MA 100 Quantitative Reasoning and Mathematical Skills (Schofield)

Semester and Year: Fall 2015, 10 Weeks (October 8 – December 10)

Course Code: MA100-10-02

I. Instructor Information: Dr. Tory Trevorrow, Adjunct Professor Mathematics [2001+]

II. Class Information: Class Meets at Schofield Education Center, above the Library, Thursdays 5:30pm-9:40pm

III. Required Text: Thinking Mathematically, 6th edition, Blitzer, Pearson, ISBN 9780321867322.
My Math Lab (MML) is not used. Teacher edition may not be used.

IV. Course Title: MA 100 Quantitative Reasoning and Mathematical Skills

V. Course Description: (from the university catalog) MA 100 Quantitative Reasoning and Mathematical Skills (3) credits. A study of various topics including an introduction to sets, logic, number systems, basic skills in algebra and geometry, consumer mathematics, probability and statistics, with an emphasis on problem solving, quantitative and logical thinking. This course fulfills the Track A general education requirement in mathematics. The course is intended as a terminal course and is not a prerequisite for any other course in mathematics. Offered every semester.

VI. Learning Outcomes:
At the conclusion of the course the student will have had to opportunity to learn fundamentals of mathematical thinking and writing, with a variety of topics. Specifically the student should be able to:

1. Understand and apply Inductive and Deductive Reasoning
2. Understand the elements of the Scientific Method and its limitations
3. Understand the basics of Number Theory, Natural Numbers, Prime Numbers
4. Understand the applications and numerical conversions using Exponential and Scientific Notation
5. Understand the basic history of our Financial System, and the basic concepts of Interest
6. Understand Percents and their application to Sales Tax, Discounts, Gain and Loss
7. Understand and apply basic financial concepts to: Simple, Compound and Continuous Interest
8. Understand basic units of Measurement, conversions within and to/from different systems
9. Understand the basic concepts of Probability, Fundamental Theorem of Arithmetic, applications
10. Understand basic Statistical Measures and Types of Graphs,

VII.
Course Overview: This course makes extensive use of the text as assigned by the university. A variety of mathematical topics are introduced and explored with an emphasis on understanding fundamental principles, how to write mathematics, exploring problem solving using numerical analysis, estimation, and algebra. Graphing, drawing, sketching and numberlines are used to help us see mathematics.

VIII. Grading Scale

A	Excellent	>90%	900 points or more
B	Good	>80%	800 points
C	Average	>70%	700 points
D	Below Average	>60%	600 points
F	Failure	<60%	599 points or less

IX. Assignments and Grading

Specific Assignment		Points	% Of Grade	Due Date
Midterm Exam	(Weeks 1-4)	400	40	Week 5
Final Exam	(Weeks 5-9)	400	40	Week 10

1.Exam Conditions. Desks must be clear of all papers, books, bags, phones, etc, except for authorized material. One student per desk, students aligned in columns to minimize accidental viewing of others' work. No talking. Any exam clarifications bring to your professor.

2.Exam Content. Exams may cover any required reading, homework, lectures, or assignments which may include video viewing and research. Normal exam time will not be more than 2 hours and may be in the form of multiple choice, fill in the blank or show your working, questions. Missing the midterm or final exam will receive a score of zero.

3.Supplies. A calculator with 2-Line Display is required, 3 ring notebook – loose leaf paper, text, metric/standard ruler, pencil, pen, eraser, some graph paper, small stapler. Other material as discussed (dice, tape measure, balloons)

4. Research. Students will have the choice of either a group research project, or a mathematically based individual research topic. Projects will involve Internet research, a typed paper, and a class presentation - due Week 9. Handout provided in class.

X. Other elements

1.Student Conduct: Any community must have a set of rules and standards of conduct by which it operates. At Chaminade, these standards are outlined so as to reflect both the Catholic, Marianist values of the institution and to honor and respect students as responsible adults. All alleged violations of the community standards are handled through an established student conduct process, outlined in the Student Handbook, and operated within the guidelines set to honor both students' rights and campus values.

Students should conduct themselves in a manner that reflects the ideals of the University. This includes knowing and respecting the intent of policies presented in the Student Handbook, and realizing that students are subject to the University's jurisdiction from the time of their admission until their enrollment has been formally terminated. Please refer to the Student Handbook for more details, or speak with the campus judicial officer at (808) 440-4275. Copies of the Student Handbook are available on the Chaminade website and in the Office of the Dean of Students.

XI. Additional Departmental and University Polices

1. Electronic Devices: Use of music devices and cell phones is prohibited during all Natural Science and Mathematics classes at Chaminade, unless specifically permitted by your instructor. Use of cellphones and music devices in laboratories is a safety issue. In addition, use of cellphones and music devices in any class is discourteous and may lead to suspicion of academic misconduct. Students who cannot comply with this rule will be asked to leave class and may be subject to laboratory safety violation fines. You will be asked to leave class and marked absent if you do not comply. This will negatively affect your grade. Please refer any questions to the Dean of Natural Sciences and Mathematics.

2. ADA Statement
2.1 Pursuant to several federal and state laws, including the Americans with Disabilities Act of 1990, as amended by the ADA Amendments Act of 2008, and Section 504 of the Rehabilitation Act of 1973, all qualified students with disabilities are protected from discrimination on basis of disability and are eligible for reasonable accommodations or modifications in the academic environment to enable them to enjoy equal access to academic programs, services, or activities. If a student would like to determine if they meet the criteria for accommodations, they should contact the Counseling Center at 808-735-4845 for further information.

3. Attendance & Tardiness

3.1 Students are expected to attend regularly all courses for which they are registered. Students should notify their instructors when illness or other extenuating circumstances prevents them from attending class and make arrangements to complete missed assignments. Notification may be done by emailing the instructor's Chaminade email address, calling the instructor's campus extension or by leaving a message with the instructor's division office (Natural Science and Math 1 (808) 440-4204). It is the instructor's prerogative to modify deadlines of course requirements accordingly. Any student who stops attending a course without officially withdrawing may receive a failing grade.

3.2 Unexcused absences equivalent to more than a week of classes may lead to a grade reduction for the course. Any unexcused absence of two consecutive weeks or more may result in being withdrawn from the course by the instructor, although the

instructor is not required to withdraw students in that scenario. Repeated absences put students at risk of failing grades.

3.3. Tardiness
Arriving late or leaving early may result in ¼ to ½ grade reduction. A sign in/out sheet will be provided. Failure to accurately sign in or out will be considered absence for that class. You may not sign in or out for anyone else.

3.4 Missed Work
If you miss class, make arrangements with a fellow student for information on lecture material, handouts, and returned work.

4. Policy on Make-Up Tests
There are no make up exams. No bonus work is provided to compensate for grades, however some bonus questions or assignments may be available as part of course work.

5. Policy on Communication
5.1 The University provides a Chaminade email address for all students. Official Chaminade communications will be sent to the students' Chaminade email address and instructors will use only this email to communicate with students. It is the responsibility of the student to check their email frequently. Report email-related problems to the Helpdesk at 808-735-4855 or helpdesk@chaminade.edu.

6. Laboratory Safety Information
The following guidelines are established to provide instructions in maintaining safety for students, staff, and faculty while using any of the science laboratories at Chaminade University. The Division of Natural Sciences and Mathematics (NSM), along with the University Environmental Safety Office are responsible for enforcing the regulations set forth in the current Student Handbook. Queries should be addressed to: Dean of Natural Sciences and Mathematics (808) 440-4204; Environmental Safety Officer (808) 739-4811

7. Title IX Declaration: Chaminade University of Honolulu recognizes the inherent dignity of all individuals and promotes respect for all people. Sexual misconduct, physical and/or psychological abuse will NOT be tolerated at CUH. If you have been the victim of sexual misconduct, physical and/or psychological abuse, we encourage you to report this matter promptly. As a faculty member, I am interested in promoting a safe and healthy environment, and should I learn of any sexual misconduct, physical and/or psychological abuse, I must report the matter to the Title IX Coordinator. Should you want to speak to a confidential source you may contact the following: Chaminade Counseling Center 808 735-4845 and or any priest serving as a sacramental confessor or any ordained religious leader serving in the sacred confidence role.

8. Academic Honesty: Students are expected to have read and to abide by the "Student Rules of Conduct" which are available in your copy of Chaminade University's Student Handbook. Cheating in the form of plagiarism, collusion, deception will not be tolerated and will negatively affect your grade.

9. Modifications: The instructor may modify elements of this syllabus according to the operational needs of the class.

XII. Additional Information (notes)