COURSE SYLLABUS - MAT 103
Quantitative Reasoning

COURSE DESIGNATION
Quantitative Reasoning. Numerical, visual, verbal, and symbolic aspects of quantitative reasoning with emphasis on interpretation of quantitative information in real world problems. This course does not satisfy the math general education requirement for business majors.
(3 hrs. credit)Prerequisites: 2 years of high school algebra or the equivalent.

TEXT

This is a custom textbook from Thomson Custom Solutions Company. It is bound especially for Delta State University. It is comprised of chapters taken from The Mathematical Palette. (ISBN 0-534-40365-4)

INSTRUCTOR
Dr. David Jay Hebert  Walters 270M  dhebert@deltastate.edu  Office Phone: 846-4508

COURSE OBJECTIVES
This course seeks to develop in the student a competency in problem solving and analysis which will be helpful in personal decision-making, in evaluating concerns in the community, city, and nation, and in setting and achieving career goals.

Upon successful completion of this course the student will be able to:
1. Define key terms related to sets, Venn diagrams, algebraic models, probability statistics and finance.
2. Use Venn diagrams to solve problems related to surveys and probabilities.
3. Use counting techniques as methods of problem solving.
4. Calculate and interpret probabilities, including probabilities from frequency tables, pie charts, and probability distributions.
5. Compute and interpret statistics pertaining to data sets.
6. Gather, organize, describe, and analyze data to make and support decisions.
7. Communicate results using the language of probability and statistics.
8. Develop and apply sampling procedures to political surveys, manufacturing quality control, and the life sciences.
9. Solve personal finance problems related to savings and interest, taxes, discounts, credit, and other purchases, such as homes and automobiles.
10. Apply a variety of problem-solving techniques to real-world problems.

GRADING AND EVALUATION
Grades will be assigned using the scale: A(90 - 100)  B(80 - 89)  C(70 - 79)  D(60 - 69)  F(below 60)

1. Homework will be assigned on a regular basis and may be collected to be graded. Announced and unannounced daily quizzes will also be given throughout the semester. No credit will be given for answers only unless we have agreed on this prior to the individual assignment. You may use your calculator on all in-class work, homework, and tests. We will also have many group assignments. These will also be graded and considered as part of your in-class work.
2. Three or four scheduled tests will be given during the semester counting for 65 percent of the final grade. The average of homework, daily quizzes, and in-class work will count as 15 percent of the final grade. A comprehensive final examination will comprise the other 20%. There will be at least one
question on each test that requires a written explanation of a concept. Evaluation of the answer to this
question will be based on mathematical content, spelling, grammar, and sentence construction.
3. Cheating and plagiarism will not be tolerated. If it is established that a violation has occurred, the
instructor may determine the penalty, or he/she may report the offense to the department chair and dean of
the school. The usual penalty involves a grade of zero on the test, examination, or paper in question.
Within each category the average will be computed on a part out of total procedure. For example,
suppose that you receive the following scores of three test: 51 out of 57, 78 out of 123, and 44 out of 45.
The test average will be computed as follows:

CLASS ATTENDANCE
1. Prompt and regular attendance is necessary for success in this course. In order to receive credit in this
course, a student must not miss more than two weeks worth of classes. If you exceed the allowable
number of absences, a grade of "F" will be assigned as the final grade in this course.
2. If a student is tardy for class, it is the student's responsibility to request that the faculty member change
the recorded absence to a tardy. This must be done on the day the tardy occurs. A maximum of 3 tardies
will be allowed. Any additional tardies will be recorded as unexcused absences.

AMERICANS WITH DISABILITIES ACT
Delta State University adheres to the requirements of the Americans with Disabilities Act. If you need an
accommodation under this Act due to a disability, contact Dr. Richard Houston in the Office of Disability
Services at 846-4690.

CLASSROOM POLICIES AND MAKE-UP TESTS
1. Do not use tobacco or eat in the classroom, and NO CELL PHONES OR BEEPERS.
2. Do come to class on time and be prepared to begin class at the scheduled time. Do not ask to leave
class early. Schedule all appointments at times that do not conflict with class time.
3. Come to my office for help during scheduled office hours. No appointment is necessary. It is
extremely important that you understand the material from each class prior to the next class. If your class
and/or work schedule conflicts with the office hours that I offer, feel free to make an appointment for a
time not listed. Scheduled office hours are:

<table>
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<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
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<tbody>
<tr>
<td>8:00-9:00, 10:00-11:00</td>
<td>8:00-10:30</td>
<td>8:00-9:00, 10:00-11:00</td>
<td>8:00 – 10:30</td>
<td>10:00-11:00</td>
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4. Quizzes will be given and homework may be collected periodically, announced or unannounced,
throughout the semester. Even if you miss a class, you are expected to have all of your assignments up-
to-date when you return to class. If you need the assignment, you may call my office. If you are tardy
or absent on the day that a quiz is given or homework is collected, you must present a written
excuse acceptable by the university (along with the missed work, if homework) as soon as you
return to class. Failure to do so will result in a zero on the missed day's homework or quiz.

5. Scheduled tests will be announced at least one week prior to the actual test date. Make-up tests will
only be given to those students presenting a written excuse, acceptable by the university. If you know
ahead of time that you are going to miss a test, notify me as soon as possible before the test date. If
possible, your test will be administered before the absence. If you are not able to provide advance notice,
due to an emergency or illness on the day of the test, you MUST contact me on the day the test is given to make arrangements for a make–up test. This absence will still require a written excuse. All make–up work must be completed within three class days of the originally scheduled work or test. Any absence from scheduled work must be covered by a written excuse from the Vice President for Academic Affairs, the Student Health Center, or a doctor before the student is allowed to make up that work. Any exception to this rule must be approved before the missed work!

6. A statistical calculator is required for this course. Do not expect me to know how to operate your calculator without the manual. Please don't ask to borrow a calculator from me or one of your classmates on test day, since rarely do two calculators operate exactly the same. Bring your calculator to class every day.

**IMPORTANT DATES**

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<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>16 September ---</td>
<td>Grades of W or F in effect</td>
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<tr>
<td>14 October</td>
<td>Reports Mid-Term Grades</td>
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<tr>
<td>15-17 October</td>
<td>Fall Break</td>
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<td>10 November —</td>
<td>Last Day to Withdraw from a Class</td>
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<td>8-12 December – Final Examination</td>
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Notice to all students: OKRA mail is the official email communication system between the university and students, and this is the only email address this instructor will use for communication purposes with students.