_____

Course Code: HIM 210   **Course Title:** Health Statistics and Data Analytics

Department: Health Information Management

Course Description: This course is a comprehensive study of the principles of statistics applied to health data, including vital and other health statistics. Topics also include common research methodologies in healthcare, as well as an introduction to healthcare data analytics and basic skills for performing data analyses and data presentation using Excel and other tools.

Prerequisites: MA 103, CIS 101

Credits: 3   **Lecture Hours: 3**   **Lab/Studio Hours: 0**   **Clinical/Fieldwork Hours:** 0

_____

Required Textbook/Materials:
    Author: Davis
    Title: Statistics & Data Analytics for Health Data
    Publisher: Elsevier – Health Sciences Division
    ISBN: 9781455753154
    Required: REQUIRED

    Author: Schnering
    Title: Case Studies in Health Information Management
    Publisher: Cengage Delmar Learning
    Edition: 3rd ISBN: 9781305955332
    Required: REQUIRED – contact instructor before purchasing

    Author: Foley
    Title: Health Information Management Case Studies
    Publisher AHIMA Press
    Edition: 1st ISBN: 9781584264583
    Required: REQUIRED – contact instructor before purchasing

    Author: Sayles
    Title: Health Information Management Technology, An Applied Approach
    Publisher: AHIMA Press

Edition 5th
ISBN: 9781584265177
Required: RECOMMENDED

All students MUST be members of AHIMA. Information for joining is provided in the first week of class.

Additional Time and Supplemental Requirements:
Based on a 15-week semester, students are expected to complete approximately 8 hours per week of assigned work outside of class.

COVID-19:
On-Campus Requirements during COVID-19: Passaic County Community College has created a thorough plan for maintaining a healthy environment while on campus during the COVID-19 Pandemic. You are required to wear your mask, maintain safe social distances and wash your hands frequently. Also, remember to use hand sanitizer stations, and do not gather in groups. Maintaining a healthy campus will require all of us to do our part. If we take these simple precautions, we can have a safe and productive semester.

Course Learning Outcomes:
Upon completion of this course, students will be able to:
- Utilize basic descriptive, institutional, and healthcare statistics (III.D.1)
- Apply graphical tools for data presentation (I.D.2)
- Analyze data to identify trends (III.D.2)
- Explain analytics and decision support (III.C.1)
- Apply report generation technologies to facilitate decision-making (III.C.2)
- Explain usability and accessibility of health information by patients, including current trends and future challenges (III.F.1)
- Report staffing levels and productivity standards for health information functions (VI.D.1)
- Plan budgets (VI.G.1)
- Explain budget variances (VI.G.3)
- Utilize data for facility-wide outcomes reporting for quality management and performance improvement. (VI.C.3)
- Explain common research methodologies and why they are used in healthcare (III.E.1)

General Education Outcomes: This is not a general education course.

Grading Standards:
    Methods of Evaluation:

Tests (2)	40%
Comprehensive Final Exam	20%
Homework Assignments	30%

Participation and Quizzes   10%

Course Content:

(Schedule and suggested topics, readings, and assignments subject to change based on instructor and instructional resource)

- Intro to Statistical Terms and Concepts in Health Data Management
- Basic Math Concepts, Central Tendency and Dispersion
- Data Presentation
- Administrative Data
- Clinical Facility Data
- Public Health Data
- Financial Data
- Scrubbing and Mapping Data
- Research and Data Analysis
- Data Analytics with Excel
- Data Reporting
- Data Visualization

Department Policies:

All Sections:

- College-level writing skills are expected in all aspects of this course. Points will be deducted for errors in grammar and spelling in written assignments, discussions and assessments.
- All assignments must be submitted by the due date/time. Most assignments will be accepted up to three days late but will be penalized. Further extensions may be considered under mitigating circumstances that can be substantiated.
- Blackboard will be utilized to manage the course materials, assessments, communications, etc. Students are responsible for submitting assignments correctly (typically through the Assignment Dropbox). Students are responsible for ensuring that the assignment is submitted to the correct Dropbox and for checking to make sure that the file submitted is the correct one. Assignments will not be accepted by email or course message.
- This course may require homework or lab activities that utilize web-based applications. These webbased applications may require:
  - o Use of a PC or laptop (rather than a tablet or cell phone). Windows-based PC or laptop is highly recommended. Some applications may not run on a MAC.
  - o The ability to download and run small executable (.exe) files onto the PC or laptop you are using. If you are using a PC or laptop at your place of employment or public place these files, you may not have the appropriate "permissions" to install and run files. Please plan appropriately. PCs are available at the college during

normal business hours for those students who need access to a PC. If you will be using computers at the college, please contact your instructor at the beginning of the semester for information about where computers with the necessary client files have been installed.

- Computer/Internet problems are not an acceptable excuse for late assignments, missed discussion posts, missed quizzes or tests. It is the student's responsibility to identify an alternate computer (at work, family member, library, etc.) which can be used in the event of a computer/internet problem. Exceptions will only be made for widespread power outages. Students are advised against waiting until the last minute or last day to submit their work for a variety of reasons. If you work on your online course assignments soon after assigned, you have more time to find an alternate computer in the case of a problem. In the case of discussion postings, it is difficult to have an effective and meaningful "discussion" if nobody posts until the last minute.

- Written assignments are to be submitted as Microsoft Office documents, typically in Word, Excel or PowerPoint as specified in the instruction assignments. Students have access to Microsoft Office applications – see Blackboard Navigation bar for instructions on how to access Office 365.

- Students must document sources so that credit is given to others for their ideas and their words – cite sources for all words and ideas that are not one's own using MLA style citations.

- <u>There are no make-ups for missed quizzes.</u>

- **Tests** may be based on reading assignments, course lectures and labs (if applicable), homework assignments and class discussions. Dates of exams are indicated in the syllabus. Any revisions of test dates will be announced by the instructor. Final exam will be comprehensive.

- **Make-ups for tests** are at the discretion of the course instructor and only when arranged in advance of the test date/test period and only when there are mitigating circumstances that can be substantiated. If make-up test is permitted, the test must be taken within 7 days of the original test day. A 10% penalty will be applied to the grade of a make-up test /exam and any late assignments or **papers regardless of the reason for the missed test/exam/assignment.**

- **Extra credit assignments will not be given in lieu of poor performance**.

- Limitations on Repeating HIM Courses - A HIM course may be attempted a maximum of two times. An attempt is defined as:
  - ○ any withdrawal from the courses after the add/drop period
  - ○ any letter grade for the course, including "F" grades assigned due to non-attendance.

  Failure to achieve a grade of "C" or higher within two attempts will result in the inability to complete the Health Information Management AAS degree program, Medical Coding Certificate or EHR/Health IT certificate. Students failing to successfully complete a course after two attempts may re-attempt the course in three years after meeting with the HIM Program Coordinatorand obtaining permission. Students requesting this re-attempt may be required repeat previously completed courses if there have been changes in the program or if there have been significant changes in course content.

- **Absences**: Students are expected to notify the course instructor in advance of any absence. In the case of online students, students should notify the instructor of any inability to login and participate in the course for more than three days. Absence does not excuse the student from any assignments, tests or other activities due during the absence. The student is responsible for any work assigned during an absence. Excused absences require supporting documentation

- Students must review all graded assignments, quizzes and tests within 1 week of the return of that item to the student. No requests for instructor review and revision of the grade will be accepted after one week of the return of that item to the student.

- The final **exam must** be completed. Failure to take the final exam will result the failure of the course.

- **Software:**
  - Access to Microsoft Office or (2007 or higher): Word, Excel and Powerpoint is strongly required. Microsoft 365 is available free to all PCCC students.
  - Installation of the following internet browsers is strongly recommended: Internet Explorer, Chrome, Firefox.
  - Adobe Reader – free download at http://get.adobe.com/reader/
  - Screen capture software – Recommended: Jing free download at http://www.techsmith.com/download/jing/

Online and Hybrid Sections:
- Students are expected to log into the course a minimum of three times each week during a regular semester and a minimum of four times per week during a summer session.

- The student is responsible for reading all announcements, discussion board posts and course messages as well as information posted on the course homepage at the time of each login.

- Each week students **must** click the **Weekly Course Lectures and Assignment** link in the navigation bar to obtain the weekly lecture and assignment. If this course has a lab component, students must access the **Weekly Lab** link in the navigation bar each week to obtain the lab assignment. Refer to the course homepage for the day of week each of these will be posted. It is highly recommended that the student access these on the day of posting in order to plan completion of the work for the week.

- Students are expected to participate in assigned discussions by submitting meaningful posts. Initial posts are due by Wednesday evening. Follow up posts are due by Sunday evening. *Discussion postings must be in your own words and references must be cited*.

- Students are advised to post contributions to the discussion board early enough in the week to allow other students in the course to react and replay. Robust discussions on these boards foster shared learning and allow students to "compare notes" from peers who may have valuable experiential knowledge about the discussion topic.

- **This course requires three in-person proctored tests**.

- Students living 50 or more miles from the nearest PCCC campus or living out-of-state may make arrangements to use a remote proctor and must submit a Proctor Agreement (in addition to completing the Test Site Selection "quiz") which must be approved by the HIM Program Director.

- Online students must schedule a testing appointment for their selected test site at HTTP://TinyURL.com/PCCCONLINE Appointments at PCCC test sites may be scheduled beginning the Sunday of the test week. Refer to the Quick Guide to Testing posted in the course for information on how to schedule an appointment.

- **Lab courses**: If this course has a lab component, failing to <u>fully complete</u> three lab assignments within one week of the due date of each, will result in a course failure. Page

- **Last Date of Attendance Policy:** Instructors of online courses must be able to meet the federal expectation for tracking Last Date of Attendance. The federal guideline states: the last date of attendance is calculated by the last time a student participated in an online discussion or made contact with a faculty member.

Classroom Sections:
- Attendance is expected, not suggested. Class is like having a job. Excessive absence will hurt your performance and your ability to pass this class.
- You are expected to be on time. If you must arrive late or leave during class, do so quietly. Information covered during that absence will not be repeated.
- Lab courses: If this course has a lab component, missing three (3) lab sessions will result in **a course failure**.

<u>**Academic Integrity**</u>
Healthcare professionals are expected to act honestly, ethically and responsibly at all times. This expectation begins with your behavior in your academic courses. As a student in this health information management/technology course you are expected to demonstrate academic integrity in all your coursework. Dishonesty of any kind will not be tolerated in this course.

Violations of academic integrity include but are not limited to:
- discussing the content of an exam during or after taking the exam with a student who has not yet taken the exam
- receiving assistance from materials, persons or electronic sources during any quiz or exam
- giving assistance to another person before, during or after a quiz or exam (including allowing someone to copy from your quiz or exam)
- giving assistance on assignments or projects unless the instructor has specifically stated that students may work together.
- modifying someone else's assignment and turning it in as your own
- plagiarizing – using someone else's words or ideas as your own; failing to cite the source of words and ideas that are not your own

- having unauthorized possession of examinations

Any incident of academic dishonesty will result in a "0" for the assignment, project, quiz or exam and will be reported to the Program Director of the Health Information Management Program. A second violation in the same course or any other course at any time while the student is enrolled at PCCC, will result in expulsion from the Health Information Management program or Medical Coding Certificate program and will be reported to the Associate Dean for Students for further disciplinary action.

Additionally, please refer to the College's Academic Integrity Policy which can be found in the College Catalog and the Student Handbook.

College Policies:
For Information regarding:
- PCCC's Academic Integrity Code
- Student Conduct Code
- Student Grade Appeal Process
Please refer to the PCCC Student Handbook and PCCC Catalog

Panther Alert:
The College will announce delayed openings, closings, and other emergency situations through the Panther Alert System. Students are encouraged to sign up for Panther Alert Notifications by logging into their student accounts through the PCCC website at www.pccc.edu and following Panther Alert System instructions.

Notification for Students with Learnings Disabilities:
If you have a disability, and believe you need accommodations in this class, please contact the Office of Disabilities Services (ODS) at 973-684-6395, or email ods@pccc.edu. You should do so as soon as possible at the start of each semester. If you require testing accommodations, you must remind me (the instructor) one week in advance of each test.