Midland College Syllabus
Spring 2008
HITT 1255 Health Care Statistics
2-0-0

Course Description:
General principles of health care statistics with emphasis in hospital statistics. Skill development in computation and calculation of health data with overview of guidelines for Texas Department of Health Vital Statistics and studies. Students will be required to utilize formulas and perform calculations to prove their competencies.

This course is NOT self-paced. There are due dates that must be met for assignment credit.

Text, References, and Supplies:


Course Goals/ Objectives: Upon completion, students should be able to:

1. Understand how statistics are used in healthcare.
2. Differentiate between descriptive and inferential statistics.
3. Define hospital-related terms.
4. Describe the characteristics of normal distribution.
5. Display healthcare data using tables, charts, and graphs as appropriate.
6. Locate healthcare-related online state and federal databases on the Internet.
7. Understand how to use healthcare data collected from online databases in comparative statistical reports.
8. Calculate institutional statistics (i.e., occupancy rate, census, length of stay).
9. Calculate vital statistics (i.e., state and federal guidelines and procedures for collection and reporting).
10. Prepare data for analysis (i.e., compile data, develop graphs, tables, etc.).
12. Interpret statistical data.
13. Describe statistical technique and data presentation techniques.
14. Analyze data for patient related informational system needs or departmental operations or services.
15. Query Databases for statistical information.
17. Create reports using registry data bases.

Domains, Subdomains, and Tasks:

I. Domain: Health Data Management
I. A. Health Data Structure, Content and Standards
I. A.4. Contribute to the definitions for and apply clinical vocabularies and terminologies used in the organization’s health information systems.

II. Domain: Health Statistics, Biomedical Research and Quality Management
II. A. Healthcare Statistics and Research
II. A.1. Abstract and maintain data for clinical indices/databases/registries.
II.A.5. Use specialized databases to meet specific organization needs such as medical research and disease registries.

III. Domain: Health Services Organization and Delivery

III. C. Subdomain: Data Storage and Retrieval

III.C.2. Query and generate reports to facilitate information retrieval.

COURSE WITHDRAWAL: Students electing to withdraw from course are required to complete a Course Withdraw Form at http://www.midland.edu/admissions/forms.php before the last day to withdraw with a grade of “W”.

Last day to withdrawal for this semester: April 10, 2008

STUDENT CONTRIBUTION and CLASS POLICIES:

Academic Honesty: Students are expected to follow the Academic Honesty policy of Midland College. Using textbooks, assignments from other students, or assistance from others while taking exams is cheating. Any student cheating will be removed from the class, given an “F” and reported to the Registrar’s office. Plagiarism will not be tolerated. For more information, review the Student Conduct/Misconduct in the MC catalog at http://www.midland.edu/admissions/images/mc_catalog_2007-2008.pdf

Participation: Participation is equivalent to Attendance. Students are required to participate in Discussion Board Assignments. These assignments are listed in the Assignment Module and part of your grade. Students are required to respond at three times a week. Check the discussion board and announcements daily.

Late assignments: No late assignments are accepted. A score of zero shall be recorded in the grade book for the assignment. Do not wait until the last minute to do your assignment. Computer malfunctions are no excuse for late assignments. Plan ahead.

Testing: 1) Quizzes usually are frequent and consist of multiple formats to include multiple choice, open-ended questions, matching, some true/false and statistical problems calculations. Since this class constitutes the ability to perform math calculations, many of the quizzes throughout out the course will require the student to perform mathematical computations.

2) There is a list of Formulae in the back of the textbook. Students may use the formulas listed unless otherwise stated on the exam.

3) Students who access the test and do not complete the exam may be required to have proctor on future examinations. (To inquire further, contact the instructor by email). Tests are only accessible once, so students should be ready to complete the exams when opening them.

4) The final examination will be comprehensive.

5) Late test: Make-up tests are given only if arrangements are made with the instructor prior to an absence. The make-up test will have to be completed by the date assigned by the instructor. Otherwise, a score of zero will be recorded.

6) Late work: There is no formal provision for late work. A zero will be placed in the grade book if an assignment is not turned in through Blackboard ON OR BEFORE the due date.
ADA statement: Students needing additional time to test due to a documented learning disability, contact Dale Williams, Counselor, at 685-5598 or dwilliams@midland.edu at the beginning of the course to make accommodations. See the current Midland College catalog for more information.

Computer Requirements:

1. Students are required to have a working computer throughout the course.
2. Students are responsible to maintain computer systems that are compatible with Blackboard courses. See home page of Blackboard for system requirements.
3. If students do not have reliable computers, then students should find access to either the college campus computer labs or alternative use.
4. Computer problems are not an excuse for incomplete or late work. Students are STRONGLY encouraged you to complete the assignments and tests prior to due date to allow for computer “problems”. If Blackboard server is down for an extending length of time and affects due dates, the due date will be adjusted accordingly.
5. **Warning:** Students should access the course using Mozilla or Netscape browser. Mozilla browser may be downloaded free at [www.mozilla.com](http://www.mozilla.com). MSN, Internet Explorer, AOL, and Yahoo are not compatible with Blackboard, and these systems MAY lock students out of tests during examinations. Do not take a chance of this happening to you. Use a compatible browser.

### Evaluation of Students:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 &gt; 99</td>
</tr>
<tr>
<td>B</td>
<td>70 - 79</td>
</tr>
<tr>
<td>C</td>
<td>60 - 69</td>
</tr>
<tr>
<td>D</td>
<td>&lt; 60</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion Board/Participation</td>
<td>15%</td>
</tr>
<tr>
<td>Required Homework</td>
<td>30%</td>
</tr>
<tr>
<td>Tests/Exams</td>
<td>30%</td>
</tr>
<tr>
<td>Final Examination</td>
<td>25%</td>
</tr>
</tbody>
</table>

A semester grade of **less than "C"** will **NOT** be acceptable as passing in this course. In order to progress from one course to another as defined in the program curriculum, the student is required to complete all courses listed in the curriculum in the college catalog with a minimum of a "C". Before registering for a semester, the student should check with the instructor to ensure they are passing with a grade of at least a "C". The student may retake the course, if failed, when it is offered again until the failed course is passed.

**Instructor Information:**

Name: Beth Aaron, BA, RHIT  
E-Mail: barron@midland.edu  
Office Hours: as posted online  
Virtual Office – SKYPE 8:00 – 9:00 Mondays (Skype name – Beth.HIM  
OR contact me by discussion board online.  
HITT Dept. Office phone: 432-685-5573  
Division Chairman and Division Secretary Names: Becky Hammack and Kay Floyd  
Division Office Location and Telephone: 209 HS, 685-4600
INFORMATION FOR YOUR BLACKBOARD COURSE SYSTEM

Go to your home page on backboard. The top tab on the left will read “My MC Blackboard.

1. Go to “Tools” on the left column of the screen.
2. Click on Personal Information.
3. Click on Edit Personal Information.
4. Verify your information and make any changes. Be sure to include a daytime Phone (or cell number) and your email address that you check frequently.
5. Click “OK” until you get back to the Personal Information page options.
6. To get to Blackboard again, click on the tab at the top left called Courses.

Assignment Submission:

All assignments must be submitted through Blackboard Assignment tab for credit.
1. Save your assignments in a rich text file “type” (.rtf).
2. When saving the assignment, name your document and include your initials. Example1: Jamie Smith’s workbook assignment title Exercise 1-1: jsmithEx1-1.rtf
   Example2: Ann Jones workbook assignment Exercise 1-2: ajonesEx1-2.rtf
3. Click “view/complete assignment”.
4. Click the “Browse” function key.
5. Attach the document.
6. Click “Submit”.
7. Click “OK”.

Checking Grades:

1. Go to Tools. Click on My Grades.
2. View your grades. If a red exclamation mark (!) appears on the position where the score should be, this means that the assignment needs to be graded, and it was properly submitted. Once the instructor reviews the assignment, a grade will be posted.
3. Feedback may be offered by the instructor for assignments. To view Feedback for the assignment, click on the grade, and the assignment notes from the instructor and the student will be available.

COURSE SCHEDULE: See Next Page.
NOTE: Course schedule may change at the discretion of the instructor. Any changes will be posted in Announcements on Blackboard.

All Homework is due on or before midnight on **Wednesdays**.
All tests are due on **Mondays**.

**NO LATE WORK IS ACCEPTED**

<table>
<thead>
<tr>
<th>Due Date</th>
<th>Chapter</th>
<th>Horton Text Assignment</th>
<th>Discussion Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>23-Jan</td>
<td>1&amp;2</td>
<td>What is Statistics &amp; Math Review</td>
<td>Introduction</td>
</tr>
<tr>
<td>30-Jan</td>
<td>3</td>
<td>Patient Census Data</td>
<td>TBA</td>
</tr>
<tr>
<td>5-Feb</td>
<td>4</td>
<td>Percentage of Occupancy Read Johns text: pages 452-458</td>
<td>TBA</td>
</tr>
<tr>
<td>11-Feb</td>
<td></td>
<td><strong>TEST 1 Chapter 1 – 3</strong></td>
<td></td>
</tr>
<tr>
<td>13-Feb</td>
<td>5</td>
<td>Length of Stay Read Johns text: pages 459-461</td>
<td>TBA</td>
</tr>
<tr>
<td>18-Feb</td>
<td></td>
<td><strong>TEST 2 Chapters 1 – 5 and Johns readings</strong></td>
<td></td>
</tr>
<tr>
<td>20-Feb</td>
<td>6</td>
<td>Death (Mortality) Rates Read Johns text: 462-468</td>
<td>TBA</td>
</tr>
<tr>
<td>27-Feb</td>
<td>7</td>
<td>Hospital Autopsies and Other Autopsy Rates</td>
<td>TBA</td>
</tr>
<tr>
<td>27-Feb</td>
<td></td>
<td><strong>TEST 3 Chapters 1 -6 Johns readings</strong></td>
<td></td>
</tr>
<tr>
<td>5-Mar</td>
<td>8</td>
<td>Morbidity and Misc. Rates</td>
<td>DB: Johns WB pg 51 Discussion Questions</td>
</tr>
<tr>
<td>12-Mar</td>
<td>9</td>
<td>Statistics computed within HIM department Read Johns text: pages 468-477</td>
<td>TBA</td>
</tr>
<tr>
<td>Mar 17-24</td>
<td></td>
<td>R-ADTs Department and Hospital Census</td>
<td></td>
</tr>
<tr>
<td>26-Mar</td>
<td>10</td>
<td>Descriptive Statistics in Health Care</td>
<td>DB: Johns Application Exercise pg 52</td>
</tr>
<tr>
<td>31-Mar</td>
<td></td>
<td><strong>Test 4 Chapters 1 – 9 &amp; Johns</strong></td>
<td></td>
</tr>
<tr>
<td>2-Apr</td>
<td>11</td>
<td>Presentation of Data Read Johns text: pages 442-452</td>
<td>TBA</td>
</tr>
<tr>
<td>9-Apr</td>
<td>12</td>
<td>Inferential Statistics in Health Care Johns Application Exercises #2 and #3 pg 52-53</td>
<td>TBA</td>
</tr>
<tr>
<td>14-Apr</td>
<td></td>
<td><strong>TEST 5 Chapters 1 – 12 &amp; Johns</strong></td>
<td></td>
</tr>
<tr>
<td>16-Apr</td>
<td>13</td>
<td>Basic Research Principles Read Johns text: 478 – 495</td>
<td>TBA</td>
</tr>
<tr>
<td>23-Apr</td>
<td></td>
<td>Continue with Data Presentation Johns Review Quiz (workbook) page 53-56</td>
<td>TBA</td>
</tr>
<tr>
<td>30-Apr</td>
<td></td>
<td>Review as stated by Instructor</td>
<td>TBA</td>
</tr>
<tr>
<td>5-May</td>
<td></td>
<td><strong>Comprehensive Final Will cover Chapters 1-13, Johns text, &amp; IRBs</strong></td>
<td></td>
</tr>
</tbody>
</table>