INSTRUCTOR: Dr. Mohammad Shakil

OFFICE / PHONE / E-MAIL: Room # 1413 - 8; (305) 237 – 8805 (Hialeah); (Please call at this number during Office Hours only); mshakil@mdc.edu.

FACULTY WEBPAGE: http://faculty.mdc.edu/mshakil/

OTHER TELEPHONE NUMBER: (305) 237 – 8750 (Secretary, Hialeah Center); please leave a message.

SAFETY AND SECURITY: Room 1115, Hialeah Campus; (305) 237 – 8701

EMERGENCY TELEPHONE NUMBER: (305) 237 – 1100

OFFICE HOURS (TENTATIVE):

(i) M / W (3:00 PM – 5:20 PM) + (7:55 PM – 8:20 PM)

(ii) T / R (1:30 PM – 2:45 PM) + (4:00 PM – 5:30 PM)

COURSE DESCRIPTION: Statistical Methods: Collecting, grouping and presenting data; measures of central tendency and dispersion; probability; testing hypotheses; confidence intervals, and correlation.

PREREQUISITE: MAC 1105 or equivalent with a grade of “C” or better.

CREDIT: 3 semester hours

COURSE OBJECTIVES: See Appendix I for “Course Competencies” & Appendix II for “Learning Outcomes”


COVERAGE: Please see the coverage below at the end of this syllabus where a list of sections to be covered is given. Minor adjustments may be made by the instructor for the completion of the topics. Any uncovered topic before the scheduled date of the test will be covered in the next class after that test. All class/test times/schedules are as per Miami-Dade College Academic Calendar 2006 – 2007, (Spring Term, 2007). Also, minor adjustments may be made at the discretion of the instructor in the test dates, except in the final exam date. The test grades will be available to the students during the class-period in the following class / week after the test is over. It is the responsibility of the students to make an early correction for any conflict of class or test or final exam dates. The instructor will not be responsible for it.

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There is no mid-term examination except the Three Tests, Two Short quizzes, One Computer Project, and the Final Exam as mentioned below. So, it will be the responsibility of the students to make their own judgment or decision to withdraw from the college or to drop this course, with a “W” or “DR,” after any Test, but on or before Wednesday, March 14, 2007. The instructor will not withdraw the students.

INSTRUCTIONAL METHOD: Lecture / Discussion

SCIENTIFIC CALCULATORS: A non-graphing scientific calculator, along with manual, is required in each lecture. (Some Recommended Scientific Calculators: TI-30Xa, or TI-36Xa, or TI-30XIIS/IIB). Note that Graphing Calculators, such as TI-83, are optional in the class, but are not required. You may also consult your instructor before buying any calculator. It is the responsibility of the students to study the manuals and practice on the calculators. Moreover, you are not allowed to use a cellular phone as a calculator in the class. It is the discretion of the instructor to deduct at least twenty points from the total points at the end of the term for using cellular phone as a calculator in the class. If any student is found using cellular phone as a calculator in the class or during the test or final examination, his / her name will be duly noted by the instructor and reported to the concerned authorities for further action, that is, an “F” in the course, expulsion from the college, etc. In such a case, a student may not be allowed to take a test or final exam or attend the lecture, and may also be asked to leave the class. No written or oral excuses will be accepted in this regard. Please see Items # IV and V of Classroom Policies below for more clarifications.

ACADEMIC SUPPORT CENTER (MATH LAB): The tutorial services of the Academic Support Center (Math Lab), Room 1309, are available to students registered in any math course taught on campus.

ADDITIONAL RESOURCES: You may also print out formulas and charts from my Faculty Webpage or your Tiola’s Statistics text book by using the following web-addresses on your personal computers or those in MDC LIBRARY / ASC: www.aw-bc.com/triola .

Note: Some of the documents require Adobe Acrobat Reader version 4.0 or later. You can download the latest version of the Acrobat Reader at Adobe’s website.

A. http://faculty.mdc.edu/mshakil/STATISTICS_%20AN%20INTRODUCTION.pdf
B. http://faculty.mdc.edu/mshakil/Probability_and_Counting_Key_Concepts_and_Formulas.pdf
C. http://faculty.mdc.edu/mshakil/Probability_&_Counting_Flow_Chart.pdf
D. http://faculty.mdc.edu/mshakil/formulas_and_tables_Triola_Statistics.pdf
E. FORMULAS: http://media.pearsoncmg.com/aw/aw_triola_elemstats_10/cw/content/formula.pdf
F. TABLE CARDS:
   http://media.pearsoncmg.com/aw/aw_triola_elemstats_10/cw/content/formula.pdf
G. (g)STUDENT SUPPLEMENTS:
   http://media.pearsoncmg.com/aw/aw_triola_elemstats_10/cw/content/supps.html
H. OTHER USEFUL WEBSITES: The following websites may also be useful for online help in your course.
   I. FORMULAS:

I. The following Websites may also be useful for online help in your course:

   (i) Prentice Hall Math Tutor Center: http://www.prenhall.com/tutorcenter/
   (iii) Pearson Education InterAct Math: http://www.interactmath.com/

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(v) For Mathematical Formulas and Tables: http://www.sosmath.com/tables/tables.html
(vi) To Print Out A Graph Paper: http://www.mathematicshelpcentral.com/graph_paper/files/Form4C-BW.pdf

MYMDCC ACCOUNT: A student login (MyMDC) account is required for ALL online activities as well as to use college computers. A student should visit www.mdc.edu/sis/ to register and obtain login account.

ACCESS SERVICES: The students, with any form of disability, should contact “Access Services” of the college as soon as the classes start. In case any accommodation or special assistance is required in the class or examination, they should obtain the relevant documents from the Access Services and provide the instructor with these. For further information, contact (305) 237 1272 (North Campus).

SERVICE LEARNING: The office of Service Learning is located at the North Campus of Miami-Dade College. For further information, contact the Center for Community Involvement, (305) 237 3848, or Professor Sherri Sinkoff, Service Learning Coordinator, MDC (Hialeah Campus).

FACTS: You may visit the State of Florida’s new FACTS (Florida Academic Counseling and Tracking for Students) Web site at www.facts.org to view/print a transcript from a Florida college you are attending or did attend, to access the catalogs of the colleges and universities in Florida, to link to all the Florida public college and university home pages, and other useful information.

GRADING POLICY:

(I) GRADING CRITERIA: Your final grade will be based on Three Multiple-Choice Non-cumulative Tests (including some non-multiple choice questions, if deemed necessary), Two Short Quizzes, a Group Computer Project (Data Analysis of Some Real World Topics using Excel or Stat-disk Statistical Software), and a Multiple-Choice Non-cumulative Final Examination. The number of questions in each of the tests and final examination will be 15 to 25. Each of the tests and final exam will be worth 100 score points. The number of questions in each of the quizzes will be 3 to 10. The total score points of the quizzes and group computer project will be 21, and will be added to the total score points earned by a student in the semester before averaging for the final course grade. (The distribution of score points in the quizzes and group computer project will be as follows: Quiz 1: 5 points; Quiz 2: 6 points; and Group Computer Project: 10 points). The Groups & Topics for Computer Project will be decided by the instructor, in consultation with the students. Please note that neither the lowest test score nor the lowest quiz score nor the final examination score will be dropped before averaging for the final grades (please see NOTES 1-7 below also). There will be “NO CURVE” on grades. Also note the following points about the grading policy:

➤ NOTE 1: All tests, quizzes, computer project, and final exam are mandatory.

➤ NOTE 2: If the final examination score is 90 % or above, the lowest test score may be replaced by the final examination score before averaging for the final grade provided a student has not missed any tests, quizzes, and computer project, and if doing so is in favor of the student. Note that none of the quiz scores (including the lowest or missed one) and the computer project score will be replaced by the final examination score.

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NOTE 3: All tests, quizzes, computer project, and final exam are mandatory. However, if a student has taken all the three tests, two quizzes, and computer project, and his / her score is 90 % to 100 % (that is, “A” Grade in each of these tests, quizzes, and computer project, not the average of these), the final grade earned by such a student will be “A” by dropping the final examination score, provided the student has taken the final exam, and the score in it is above 65 % but below 90 %. (Note that the final exam is mandatory. If any student misses the final examination, a zero will be awarded for the missed final examination and the grade earned by the student will be an “F”).

NOTE 4: It should be noted that the total score points of the quizzes and computer project will be 21. Any point obtained in the quizzes and computer project will be added to the total test and final exam score points earned by a student in the semester before averaging for the final course grade. (The distribution of score points in the quizzes will be as follows: Quiz 1: 5 points; Quiz 2: 6 points; and Group computer Project: 10 points).

NOTE 5: All the students are advised to do their home-work as mentioned in the syllabus, and also through MyMathLab as per instruction given below in the end of the syllabus. If there is any technical difficulty in using MyMathLab, it should be immediately reported to the instructor. In that case, all the students will be required to do their home-work as already assigned by the instructor in the syllabus as well as some supplementary H/W assignments assigned in the class. Please note that the homework will not be graded.

NOTE 6: Instructor’s Discretion: It is the discretion of the instructor to drop one of the lowest test scores (but not the final exam score), before averaging for the final course grade, provided a student has not missed any test, quiz, and the final examination, and if doing so is in favor of the student. (In such a case, the final course grades will be calculated out of a total of 321 points, by taking the total of the final examination score, the two best test scores, the two quiz scores, and computer project score, and dividing the total by 3 before averaging for the final course grade. Please note that this requirement is fully at the discretion of the instructor.

NOTE 7: Please see the Item # III (Evaluation and Grading Scale) below also.

(II) HOMEWORK:

(a) Usually the odd-numbered problems at the end of each section and all of the chapter reviews are suggested for the homework problems and assignments. This will increase your speed, accuracy, confidence, and understanding of doing the problems and the directions on the tests. It is strongly suggested that you should do all the homework assigned. This will also help you in memorizing the formulas and understanding of the concepts, which are very important for any math course. The homework will not be graded. Some Supplementary H/W assignments may also be assigned in the class. The students are strongly advised and highly recommended to see their course instructor during office-hours for any help and advisement in their home-work and course materials.

(b) You may also visit the Academic Support Center (Room 1309) / Math Study Room at Hialeah Campus or MDC Math Lab (North Campus) for additional help. The Math Lab at MDC (Hialeah Campus / North Campus) is an open lab for currently enrolled mathematics students. There are tutors, videotapes, and software available to assist students.

(III) EVALUATION AND GRADING SCALE: Your final grades will be calculated out of a total of 421 points, by taking the AVERAGE of the final examination score, the three test scores, and three quiz scores.

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(However, minor adjustments may be made in your final grades calculation at the discretion of the instructor; please see the Item # I, NOTES 1 - 7 (Grading Criteria) above for details). "Each of the tests and the final exam will have equal weight." If any student misses the final examination, a zero will be awarded for the missed final examination and the grade earned by the student will be an “F." The following scale will be used for the calculation of final grade. “Minor adjustments may be made by the instructor.” Please see the Item # I (Grading Criteria) above also.

<table>
<thead>
<tr>
<th>GRADE</th>
<th>GRADING SCALE (Note: Here x represents the average of the final examination score and the two best test scores, including any extra credit points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 % ≤ x ≤ 100 %</td>
</tr>
<tr>
<td>B</td>
<td>80 % ≤ x &lt; 90 %</td>
</tr>
<tr>
<td>C</td>
<td>70 % ≤ x &lt; 80 %</td>
</tr>
<tr>
<td>D</td>
<td>60 % ≤ x &lt; 70 %</td>
</tr>
<tr>
<td>F</td>
<td>Below 60 %</td>
</tr>
</tbody>
</table>

(IV) MANDATORY TESTS, QUIZZES, COMPUTER PROJECT, AND FINAL EXAM: All tests, quizzes, computer project, and final exam are mandatory. However, if you miss any test due to accident, traffic ticket, hospitalization, arrest, court date, jury duty, religious observance, etc, you must produce an authentic document to prove your absence so that your final exam score will be counted twice as to replace the missed test. A doctor's note is not acceptable unless it says “(student's name) was unable to attend school on (date of test).” Please note that the replacement of a missed test by the final exam score on the above ground will be allowed only once during the entire semester. (However, the said provision for the missed test will not be applied to the missed quizzes and computer project. If any student misses a quiz, including computer project, a zero will be awarded for the missed quiz, including computer project). Further, as it is the discretion of the instructor to apply the provision of Item # I, NOTE 3 (Grading Criteria) above for the whole class if it is in favor of the students, then in such a case a missed test may be considered as the lowest test score and the rule of Item # I, NOTE 3 (Grading Criteria) above may be applied. Tardiness is permitted on test days without penalty although you will have less time on the test than everyone else. If you are so late that someone has already turned in their test before you arrive, you will not be allowed to take the test and a zero will be given for the respective test. No written or oral excuses will be accepted for this.

(V) NOTICE ABOUT TEST DATES: Please see the Lecture-Schedule below. It is the responsibility of the students to note down the test and final exam dates. However, you will have at least one class notice of an upcoming test. All tests and final exam are mandatory. There will be no makeup test in any circumstances (see Item VI below also). A zero will be awarded for any missed test. No written or oral excuses will be accepted for this.

(VI) NO MAKE UP OF TESTS / FINAL EXAM / QUIZZES / HW / PROJECTS: There will be no make-up for any missed quizzes, tests, or the final exam. These must be taken on due dates. In case a student misses a test due to some religious observance, hospitalization, jury duty, court date, or accident, and if a reasonable and authentic document is provided for these and, if in the opinion of the instructor, the absence is excusable, there will be no makeup test but your final exam score will be counted twice as to replace the missed test. Please note that the replacement of a missed test by the final exam score on the above ground will be allowed only once during the entire semester. In such cases, the final grades will be calculated, out of a total of 421 points, by taking the AVERAGE of the final examination score, three test scores, two quiz scores, and computer project score. If no reasonable and authentic document is provided for a missed test, then a zero will be awarded for such a test, and the student will be responsible to earn a lower grade.

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(including an “F”), if the final grades are calculated, out of a total of 421 points, by taking the AVERAGE of the final examination score, three test scores, two quiz scores, and computer project score. No written or oral excuses will be accepted for this. However, as it is the discretion of the instructor to apply the provision of Item # I, NOTE 3 (Grading Criteria) above for the whole class if it is in favor of the students, then in such a case a missed test may be considered as the lowest test score and the rule of Item # I, NOTE 3 (Grading Criteria) above may be applied.

(VII) CHEATING ETC. IN THE EXAMINATION: A “Zero” will be given in the test for cheating in any form, including plagiarism, taking help or copying from other students or giving help to the other students during the tests / final exam. If any student is caught cheating during the examination, his / her name will be duly noted by the instructor and reported to the concerned authorities for further action (namely, an "F" in the course, expulsion from the college, etc.). For details please see the Students’ Hand-Book. No written or oral excuses will be accepted for this.

CLASSROOM POLICIES:

(I) ATTENDANCE: Attendance is required for every class and students are responsible for all course work, whether present or not. More than Three Unexcused Absences during the entire semester is considered excessive and will result in a failing grade or the name of the student will be purged from the class roster. In addition, please note the following requirements.

(a) NOTE: Tardiness is not acceptable. “It is the discretion of the instructor to deduct at least ten points from the total points at the end of the term for each tardiness (even one second late constitutes a tardiness).” No written or oral excuses will be accepted.

(b) NOTE: Except in the case of an emergency, no students will be allowed to leave the class-room once the class has begun. During an emergency, the instructor's permission must be sought before leaving the class-room. “It is the discretion of the instructor to deduct at least ten points from the total points at the end of the term for each such violation.” No written or oral excuses will be accepted.

(c) “It is the discretion of the instructor to deduct at least ten points from the total points at the end of the term for each absence after the third absence during the semester. More than two absences will also result in a failing grade or the name of the student will be purged from the class roster.” No written or oral excuses will be accepted.

(II) DROPS OR WITHDRAWALS: These are not initiated by the instructor (Dr. Shakil). If you stop attending, you must drop the class yourself to avoid a grade of “F”.

A. The last day to withdraw from classes with “100% refund” or to change courses “without penalty” or to register, add, drop, or change sections of credit courses without signature of instructor is Tuesday, January 09, 2007.

B. The deadline for dropping classes with a grade of “DR” or the last day to withdraw from the college with a grade of “W” is on or before Wednesday, March 14, 2007, which is the responsibility of the students. The instructor will not withdraw the students.

(III) PURGE ROLLS: The students are encouraged to attend all the classes regularly, which is important. For any missed class, the students themselves are responsible for any makeup or catch-up of the
materials. Unexcused absences for more than two days at any time during the semester are considered excessive. The names of such absentees will be purged from the class roll by the instructor without any notice as per rules and regulations stipulated by the college. Once the name of a student is purged from the class roll by the instructor, it cannot be reinstated in any circumstance. “Moreover, it is the discretion of the instructor to purge a student’s name from the class roll or award an “F” due to excessive absences, unsatisfactory progress, indiscipline, misconduct, or any disruptive behavior in the class.” No written or oral excuses will be accepted for this.

(IV) ACADEMIC MISCONDUCT: The student is responsible for any classroom misbehavior or academic misconduct or indiscipline, which is conducive to the educational process and for achieving standards of performance established by the instructor. A student may be penalized for any misbehavior or misconduct. The academic misconduct includes (but is not limited to) giving or receiving assistance on a test, quiz, or homework assignment for which such assistance is not permitted, falsifying a document to obtain an excusal from a test, and using unauthorized notes on a test or quiz. “The instructor has the final authority in all matters relating to the course content, grading practices, and classroom policies & procedures.” Penalties for Academic Misconduct range from an “F” in the course to “expulsion” from the college. A more complete definition of Academic Misconduct is given in the Student Handbook. In the tests or final exam, no student will be allowed to use the textbook or class-notes or handouts or formula-sheets. The students should review all materials learnt in previous math classes, and memorize all the relevant formulas. It is strongly suggested that you should do all the homework assigned. This will also help you in memorizing the formulas and understanding of the concepts, which are very important for this math course. “However, it is the discretion of the instructor to allow students to use some necessary and difficult formulas in the tests or final exam which should be prepared on Index Cards (not exceeding two) or on a letter-sized paper (not exceeding one, and may be written on both sides), in consultation with your instructor. If allowed by the instructor, these must be shown to the instructor before starting the examination. The students must write their names and student ID’s on these. There should no examples or problems written on the cards or papers, which will be treated as cheat. A “Zero” may be given for this.” The students are also advised to make photocopies of all necessary tables / charts beforehand, if required. You will not be allowed to use textbook for formulas / tables / charts, etc, in the tests or the final exam. No written or oral excuses will be accepted for this.

(V) BEEPERS AND CELLULAR PHONES: Use of cellular phones, beepers, musical instruments, CD players, etc., or keeping these in person are not allowed in the class-room. These should be kept in the bags and must be turned off before the classes start. The vibrate mode is not considered turned off. beepers and cellular phones must not be visible to you or instructor. If they are on your belt, they are visible. If they are in your book bag or pocket, they are not. Violations of this policy will result in your having to put the beeper or cell phone in the hallway immediately outside the class. If you are afraid of it being stolen, you may choose to leave the class with it, but you will not be readmitted to the class that day. If this occurs during a test and you choose to leave rather than put the beeper or phone in the hallway, all unanswered test questions will be marked wrong. All students are required to abide by the said policy about cellular phones, beepers, musical instruments, and CD players. “It is the discretion of the instructor to deduct at least ten points from the total points at the end of the term for each such violation.” Further, penalties for violation of this policy may also result in an “F” in the course or “expulsion” from the class or the matter being reported to the concerned authorities in the college, such as the Chair, or Academic Dean, or others. No written or oral excuses will be accepted for this.

(VI) NO FOODS AND DRINKS ALLOWED: It should be noted that no foods (including gums) and drinks (except water) will be allowed in the class room. “It is the discretion of the instructor to deduct at least ten points from the total points at the end of the term for each such violation.” Further, penalties for violation of this policy may also result in an “F” in the course or “expulsion” from the class or the matter being reported to the concerned authorities in the college, such as the Chair, or Academic Dean, or others. No written or oral excuses will be accepted for this.

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(VII) NO TALKING ALLOWED: It should be noted that no talking will be allowed in the class room. “It is the discretion of the instructor to deduct at least ten points from the total points at the end of the term for each such violation.” Further, penalties for violation of this policy may also result in an "F" in the course or “expulsion” from the class or the matter being reported to the concerned authorities in the college, such as the Chair, or Academic Dean, or others. No written or oral excuses will be accepted for this.

LECTURE-SCHEDULE AND H/W ASSIGNMENTS (TENTATIVE) (Total: 30 Lectures)
(See Page Number 8)

Note the following:

(i) Minor adjustments may be made in the topics / problems at the discretion of the instructor.
(ii) The students are directed to prepare some of the easy topics by themselves if not covered in the class due to the constriction of time. The tests and final exam will cover all the topics scheduled in the syllabus. The students are advised to consult the instructor for any help in this regard during the office hours. No written or oral excuse will be accepted for this.
(iii) SUPPLEMENTARY H/W FROM CHAPTER EXCERCISE / SUMMARY / REVIEW MAY ALSO BE ASSIGNED.
(iv) All tests and final examination will be multiple-choice.
(v) If time permits, during the last 15 minutes of each lecture (except the test / quiz days), the instructor will answer some questions from home work. After home work session, the lecture will be charged for the day.

(A) TEST SCHEDULE:

1) Test # 1: R, Jan 25, 2007: During Class-time
2) Test # 2: T, Feb 20, 2007: During Class-time
3) Test # 3: T, Mar 20, 2007: During Class-time
4) Review For Final Examination: T, Apr 17, 2007: During Class-time
5) Final Examination (Tentative): R, Apr 19, 2007: During Class-time

(B) QUIZ SCHEDULE:

I. Quiz # 1: R, Feb 15, 2007: (During Last 15 Minutes of Class-time)
II. Quiz # 2: R, Mar 15, 2007: (During Last 15 Minutes of Class-time)
III. Group Computer Project Due in the Class (Positively), and 8 Minutes Class-Room Presentation of the Project by Each Group: R, Apr 05, 2007
(C) LECTURE & EXAM SCHEDULE: (See Below)

LECTURE-SCHEDULE AND H/W ASSIGNMENTS (TENTATIVE) (Total: 30 Lectures)
NOTE: Minor adjustments may be made in the topics / problems at the discretion of the instructor. SUPPLEMENTARY H/W FROM CHAPTER SUMMARY / REVIEW MAY ALSO BE ASSIGNED. All tests, quizzes, and final examination will be multiple-choice.

<table>
<thead>
<tr>
<th>MTG #</th>
<th>DAY / DATE</th>
<th>CHAPTERS</th>
<th>SECTIONS</th>
<th>EXERCISES / PAGES / PROBLEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R, Jan 04</td>
<td>Introduction to Syllabus; Chapter 1</td>
<td>1.1 (Overview); 1.2; 1.3; 1.4</td>
<td>1.2: P. 10: # 1 – 24 (ODDS); 1.3: P. 18: # 1, 3, 5, 11, 15, 19 – 25 (ODDS); 1.4: P. 31: # 6 – 8, 13 – 24 (ODDS), 26, 28, 29</td>
</tr>
<tr>
<td>2</td>
<td>T, Jan 09</td>
<td>2</td>
<td>2.1 (Overview); 2.2; 2.3; 2.4</td>
<td>2.2: P. 48: # 1 – 19 (ODDS), 21; 2.3: P. 54: # 1 – 13 (ODDS); 2.4: P. 66: # 1, 2, 6, 7, 9, 12, 15</td>
</tr>
<tr>
<td>3</td>
<td>R, Jan 11</td>
<td>3</td>
<td>3.1 (Overview); 3.2; 3.3</td>
<td>3.2: P. 86: # 1 – 13 (ODDS), 17, 25, 27; 3.3: P. 104: # 1 – 17 (ODDS), 25 – 31 (ODDS)</td>
</tr>
<tr>
<td>4</td>
<td>T, Jan 16</td>
<td>3.4</td>
<td>3.4</td>
<td>3.4: P. 146: # 1 – 3, 5 – 25 (ODDS)</td>
</tr>
<tr>
<td>5</td>
<td>R, Jan 18</td>
<td>3.5</td>
<td>3.5: P. 126: # 1 – 7 (ODDS)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>T, Jan 23</td>
<td>Review for Test # 1</td>
<td>Review for Test # 1: Chapters 1, 2 &amp; 3 as above</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>R, Jan 25</td>
<td>TEST # 1</td>
<td>TEST # 1</td>
<td>(Chapters 1, 2 &amp; 3)</td>
</tr>
<tr>
<td>8</td>
<td>T, Jan 30</td>
<td>4</td>
<td>4.1 (Overview); 4.2; 4.3</td>
<td>4.2: P. 146: # 1 – 13 (ODDS); 17 – 25 (ODDS); 4.3: P. 156: # 1 – 13 (ODDS), 21, 22</td>
</tr>
<tr>
<td>9</td>
<td>R, Feb 01</td>
<td>4.4; 4.5</td>
<td>4.4: P. 165: # 1 – 19 (ODDS); 4.5: P. 171: # 1 – 17 (ODDS)</td>
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</tr>
<tr>
<td>10</td>
<td>T, Feb 06</td>
<td>4.7</td>
<td>4.7: P. 186: # 1 – 15 (ODDS), 27, 29, 30</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>R, Feb 08</td>
<td>5.1 (Overview); 5.2</td>
<td>5.2: P. 209: # 1 – 19 (ODDS)</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>T, Feb 13</td>
<td>5.3; 5.4</td>
<td>5.3: P. 220: # 1 – 29 (ODDS); 5.4: 227: 1 – 11 (ODDS), 19</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>R, Feb 15</td>
<td>SHORT QUIZ # 1</td>
<td>Review for Test # 2; SHORT QUIZ # 1</td>
<td>Review for Test # 2: Chapters 4 &amp; 5 as above</td>
</tr>
<tr>
<td>14</td>
<td>T, Feb 20</td>
<td>TEST # 2</td>
<td>TEST # 2</td>
<td>(Chapters 4 &amp; 5)</td>
</tr>
<tr>
<td>15</td>
<td>R, Feb 22</td>
<td>6</td>
<td>6.1 (Overview); 6.2; 6.3</td>
<td>6.2: P. 257: # 1 – 27 (ODDS), 37, 39; 6.3: P. 266: # 1 – 17 (ODDS), 21, 23</td>
</tr>
<tr>
<td>16</td>
<td>T, Feb 27</td>
<td>6.4; 6.5 (CLT: An Introduction)</td>
<td>6.4: P. 278: # 1 – 7 (ODDS), 11 6.5: P. 287: # 1 – 19 (ODDS)</td>
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<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
<th>Notes</th>
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<tbody>
<tr>
<td>17</td>
<td>R, Mar 01</td>
<td>NO CLASSES</td>
<td>COLLEGE CONFERENCE DAY</td>
</tr>
<tr>
<td>18</td>
<td>T, Mar 06</td>
<td>7</td>
<td>7.1 (Overview); 7.2</td>
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<td>19</td>
<td>R, Mar 08</td>
<td>7.3</td>
<td>7.3: P. 345: # 1-35 (ODDS)</td>
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<td>20</td>
<td>T, Mar 13</td>
<td>7.4</td>
<td>7.4: P. 359: # 1–25 (ODDS)</td>
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<tr>
<td>21</td>
<td>R, Mar 15</td>
<td>SHORT QUIZ # 2</td>
<td>Review for Test # 3; SHORT QUIZ # 2</td>
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<td></td>
<td>Review for Test # 3: Chapters 6 &amp; 7 as above.</td>
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<tr>
<td>22</td>
<td>T, Mar 20</td>
<td>TEST # 3</td>
<td>TEST # 3 (Chapters 6 &amp; 7)</td>
</tr>
<tr>
<td>23</td>
<td>R, Mar 22</td>
<td>8</td>
<td>8.1 (Overview); 8.2</td>
</tr>
<tr>
<td>24</td>
<td>T, Mar 27</td>
<td>8.3 (Traditional Method: P. 410 only)</td>
<td>8.3: P. 414: 1 – 23 (ODDS)</td>
</tr>
<tr>
<td>25</td>
<td>R, Mar 29</td>
<td>8.4 (Both P-Value Method: P. 419 &amp; Traditional Method: P. 410)</td>
<td>8.4: P. 422: 1 – 17 (ODDS)</td>
</tr>
<tr>
<td>26</td>
<td>T, Apr 03</td>
<td>8.5 (Traditional Method only: Similar to Example on P. 427 - 428)</td>
<td>8.5: P. 431: 1 – 31 (ODDS)</td>
</tr>
<tr>
<td>27</td>
<td>R, Apr 05</td>
<td>Computer Project Due</td>
<td>Class-Room Presentation of the Project</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Computer Project Due, and 10 Minutes Class-Room Presentation of the Project by Each Group</td>
</tr>
<tr>
<td>28</td>
<td>T, Apr 10</td>
<td>9</td>
<td>9.1 (Overview); 9.3 (Method: Part 2: P. 475)</td>
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<tr>
<td>29</td>
<td>R, Apr 12</td>
<td>9.4</td>
<td>9.4: P. 489: # 5 – 13 (ODDS)</td>
</tr>
<tr>
<td>30</td>
<td>T, Apr 17</td>
<td>Catch-up &amp; Review For Final Exam</td>
<td>Review of Some Problems for Final Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Review For Final Exam: (Emphasis on Chapters 8 and 9 as discussed above).</td>
</tr>
<tr>
<td>31***</td>
<td>R, Apr 19</td>
<td>Final Exam (Tentative)</td>
<td>FINAL EXAM (Tentative)</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>FINAL EXAMINATION: Emphasis on Chapters 8 and 9 (Comprehensive), as discussed above. Minor adjustments may be made at the discretion of the instructor.</td>
</tr>
<tr>
<td>32***</td>
<td>Final Exam Week</td>
<td>Final Exam Week</td>
<td>FINAL EXAM WEEK</td>
</tr>
</tbody>
</table>

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APPENDIX I

COURSE COMPETENCIES
STA 2023 – Statistical Methods

Competency 1: The student will be able to analyze data by:

a. Constructing and interpreting frequency tables and graphs such as bar graphs, pie charts and stem-and-leaf plots.
b. Computing and interpreting the measures of centrality: the mean, median, mode and midrange.
c. Computing and interpreting the measures of dispersion: the range, variance and standard deviation.

Competency 2: The student will be able to apply the measures of position by:

a. Computing z-scores.
b. Applying the Empirical Rule to the Normal Distribution.
c. Applying the Chebyshev’s Rule to the Non-Normal (or unknown) Distributions.

Competency 3: The student will be able to apply the counting principles by:

b. Computing the possible outcomes of compound events.
c. Computing Combinations and Permutations.

Competency 4: The student will be able to apply basic probability theory by:

a. Describing a sample space and an event.
b. Calculating probabilities of simple, compound and conditional events.

Competency 5: The student will be able to analyze random variables by:

a. Distinguishing between discrete and continuous random variables.
b. Constructing a probability distribution for a discrete random variable and computing its mean and standard deviation.
c. Computing probabilities for random variables having a binomial distribution.
d. Computing probabilities for random variables having a normal distribution.
e. Applying the Central Limit Theorem.
f. Approximating the Binomial Probability using the Normal Distribution.

Competency 6: The student will be able to analyze confidence intervals by:

a. Constructing confidence intervals of a single mean with a known population standard deviation.
b. Constructing confidence intervals of a single mean with an unknown population standard deviation.
c. Constructing confidence intervals of a single proportion.
d. Constructing confidence intervals of the difference between two means.

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Competency 7: The student will be able to apply hypothesis test procedures by:
   a. Identifying Type I and Type II errors.
   b. Identifying and interpreting p-values.
   c. Testing a single mean for large or small samples.
   d. Testing the difference between two means.
   e. Testing a single proportion.

Competency 8: The student will be able to analyze bivariate data by:
   a. Constructing and interpreting a scatter-plot.
   b. Computing and interpreting the linear correlation coefficient.
   c. Determining the simple linear regression equation and using it to make predictions.

APPENDIX II

LEARNING OUTCOMES

STA 2023 – Statistical Methods

ITEM #  TOPICS
1   Construct a frequency distribution, which also shows cumulative and relative frequencies
2   Construct a histogram
3   Construct and interpret stem-and-leaf plots
4   Compute measures of central tendency
5   Compute measures of dispersion
6   Find the percentile of a score or find the score corresponding to a percentile
7   Construct a box-and-whisker diagram
8   Use various counting rules, including the Multiplication Rule, Permutations and Combinations
9   Know the meanings of sample space, outcome, event, classical vs. empirical probability
10  Compute probabilities of simple events, complement probabilities, and odds
11  Apply the addition rules of probability
12  Apply the multiplication rules of probability
13  Compute conditional probabilities
14  Understand the meaning of a probability distribution and be able to construct discrete probability distributions
15  Compute the mean & variance of a probability distribution
16  Find the expected value of a discrete probability distribution
17  Compute probabilities using the binomial probability distribution
18  Apply the empirical rule for normally distributed data
19  Calculate z-scores and find probabilities for normally distributed data
20  Compute the mean of the sampling distribution of the means or proportions
21  Apply the Central Limit Theorem
22  Apply the normal approximation to the binomial distribution
23  Construct confidence intervals for proportions
24  Construct confidence intervals for a mean (\(\sigma\) Known or \(\sigma\) Not known)
25  Perform hypothesis tests for proportions
26  Perform hypothesis tests for means (\(\sigma\) Known or \(\sigma\) Not known)
27  Perform hypothesis tests for variances or standard deviations (OPTIONAL)

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Compute the p-value associated with a hypothesis test
Understand the relationship between a confidence interval and a two-tail hypothesis test.
Perform hypothesis tests for the difference between two means (independent samples)
Perform hypothesis tests for the difference between two means (small, dependent samples: Matched Pairs.)
Perform hypothesis tests for the difference between two proportions
Construct a scatter-plot for paired data
Compute and understand the meaning of the linear correlation coefficient
Determine the linear regression equation for paired data
Be able to graph a linear regression equation and use it to make predictions

MIAMI-DADE COLLEGE - Academic Year 2006-2007

SPRING 2006-2007

1. Registration Begins: M Oct 02
2. Late Registration Begins ($50 fee) W Jan 03
3. Classes Begin: Weekday and Evening W Jan 03 S Jan 06
4. Last Day to Change Courses without Penalty; Withdraw from classes with 100% refund; Register, add, drop, or change sections of credit courses without signature of instructor T Jan 09
5. CLAST: Deadline to Register Date of Test F Jan 19 S Feb 17
6. Last Day to Withdraw with Grade of W W Mar 14
7. Last Day of Classes F Apr 20
8. Last Day of Final Exams F Apr 27
9. Last Day to Apply for Degree & Name Appear in Commencement Program M Apr 2, 2007
10. Commencement Ceremony S April 28, 2007
10. Holidays S Jan 13 U Jan 14 M Jan 15 F Apr 06 S Apr 07 U Apr 08 R Mar 01

** No Classes (Conference Day)

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I, _____________________________, Student ID # _____________________,

have read and understood the terms and conditions as stipulated in the syllabus for the course **STA 2023 (STATISTICAL METHODS)**, T / R, 5:40 PM – 6:55 PM, Ref # 388065, Sec # 001, Spring Term 2007 (Tuesday, January 02 – Friday, April 27, 2007), by the course instructor, Dr. Mohammad Shakil, and provided to me by him on this first day of the class at Miami-Dade College, Hialeah Campus. By signing the contract, I agree with full responsibility to abide by the terms and conditions as mentioned in the said syllabus till the completion of the term.

________________________________                ________________________

Student’s Signature                                                       Date

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Student Registration for MyMathLab

Website Description
MyMathLab/CourseCompass is a website you can use to assess your math skills, do homework, take tests, view videos and more! Access to this website is with a MyMathLab Student kit that comes free with your new textbook (if you have a used book, you can purchase access online in Step 3 below or as a standalone kit at your bookstore, but you need a valid Course ID from your instructor). For more information about this website, including system requirements, go to www.mymathlab.com.

On-line Registration
You'll need:
• Your access code (inside your new textbook, purchased online in step 3, or with a standalone access kit).
• A valid email address
• Your Professor’s Course ID Number: ___________________________
• Your school zip code:__________________________
2. Click on the Register button below Students
3. Review the Before You Start information to ensure you have everything you need to register; Click Next
4. If you have previously taken a course in CourseCompass, click Yes, Look Me Up and enter your username and password, if you can remember that information. Otherwise, skip this first step leaving No, I am a New User selected.
5. Enter the 6-word access code from your Student Access Kit or inside your textbook, your School’s zip code, then select your Country; click Next.
6. Enter your professor's Course ID number. Click Next.
7. Fill in all required Personal Information, select your school from the drop-down list, then create your own personal login name & password for this site. Choose a security question (for use if you forget your password) & type the answer. Review the Site License Agreement as desired and click Next.
8. Your Confirmation & Summary screen appears; write down your confirmed login/password (a confirmation email will be sent to you. If you use a Spam email blocker, be sure to allow emails from Pearsoned.com). Click the CourseCompass Log In Now button and use the log in name & password you just created to enter CourseCompass. In the future, you will enter your MyMathLab course from this site, www.coursecompass.com, so it’s a good idea to bookmark this page. You will not have to register again for this course.
9. Under Courses you are taking, click on the Course name to access your professor’s web material.

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Inside MyMathLab
To the left are a series of buttons (they may be called Announcements, Course Documents, etc.). Use these to check for news from your professor, the course syllabus, & to access textbook content. Textbook material (quizzes, videos, etc.) is typically found under Course Documents or Chapter Contents. Your professor may have customized this website, so features & button names may vary. For Technical Support, call Toll Free 1-800-677-6337, Monday through Friday 8AM – 8PM, Sun. 5-PM-12AM EST.

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