a lot of unnecessary stress.

The following are some important notes concerning student responsibilities:

- Please do not ask for a copy of my notes for a day on which you were absent. Employ the buddy system to get copies of any notes you might need. It’s probably a good idea to start exchanging phone numbers (or e-mail addresses) with classmates now in the event of such a need later.
- 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.
• It is your responsibility to keep hold of any supplemental material distributed in class. It is also your responsibility to return to your folder all quizzes and tests passed back to you.
• Check Moodle regularly (at least once a week) to see if there are any announcements you may have missed in class, or to keep track of the topics we are covering each week.
• It is your responsibility to keep an accurate record of your graded work. Again, do not assume I always have my to-the-moment grade sheets ready.
• If you are ill, 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 coming to class feeling sleepy isn’t going to help you much with the day’s lesson.
• Lastly, it is your responsibility to keep, read and know the contents of this syllabus.

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. Cheating on quizzes or tests will be punished with a mark of 0. There will be no make-ups for missed tests or quizzes; see Make-up policy for extenuating circumstances. Answers you write on quizzes or 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/Vaping-free campus:
UGO is a tobacco-free/smoke-free, vaping/e-cigarette free campus. Thank you for not using tobacco products or e-cigarettes on campus, for helping to fight cancer, and for helping make UOG a healthy learning and living environment.

Welcome!
AND FINALLY...Welcome to MA165! This class will move at a good pace through the textbook, but should be fun and interesting for those who come to class ready to listen, learn, and ask questions when they don’t understand a particular concept or can’t read my writing on the board.

MA165 – Tentative Schedule – Fall 2015

| Weeks 1 – 4 | Ch. 1 & 2 | (Aug 19 – Sep 10) |
| Weeks 5 – 7 | Ch. 3 & 4 | (Sep 14 – Oct 1) |
| Weeks 8 – 11 | Ch. 5 & 6 | (Oct 5 – Oct 29) |
| Weeks 12 – 14 | Ch. 7 & 8 (selected topics) | (Nov 3 – Nov 25) |
| Weeks 14 – 17 | Ch. 9, 10 & 11 (selected topics) | (Nov 23 – Dec 10) |
(This is a tentative schedule, and is subject to change, should a topic require more or less time in class.)

MA165 – Learning Objectives and Outcomes

Ever wondered why we require certain courses for general education, or for a given major, or as a prerequisite for another course? Read on below to see what the MA165 student learning objectives are (what you should expect to learn in this course), how they tie into the Math Program Learning Outcomes, and how they tie into the bigger picture – the University’s Institutional Learning Outcomes.
### MA165 Course Student Learning Objectives (SLOs)

<table>
<thead>
<tr>
<th>Course SLOs:</th>
<th>Program Learning Outcomes (PLOs)</th>
<th>University Learning Outcomes (ILOs)</th>
<th>Method of Assessment</th>
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</thead>
<tbody>
<tr>
<td>Identify functional relationships between two variables, both graphically and algebraically.</td>
<td>MA PR-1  MA PR-2  MA PR-3</td>
<td>ILO-1  ILO-2</td>
<td>Questions on homework, workshops, quizzes and tests.</td>
</tr>
<tr>
<td>Specify the graphical and algebraic characteristics of polynomial, rational, exponential, logarithmic, and trigonometric functions.</td>
<td>MA PR-1  MA PR-2  MA PR-3</td>
<td>ILO-1  ILO-2</td>
<td>Questions on homework, workshops, quizzes and tests.</td>
</tr>
<tr>
<td>Employ mathematical modeling techniques to solve problems using polynomial, rational, exponential, logarithmic, and trigonometric functions.</td>
<td>MA PR-1  MA PR-2  MA PR-3</td>
<td>ILO-1  ILO-2</td>
<td>Questions on homework, workshops, quizzes and tests.</td>
</tr>
<tr>
<td>Sketch the graphs of different kinds of functions, identify their domain and range, and construct new functions from a given set of functions.</td>
<td>MA PR-1  MA PR-2  MA PR-3</td>
<td>ILO-1  ILO-2</td>
<td>Questions on homework, workshops, quizzes and tests.</td>
</tr>
<tr>
<td>Demonstrate an understanding and application of systems of equations, and the various methods for solving them.</td>
<td>MA PR-1  MA PR-2  MA PR-3</td>
<td>ILO-1  ILO-2</td>
<td>Questions on homework, workshops, quizzes and tests.</td>
</tr>
<tr>
<td>Demonstrate an understanding of infinite sequences and geometric series. (Time permitting)</td>
<td>MA PR-1  MA PR-2  MA PR-3</td>
<td>ILO-1  ILO-2</td>
<td>Questions on homework, workshops, quizzes and tests.</td>
</tr>
<tr>
<td>Gain basic familiarity with conic sections, both graphically and algebraically. (Time permitting)</td>
<td>MA PR-1  MA PR-2  MA PR-3</td>
<td>ILO-1  ILO-2</td>
<td>Questions on homework, workshops, quizzes and tests.</td>
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</table>

(Note: Student Learning Outcomes for MA165 are undergoing revisions.)

### Math Program Learning Objectives:

<table>
<thead>
<tr>
<th>Math Program Learning Objectives:</th>
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<tbody>
<tr>
<td>MA PR-1</td>
<td>Demonstrate critical thinking, problem solving skills and ability to use mathematical methods by identifying, evaluating, and classifying, analyzing, synthesizing, data and abstract ideas in various contexts and situations.</td>
</tr>
<tr>
<td>MA PR-2</td>
<td>Demonstrate the knowledge of current mathematical applications, computing practices and technology use in industry, and science and education.</td>
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</tbody>
</table>
MA PR-3  Demonstrate ability to use modern software, abstract thinking, and mathematical practices connected to scientific and industrial problems, and demonstrate these skills that are currently used by technologies in society and education.

MA PR-4  Perform skills that enable them to evaluate, propose and convey novel solutions to scientific and business problems, etc.

MA PR-5  Demonstrate a sense of exploration that enables students to pursue lifelong learning and currency in their careers in mathematics, statistics, education, high-tech and bi-tech industries.

(Note: Math Program Learning Outcomes are undergoing revisions.)

Institutional Expected Student Learning Outcomes:
UOG Expected Student Learning Outcomes  December 2008

Some of the expected fundamental knowledge, skills, and values that the University of Guam student will have demonstrated upon completion of any degree are:

ILO1: Mastery of critical thinking & problem solving
ILO2: Mastery of quantitative analysis
ILO3: Effective oral and written communication
ILO4: Understanding & appreciation of culturally diverse people, ideas & values in a democratic context
ILO5: Responsible use of knowledge, natural resources, and technology
ILO6: An appreciation of the arts & sciences
ILO7: An interest in personal development & lifelong learning