

Western Technical College 10501107 Digital Literacy for Healthcare

Course Outcome Summary

Course Information

Description	The focus of this course is the use of technology in healthcare. Learners use common business software applications, including word processing, presentation, spreadsheet, and databases. Communication methods using technology are addressed. Learners gain experience with using the electronic health record (EHR). Healthcare EHR security issues, social media use, and digital healthcare resources are examined.
Career Cluster	Health Science
Instructional Level	Associate Degree Courses
Total Credits	2
Total Hours	54

Pre/Corequisites

Prerequisite Either computer skills proficiency or successful completion of a basic computer skills course or boot camp.

Textbooks

MindTap for Beskeen/Cram/Duffy/Friedrichsen's Illustrated Series Collection, Microsoft 365 & Office 2021. Copyright 2023. Beskeen, David. Publisher: Cengage Learning. **ISBN-13:** 978-0-357-67483-3. Required.

EHR Go – Access (16 week). Copyright 2020. Publisher: Archetype Innovations. **ISBN-13:** 978-0-9858379-8-3. Required.

Learner Supplies

Internet and E-mail access, Microsoft Office (Word, PowerPoint, Access, Excel). Free access with Western

Success Abilities

- 1. Refine Professionalism: Improve Critical Thinking
- 2. Refine Professionalism: Practice Effective Communication

Program Outcomes

1. HIT - Apply informatics and analytics in data use

Course Competencies

1. Use word processing software to generate professional healthcare documents

Assessment Strategies

- 1.1. Skills Check Assessment
- 1.2. Project Exam
- 1.3. Healthcare related project application using word processing

Criteria

- 1.1. you examine the use of word processing software in healthcare
- 1.2. you use software templates to complete common healthcare documents (i.e. memo, business letter, marketing documents)
- 1.3. you use shortcut keystrokes
- 1.4. you create and format a table
- 1.5. you insert components in a document (i.e., mail merge, hyperlinks, clip art, photos)
- 1.6. you send word processing documents electronically
- 1.7. you follow standard/professional guidelines to create the documents
- 1.8. you use proofing and language tools
- 1.9. you format text, paragraphs, and objects in documents
- 1.10. you use file handling commands of the software (Open, Save, Save As, Print)

Learning Objectives

- 1.a. Examine appropriate uses of word processing in healthcare.
- 1.b. Use software templates to create common healthcare documentation (memos, business letters, marketing documents).
- 1.c. Use word processing features to increase productivity (shortcut keys, mail merge).
- 1.d. Apply word processing features to create document content (insert table, objects, hyperlinks).
- 1.e. Send word processing documents electronically (email, drop box, etc.).
- 1.f. Follow standard/professional guidelines in creation of documents.
- 1.g. Use word processing features to edit a document (proofing and language tools; format text, paragraphs and objects, format table).

2. Use presentation software to convey healthcare related information

Assessment Strategies

- 2.1. Skills check assessment
- 2.2. Project exam
- 2.3. Healthcare related project application using presentation software

Criteria

- 2.1. you examine the use of presentation software in healthcare
- 2.2. you use design themes and software templates to create the presentation
- 2.3. you use file handling commands of the software (Open, Save, Save As, Print)
- 2.4. you add objects (i.e., clip art, photos, audio, video)
- 2.5. you enhance the presentation using the software tools (i.e., smart art, hyperlinks, animations, slide transitions)
- 2.6. you add speaker notes

- 2.7. you add headers and footers
- 2.8. you follow standard/professional guidelines for effective presentations (i.e., bullet points, adequate white space)

Learning Objectives

- 2.a. Examine appropriate use of software for presentations in healthcare.
- 2.b. Use templates and apply design themes to create a visually attractive presentation.
- 2.c. Demonstrate the ability to manage presentation files (open, save, save as, print).
- 2.d. Apply features of presentation software to enhance/increase interactivity of the presentation (clip art, photos, audio, video, smart art, hyperlinks, animation, slide transitions).
- 2.e. Use speaker notes in a presentation for presenter reference.
- 2.f. Use headers and footers to organize a presentation (insert slide numbers, presenter info, etc.).
- 2.g. Follow standard/professional guidelines for effective presentations.

3. Use spreadsheet software to summarize and report healthcare data

Assessment Strategies

- 3.1. Skills check assesement
- 3.2. Project exam
- 3.3. Healthcare related project application using spreadsheet software

Criteria

- 3.1. you examine the use of spreadsheet software in healthcare
- 3.2. you open workbooks
- 3.3. you enter and format data
- 3.4. you enter formulas and functions
- 3.5. you create charts and graphs
- 3.6. you sort and filter data
- 3.7. you edit worksheets
- 3.8. you create worksheets
- 3.9. you save worksheets
- 3.10. you follow standard/professional guidelines for effective use

Learning Objectives

- 3.a. Examine uses of spreadsheets in healthcare.
- 3.b. Demonstrate management of spreadsheet files (open, create worksheet, edit, save).
- 3.c. Differentiate between worksheet and workbook.
- 3.d. Enter spreadsheet data.
- 3.e. Format spreadsheet data.
- 3.f. Demonstrate the ability to make calculations using spreadsheet formulas and functions.
- 3.g. Translate spreadsheet data into charts and graphs including label and legend as appropriate.
- 3.h. Apply sort and filter tools to organize spreadsheet data for analysis and decision making.
- 3.i. Follow standard/professional guidelines for effective use of spreadsheets.

4. Utilize a database

Assessment Strategies

- 4.1. Skills check assessment
- 4.2. Project exam

Criteria

- 4.1. you examine the use of databases in healthcare
- 4.2. you enter and edit data
- 4.3. you perform a query
- 4.4. you generate a report

Learning Objectives

- 4.a. Define database terminology (field, record, table, objects).
- 4.b. Identify the purpose of database objects (table, form, query, report).
- 4.c. Discuss the benefits of using a database to manage data.
- 4.d. Demonstrate management of database files (open, create, name objects, save).
- 4.e. Enter appropriate field names for given data into a database table.
- 4.f. Set appropriate field as primary key in a database table.

- 4.g. Differentiate between primary key and foreign key.
- 4.h. Explain how autonumber relates to the number of records in a table.
- 4.i. Set appropriate field types for each data field in a database table (date/time, text, number, look up wizard, etc.).
- 4.j. Set appropriate field length for data fields in a database table.
- 4.k. Relate tables in a relational database.
- 4.I. Describe usefulness of creating a one to many relationship using database tables.
- 4.m. Explain benefit of reinforcing referential integrity in a relational database.
- 4.n. Differentiate between datasheet, report, form, and design views.
- 4.o. Enter data in a database table.
- 4.p. Design a form for data entry based on a table (manually or using wizards).
- 4.q. Design a query to filter data in a database (manually or using wizards).
- 4.r. Write criteria to filter data for a query.
- 4.s. Design a report based on a database query or table (manually or using wizards).
- 4.t. Modify a report in design view or report layout view (labels, counts, subtotals).
- 4.u. Apply group and sort orders to a report design.
- 4.v. Examine the use of various public research databases to which health care organizations contribute data.

5. Communicate using technology in the healthcare setting (virtual meetings, interoffice communication, email, fax)

Assessment Strategies

- 5.1. Web conferencing meeting
- 5.2. Secure email assignment

Criteria

- 5.1. you differentiate between secure and unsecure communication methods
- 5.2. you choose the most appropriate communication method for the situation
- 5.3. communication maintains security and confidentiality of patient information
- 5.4. communication is presented in a professional manner
- 5.5. communication follows accepted online or written etiquette

Learning Objectives

- 5.a. Compare privacy and security of various technologies used to communicate information (fax, e-mail, phone).
- 5.b. Discuss appropriate and inappropriate uses of email in the work setting.
- 5.c. Apply rules of netiquette to email communications.
- 5.d. Utilize spell checker and grammar checker in email communications.

6. Examine the security considerations of the electronic health record

Assessment Strategies

6.1. EHR simulation activities for privacy and security

Criteria

- 6.1. you describe the HIPAA requirements related to the use of the electronic health record
- 6.2. you explain the ownership of the electronic health record
- 6.3. you explain minimal necessary use of the electronic health record
- 6.4. you describe the electronic health record audit trails
- 6.5. you identify the impact of security breaches for yourself and the organization
- 6.6. you summarize ways to safeguard the security of the electronic health record: administrative, technical and physical

Learning Objectives

- 6.a. Compare protections under HIPAA's privacy rule and security rule.
- 6.b. Differentiate between ownership of the physical record versus patient information.
- 6.c. Describe minimum necessary use of protected health information.
- 6.d. Describe the content of the Notice of Privacy Practices.
- 6.e. Contrast administrative, technical, and physical security safeguards.
- 6.f. Discuss sanctions for employee non-compliance with security policies and procedures.
- 6.g. Differentiate access, audit, and integrity controls.
- 6.h. Describe physical controls for workstations and devices that protect information privacy and security.

- 6.i. Describe criminal and civil penalties for misuse of protected health information.
- 6.j. Describe breach notification requirements (affected individual, Dept. of HHS, media outlets).
- 6.k. Examine the impact of a breach of health information.
- 6.I. Discuss civil and criminal penalties for misuse of PHI.

7. Demonstrate entry level skills for using the electronic health record

Assessment Strategies

7.1. EHR simulation activities for all user types (administration, support services, providers)

Criteria

- 7.1. you log in to the electronic health record software
- 7.2. you navigate the various parts of the electronic health record
- 7.3. you access medical resources from the electronic health record
- 7.4. you locate specific information within the record
- 7.5. you record patient visit information

Learning Objectives

- 7.a. Demonstrate the use of an access code or password to log into electronic health record software.
- 7.b. Describe the core functions of the EHR.
- 7.c. Discuss social forces driving adoption of electronic health records.
- 7.d. Illustrate the use of decision support within the EHR.
- 7.e. Demonstrate data entry and retrieval using an electronic health record from the standpoint of various users.
- 7.f. Compare features and shortcuts that facilitate standardization of documentation and speed of data entry (checklists, templates, forms, picklists, etc.).
- 7.g. Use standard health record "views" in the electronic health record (orders, lab tests, medication administration report, problem list, flow sheets, vital signs, immunization records, prescriptions, etc.).
- 7.h. Discuss federal strategies to promote EHR adoption.

8. Examine the role of social media in healthcare

Assessment Strategies

- 8.1. Group discussion on cases of social media violations in healthcare
- 8.2. Analysis of positive and negative social media uses in healthcare

Criteria

- 8.1. you describe the confidentiality practices related to social media
- 8.2. you differentiate between personal and professional uses of social media
- 8.3. you explore social media policies established by healthcare organizations
- 8.4. you explain how organizations use social media

Learning Objectives

- 8.a. Identify situations in which inappropriate use of social media may be in violation of legal regulations (eg HIPAA, NLRB).
- 8.b. Identify potential consequences of social media abuse in healthcare.
- 8.c. Explain the purpose and uses of social media.
- 8.d. Differentiate social media tools (Facebook, Twitter, Instagram, blogs, etc.).
- 8.e. Summarize reasons why people use social media in their personal lives.
- 8.f. Describe what is meant by "digital footprint" and analyze the importance of knowing your digital footprint.
- 8.g. Analyze the challenges presented by the use of social media in healthcare.
- 8.h. Identify appropriate action to be taken in the case of a patient privacy violation related to social media use.
- 8.i. Explain how employers may use social media to benefit their businesses.
- 8.j. Explain how healthcare providers and organizations may use social media to communicate with the public and to benefit their patients.

9. Evaluate the reliability of digital healthcare resources

Assessment Strategies

9.1. Evaluation of quality of digital health resources

Criteria

You will know you are successful when

- 9.1. you identify commonly used digital resources
- 9.2. you evaluate the authority of the resource
- 9.3. you evaluate the accuracy of the resource
- 9.4. you evaluate the objectivity of the resource
- 9.5. you evaluate the currency of the resource
- 9.6. you evaluate the contextual use of the resource

Learning Objectives

- 9.a. Determine commonly used digital resources for healthcare.
- 9.b. Analyze the authority of digital healthcare resources (who runs or finances it).
- 9.c. Determine whether digital healthcare resources have a review process in place to ensure the quality of information before it is distributed to the public.
- 9.d. Determine who contributes to the information available in the digital healthcare resource (medical professionals, other).
- 9.e. Determine the frequency with which the digital healthcare resource is updated/date of last review.
- 9.f. Illustrate the usefulness of integrated decision support links in the EHR which give the clinician access to materials relevant to the current case.
- 9.g. Explain how patients become involved in their own care by using internet resources for research.
- 9.h. Summarize the benefit of a patient portal in providing educational information to patients.