BIT206

COMPUTERS IN THE MEDICAL PROFESSION

3 Credit Hours

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BIT206 Computers in the Medical Profession

I. CATALOGUE DESCRIPTION
   A. Pre-requisites: BIT138 Word Processing Applications I and Reading Proficiency
   B. 3 Semester Credit Hours
   C. This course prepares the student to work with the computer technology used by the administrative medical assistant to accomplish the tasks used in the medical profession. (S)

II. EXPECTED LEARNING OUTCOMES/CORRESPONDING ASSESSMENT MEASURES

| Demonstrate knowledge of computer terminology used in medical professions | Written exams |
| Produce medical documents using a word processor | Manual/portfolio |
| Produce spreadsheets | Group project |
| Build computer databases | Group project |
| Produce presentations using presentation software | PowerPoint presentation |
| Demonstrate ability to use various billing and coding software used in the medical profession | Simulation project |
| Demonstrate ability to use patient management software | Assignment |

III. OUTLINE OF TOPICS

A. Computers in the Medical Profession
   1. Identify general use of computers in medical organizations
   2. Identify ways a computer can help a medical professional
   3. Discuss the types of software used in the medical profession
   4. Identify ways medical research can be conducted using a computer
   5. Understand basic medical organization security issues and why good security measures are imperative in a medical organization

B. Word Processing
   1. Create, edit, and modify merge documents
   2. Merge envelopes
   3. Create, modify, customize, and format a table
   4. Apply borders and shading to a table
   5. Apply an auto format to a table
   6. Create a form for handwritten entries
   7. Create a form and save it as a template
8. Fill in and print a form document
9. Edit a form template
10. Create and fill in a form with a form field drop-down list

C. Spreadsheet Software
1. Use the AVERAGE, MAX, and MIN formulas to perform statistical analysis
2. Create TODAY and DATE formulas
3. Create an IF formula to return a result based on a logical test
4. Create, edit, and format charts
5. Insert, size, and move a picture
6. Draw arrows and text boxes
7. Change margins
8. Center a worksheet horizontally and vertically
9. Create a custom header and footer
10. Print row headings, column headings, and gridlines
11. Scale a worksheet to fit within a specified number of pages
12. Add records, filter and sort a list

D. Database Management Systems
1. Integrate database information with spreadsheet/word processing documents
2. Create table relationships
3. Modify database using advanced queries like combine, calculate, update, duplicate
4. Design and use forms in database
5. Use import feature for database and table

E. Presentation Software
1. Apply formatting with Format Painter
2. Change alignment, line, and paragraph spacing
3. Draw a text box
4. Insert headers and footers
5. Change the slide design and color scheme
6. Insert, format, size, and move clip art images
7. Create and format organizational charts and diagrams
8. Insert and format WordArt
9. Add an animation scheme to a presentation
10. Add sound to a presentation
F. Billing and Coding Software
   1. Learn what billing and coding software entail
   2. Identify why accurate billings are important to medical professions
   3. Explain the computerized billing and coding process
   4. Explain how reports generated from a billing process can help an office

G. Patient Management
   1. Learn the components of patient management
   2. Demonstrate why patient management is important to a medical organization
   3. Explain how reports generated from patient management can help an office

IV. METHOD(S) OF INSTRUCTION

   A. Lecture
   B. Demonstration using the Smart Classroom Equipment
   C. Hands-on Lab Exercises and Simulations
   D. Group Projects

V. REQUIRED TEXTBOOK(S)


VI. REQUIRED MATERIALS

   USB Storage Drive

VII. SUPPLEMENTAL REFERENCES

   A. CD with Medical Documents
   B. Internet Resource Center, [www.emcp.com](http://www.emcp.com), and Reliable Internet Access
VIII. METHOD OF EVALUATION

A. Assignments 20%
B. Manual/Portfolio & Written Exams 20%
C. Group Projects 20%
D. PowerPoint Presentations 20%
E. Simulation Project 20%

IX. ADA AA STATEMENT

Any student requiring special accommodations should inform the instructor and the Coordinator of Disability Support Services (Library; phone 636-481-3169).

X. ACADEMIC HONESTY STATEMENT

All students are responsible for complying with campus policies as stated in the Student Handbook (see College website, http://www.jeffco.edu).

XI. ATTENDANCE STATEMENT

Regular and punctual attendance is expected of all students. Any one of these four options may result in the student being removed from the class and an administrative withdrawal being processed: (1) Student fails to begin class; (2) Student ceases participation for at least two consecutive weeks; (3) Student misses 15 percent or more of the coursework; and/or (4) Student misses 15 percent or more of the course as defined by the instructor. Students earn their financial aid by regularly attending and actively participating in their coursework. If a student does not actively participate, he/she may have to return financial aid funds. Consult the College Catalog or a Student Financial Services representative for more details.

XII. OUTSIDE OF CLASS ACADEMICALLY RELATED ACTIVITIES

The U.S. Department of Education mandates that students be made aware of expectations regarding coursework to be completed outside the classroom. Students are expected to spend substantial time outside of class meetings engaging in academically related activities such as reading, studying, and completing assignments. Specifically, time spent on academically related activities outside of class combined with time spent in class meetings is expected to be a minimum of 37.5 hours over the duration of the term for each credit hour.