El Paso Community College
Syllabus
Part II
Official Course Description

SUBJECT AREA	**Health Information Technology**
COURSE RUBRIC AND NUMBER	**HITT 1255**
COURSE TITLE	**Health Care Statistics**
COURSE CREDIT HOURS	**2** **2** : **1**
	Credits Lec Lab

I. Catalog Description

Provides principles of health care statistics with emphasis in hospital statistics. Develops skills in computation and calculation of health data with overview of guidelines from the Texas Department of Health Vital Statistics and Studies. A grade of "C" or better is required to take the next course. **Corequisite: HITT 2360 and HITT 2435. (2:1).**

II. Course Objectives

A. Unit I. Overview of Statistics and Mathematics Review
1. Define the term "statistics.
2. Discuss the basic purpose(s) of statistics.
3. Name an example of a vital statistic, along with its common use.
4. State the U.S. reporting requirements for vital statistics.
5. Define the main terms employed in the generation of health statistics using the Glossary of Healthcare Services and Statistical Terms as a guide.
6. Convert fractions to percentages.
7. Differentiate among ratio, proportion, percentage, and rate.
8. Define and compute mean, median, and mode.

B. Unit II. Patient Census Data
1. Define, differentiate, and apply the terms census, daily census, inpatient service day, and total inpatient service days.
2. Compute daily census and inpatient service days using admission and discharge data.
3. Compute census and inpatient service days with data given for births and transfers.
4. Compute the average daily census for a patient care unit.

C. Unit III. Bed Occupancy Ratio
1. Define and differentiate among the terms bed count newborn bed count, bed count days, and newborn bed count days.
2. Compute the bed occupancy ratio for any period given the data representing bed count and inpatient service days.
3. Compute the bassinet occupancy ratio for any given bassinet count and newborn inpatient service days.

D. Unit IV. Length of Stay Data
1. Compute average length of stay using the standard statistical formula.
2. Compute the average length of stay for newborns using the standard statistical formula.
3. Compute the average length of stay for one patient using the standard statistical formula.
4. Compute the total length of stay for a group of discharge patients.
5. Determine the median length of stay for a small group of patients.

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6. Describe the conditions under which the median is the preferred measure of central tendency when presenting average length of stay.

E. Unit V. Obstetrical and Perinatal Rates
   1. Define and differentiate among neonatal deaths, post neonatal deaths, and infant deaths.
   2. Compute infant mortality rates and fetal death (stillborn) rates.
   3. Compute maternal death rates.
   4. Compute cesarean section rates.

F. Unit VI. Morbidity and Other Rates
   1. Discuss infection rate.
   2. Define and calculate postoperative infection rate.
   3. Distinguish between a surgical procedure and a surgical operation.
   4. Compute any other rate when provided the necessary data.

G. Unit VII. Death (Mortality) Rates
   1. Define and calculate death rate.
   2. Discuss net death rate, postoperative death rate, and anesthesia death rate.
   3. Calculate postoperative death rate.
   4. Define cancer mortality rate.

H. Unit VIII. Hospital Autopsies and Autopsy Rates
   1. Define the terms hospital inpatient autopsy, hospital autopsy, and autopsy rate.
   2. Compute gross autopsy rate.
   3. Compute net autopsy rate.
   4. Compute adjusted hospital autopsy rate.

I. Unit IX. Statistics Computed within the Health Information Management Department
   1. Describe the uses of statistics computed within the HIM Department.
   2. Determine how to calculate effective medical transcription unit labor costs.
   3. Calculate cost breakdown of release of information requests.
   4. Explain measures used within the HIM Department to determine staff workload levels.
   5. Recognize how statistics are used with the HIM department to plan work space and health record storage.

J. Unit X. Statistics Computed for Alternative Care Settings
   1. Calculate resources allocation in managed care organizations.
   2. Discuss the types of statistics kept for ambulatory care facilities.
   3. Recognize how long-term care statistics may differ from traditional acute care statistics.
   4. Describe two instruments used to calculate statistics in behavioral (mental) health settings.

K. Unit XI. Measures of Variation
   Upon satisfactory completion of this unit, the student will be able to:
   1. Define and differentiate between range, variance, and standard deviation.
   2. Calculate range, variance, and standard deviation.

L. Unit XII. Data Presentation
   Upon satisfactory completion of this unit, the student will be able to:
   1. Discuss categorical data: nominal (dichotomous), ordinal, interval, and ratio.
   2. Differentiate between numerical data: discrete data and continuous data.
   3. Describe and differentiate between tables and graphs.
   4. Create tables and graphs to depict statistical information.

M. Unit XIII. Computerization of Statistics
   1. Verify computerized statistical reports for accuracy.
   2. Recalculate statistics for greater specificity.
   3. Generate computerized statistical reports.

N. For All Units
   1. Adhere to the Health Occupations Division Criteria for Course Pursuit. (See attached)
   2. Adhere to the Health Occupations Division Scholastic Dishonesty Policy. (See attached)

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III.   THECB Learning Outcomes (WECM)

1.   Prepare statistical reports to support healthcare information and department operations and services.
2.   Formulate statistics that meet medical and administrative reporting needs and requirements of government regulatory and voluntary agencies.
3.   Analyze health care statistics, vital statistics, descriptive statistics, data validity, and reliability.
4.   Assess methods of healthcare data.
5.   Utilize appropriate methods of data display.

IV.   Evaluation

A. Pre-assessment
The instructor will review and discuss the course prerequisites on the first day of class. Due to specialized admission requirements for the HITT Program, all students should have the necessary prerequisites prior to enrollment.

B. Post-assessment
A unit exam will be administered at the completion of each unit in this course. Quizzes over lecture/lab material and/or assigned reading are at the discretion of the instructor.

Unit activities/assignments will be assigned by the instructor to further enhance students' understanding of the course objectives.

A comprehensive final examination will be administered for this course.

The instructor will maintain a continuous record of each student's progress. Students not performing at a C level or better in the course will be referred for tutoring and/or counseling.

Students are encouraged to seek direction and help for those areas in which they experience difficulty. The course instructor may assign remedial or tutorial work designed to enhance student proficiency.

Students not adhering to the Health Occupations Criteria for course pursuit may be administratively withdrawn from this course. (See attached)

C. Grading Scale

93-100= A
83-92 = B
75-82 = C
0-74   = Failing

The student must receive a grade of "C" or better to pass this course.

V.   Disability Statement (Americans with Disabilities Act [ADA])
EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024).

VI.   6 Drop Rule
Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.

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HEALTH OCCUPATIONS DIVISON CRITERIA FOR COURSE PURSUIT

In order to establish guidelines for determining when a student has ceased to pursue the course objectives, the Health Occupations Division has set the following applicable standards.

1. The student must adhere to the attendance requirement of course HITT 1255. In order to pursue the course, the student must attend a minimum of 40 hours of instruction. (Meets a total of 48 hours).

2. The student will not be able to make up theory hours. The student will be able to make up lab hours at the discretion of the instructor.

3. Tardiness will be defined as being fifteen (15) minutes or more late to laboratory sessions and fifteen (15 minutes or more late to theory sessions. Students will be allowed two (2) events of tardiness, after which the tardiness will be considered an absence.

4. If required by instructor/coordinator, student also must follow the standards established in the El Paso Community College Health Occupations Programs Students Handbook for Allied Health Students and/or program addendum. The student is bound by standards in the El Paso Community College Health Occupations Programs Student Handbook for Allied Health Students as evidenced by the return of a signed/dated acknowledgement sheet.

5. Where the student continues to pursue the course objectives but is receiving failing grades, he/she will remain eligible to complete the course, except in instances where unsafe practice occurs.

6. The student must appear for examinations, presentations, or other required class activities and submit required papers, projects, and/or reports as identified in the course syllabus/calendar.

Failure of the student to follow the above will indicate that the student is no longer pursuing the objectives of the course and will result in faculty initiated withdrawal.

EL PASO COMMUNITY COLLEGE
HEALTH OCCUPATIONS DIVISION
SCHOLASTIC DISHONESTY

Scholastic dishonesty shall constitute a violation of these rules and regulations and is punishable as prescribed by Board policies. Scholastic dishonesty shall include, but not be limited to, cheating on a test, plagiarism, and collusion. "Cheating on a test" shall include:

1. Copying from another student's paper.

2. Using test materials not authorized by the person administering the test.

3. Unauthorized collaborating with or seeking aid from another student.

4. Knowingly using, buying, selling, stealing, or soliciting, in whole or in part, the contents of a test.

5. The unauthorized transportation or removal, in whole or in part, of the contents of the test.

6. Substituting for another student, or permitting another student to substitute for one's self, to take a test.

7. Bribing another person to obtain a test or information about a test.

8. "Collusion" shall be defined as the unauthorized collaboration with another person in preparing written work for fulfillment of course requirements.

9. Any student involved in scholastic dishonesty as identified above, or in the Student Handbook, may, at the discretion of the faculty,

    a. Have the test or paper graded zero (0).
    b. Be removed from the class.
    c. Be recommended for administrative dismissal from the course or program

The stringency of this policy is understandable when read in the context of an educational program preparing individuals for a health career where the safety and well-being of the public are largely dependent upon the knowledge and ethical responsibility of the health personnel. Evidence of unethical behavior, such as cheating, precludes the instructional faculty's ability to declare prospective graduates to be reliable and ethical.