Course Outline

Job Title
Medical Records Specialists

Career Pathway:
Healthcare Administrative Services

Industry Sector:
Health Science and Medical Technology

O*NET-SOC CODE:
29-2072.00

CBEDS Title:
Intro to Health Information & Records Systems

CBEDS No.:
4263

76-15-80

Medical Office Administration/4: Diagnostic Coding

Credits: 5   **Hours:** 90

Course Description:
This competency-based course is the fourth in a sequence of five designed for Medical Office Administration. It provides students with project-based experiences in diagnostic coding used in medical offices, hospitals, clinical laboratories, private and governmental insurance agencies, and other healthcare-related facilities. Instruction includes an introduction and safety, introduction to international classification of diseases, official coding guidelines, coding guidelines, and employability skills review. Competencies in this course are aligned with the California High School Academic Content Standards and the California Career Technical Education Model Curriculum Standards.

Prerequisites:
Enrollment requires successful completion of the Medical Office Administration/3: Insurance and Billing (76-15-70) course and keyboarding speed and accuracy as required by the industry.

NOTE: For Perkins purposes this course has been designated as a **concentrator/capstone** course.

This course cannot be repeated once a student receives a Certificate of Completion.

COURSE OUTLINE COMPETENCY-BASED COMPONENTS

A course outline reflects the essential intent and content of the course described. Acceptable course outlines have six components. (Education Code Section 52506). Course outlines for all apportionment classes, including those in jails, state hospitals, and convalescent hospitals, contain the six required elements:

(EC 52504; 5CCR 10508 [b]; Adult Education Handbook for California [1977], Section 100)

COURSE OUTLINE COMPONENTS   **LOCATION**

GOALS AND PURPOSES   Cover

The educational goals or purposes of every course are clearly stated and the class periods are devoted to instruction. The course should be broad enough in scope and should have sufficient educational worth to justify the expenditure of public funds.

The goals and purpose of a course are stated in the COURSE DESCRIPTION. Course descriptions state the major emphasis and content of a course, and are written to be understandable by a prospective student.

PERFORMANCE OBJECTIVES OR COMPETENCIES   pp. 7-10

Objectives should be delineated and described in terms of measurable results for the student and include the possible ways in which the objectives contribute to the student's acquisition of skills and competencies.

Performance Objectives are sequentially listed in the COMPETENCY-BASED COMPONENTS section of the course outline. Competency Areas are units of instruction based on related competencies. Competency Statements are competency area goals that together define the framework and purpose of a course. Competencies fall on a continuum between goals and performance objectives and denote the outcome of instruction.

Competency-based instruction tells a student before instruction what skills or knowledge they will demonstrate after instruction. Competency-based education provides instruction which enables each student to attain individual goals as measured against pre-stated standards.

Competency-based instruction provides immediate and continual repetition and In competency-based education the curriculum, instruction, and assessment share common characteristics based on clearly stated competencies. Curriculum, instruction and assessment in competency-based education are: explicit, known, agreed upon, integrated, performance oriented, and adaptive.

COURSE OUTLINE COMPONENTS	**LOCATION**

INSTRUCTIONAL STRATEGIES   p. 12

Instructional techniques or methods could include laboratory techniques, lecture method, small-group discussion, grouping plans, and other strategies used in the classroom.

Instructional strategies for this course are listed in the TEACHING STRATEGIES AND EVALUATION section of the course outline. Instructional strategies and activities for a course should be selected so that the overall teaching approach takes into account the instructional standards of a particular program, i.e., English as a Second Language, Programs for Adults with Disabilities.

UNITS OF STUDY, WITH APPROXIMATE HOURS ALLOTTED FOR EACH UNIT   Cover

The approximate time devoted to each instructional unit within the course, as well as the total hours for   pp. 7-22
the course, is indicated. The time in class is consistent with the needs of the student, and the length of the class should be that it ensures the student will learn at an optimum level.

Units of study, with approximate hours allotted for each unit are listed in the COMPETENCY AREA STATEMENT(S) of the course outline. The total hours of the course, including work-based learning hours (community classroom and cooperative vocational education) is listed on the cover of every CBE course outline. Each Competency Area listed within a CBE outline is assigned hours of instruction per unit.

EVALUATION PROCEDURES   p. 12

The evaluation describes measurable evaluation criteria clearly within the reach of the student. The evaluation indicates anticipated improvement in performances as well as anticipated skills and competencies to be achieved.

Evaluation procedures are detailed in the TEACHING STRATEGIES AND EVALUATION section of the course outline. Instructors monitor students' progress on a continuing basis, assessing students on attainment of objectives identified in the course outline through a variety of formal and informal tests (applied performance procedures, observations, and simulations), paper and pencil exams, and standardized tests.

REPETITION POLICY THAT PREVENTS PERPETUATION OF STUDENT ENROLLMENT   Cover

After a student has completed all the objectives of the course, he or she should not be allowed to reenroll in the course. There is, therefore, a need for a statement about the conditions for possible repetition of a course to prevent perpetuation of students in a particular program for an indefinite period of time.

ACKNOWLEDGMENTS

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1.0 Academics
Analyze and apply appropriate academic standards required for successful industry sector pathway completion leading to postsecondary education and employment. Refer to the Health Science and Medical Technology academic alignment matrix for identification of standards.

2.0 Communications
Acquire and accurately use Health Science and Medical Technology sector terminology and protocols at the career and college readiness level for communicating effectively in oral, written, and multimedia formats.

3.0 Career Planning and Management
Integrate multiple sources of career information from diverse formats to make informed career decisions, solve problems, and manage personal career plans.

4.0 Technology
Use existing and emerging technology to investigate, research, and produce products and services, including new information, as required in the Health Science and Medical Technology sector workplace environment.

5.0 Problem Solving and Critical Thinking
Conduct short, as well as more sustained, research to create alternative solutions to answer a question or solve a problem unique to the Health Science and Medical Technology sector using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques.

6.0 Health and Safety
Demonstrate health and safety procedures, regulations, and personal health practices and determine the meaning of symbols, key terms, and domain-specific words and phrases as related to the Health Science and Medical Technology sector workplace environment.

7.0 Responsibility and Flexibility
Initiate, and participate in, a range of collaborations demonstrating behaviors that reflect personal and professional responsibility, flexibility, and respect in the Health Science and Medical Technology sector workplace environment and community settings.

8.0 Ethics and Legal Responsibilities
Practice professional, ethical, and legal behavior, responding thoughtfully to diverse perspectives and resolving contradictions when possible, consistent with applicable laws, regulations, and organizational norms.

9.0 Leadership and Teamwork
Work with peers to promote divergent and creative perspectives, effective leadership, group dynamics, team and individual decision making, benefits of workforce diversity, and conflict resolution as practiced in the Cal-HOSA career technical student organization.

10.0 Technical Knowledge and Skills
Apply essential technical knowledge and skills common to all pathways in the Health Science and Medical Technology sector, following procedures when carrying out experiments or performing technical tasks.

11.0 Demonstration and Application
Demonstrate and apply the knowledge and skills contained in the Health Science and Medical Technology anchor standards, pathway standards, and performance indicators in classroom, laboratory, and workplace settings and through the Cal-HOSA career technical student organization.

C. Health Care Administrative Services Pathway

Health care administrative workers include site administrators, managers, attorneys, receptionists, secretaries, billing and coding specialists, health informatics technicians, accountants, managers, and other knowledge workers that support the process of patient care. Health care administrative workers are the invisible backbone of health care; without appropriately skilled workers in these fields, health care systems simply could not function.

Sample occupations associated with this pathway:

- ♦ Clinical Data Specialist
- ♦ Ethicist
- ♦ Medical Illustrator
- ♦ Health Care Administrator

C1.0   Understand health care systems as the organization of people, institutions, funding, and resources as well as the broad scope of operations in which health care services are delivered to meet the health needs of target populations.

C2.0   Understand the various health care provider and support roles in patient care as an integrated, comprehensive health care system, to offer the very best options for treatment of patients.

C3.0   Understand the overarching concepts of economic and financial management systems, system and information management, and the latest innovations in health care as they affect health care delivery

C4.0   Know the role and relationship of public policies and community engagement on the health care delivery system.

C5.0   Understand and maintain standards of excellence, professional, ethical, and moral conduct required in management of personnel and policy within the health care delivery system.

C6.0   Understand the dynamics of human relations, self-management, organizational, and professional leadership skills necessary within the health care administrative system.

C7.0   Follow the model of medical safety practices and processes that can help prevent system medication errors and understand the consequences of mistakes.

C8.0   Understand the resources, routes and flow of information within the health care system and participate in the design and implementation of effective systems or processes.

C9.0   Use an electronic health care patient information system to optimize the acquisition, storage, retrieval, and use of information in health and biomedicine.

C10.0   Understand common file formats for document and medical imaging, digitizing paper records, and storing medical images.

C11.0   Know how to schedule and manage appointments for providers.

C12.0   Understand how to use health information effectively.

C13.0   Understand the need to communicate health/medical information accurately and within legal/regulatory bounds across the organization.

C14.0   Understand how to transfer information to third-parties.

C15.0   Code health information and bill payers using industry standard methods of classification of diseases, current procedural terminology, and common health care procedure coding system.

C16.0   Use a systematic method of continual process improvement.

COMPETENCY-BASED COMPONENTS
for the <u>**Medical Office Administration/4: Diagnostic Coding**</u> *Course*

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS

A. INTRODUCTION AND SAFETY
 	
Review, apply, and evaluate classroom and workplace policies and procedures used in accordance with federal, state, and local safety and environmental regulations.
 	
(2 hours)
	1. Review the scope and purpose of the course.
	2. Review the overall course content as a part of the Linked Learning Initiative.
	3. Review classroom policies and procedures.
	4. Review the different occupations in the Health Science and Medical Technology Industry Sector that have an impact on the health industry.
	5. Review the opportunities available for promoting gender equity, cultural sensitivity and the representation of non-traditional populations in the healthcare field.
	6. Review local, district, state, and federal regulatory agencies, entities, laws, and regulations related to the Health Science and Medical Technology industry sector.
	7. Review resource and time management and its importance to the successful operation of an organization.
	8. Review the purpose of the California Occupational Safety and Health Administration (Cal/OSHA) and its laws governing the healthcare field.
	9. Review the impact of Environmental Protection Agency (EPA) legislation on the Health Science and Medical Technology Industry Sector practices.
	10. Review classroom and workplace first aid and emergency procedures according to American Red Cross (ARC) standards.
	11. Review how each of the following insures a safe workplace:
	   a. employees' rights as they apply to job safety
	   b. employers' obligations as they apply to safety
	   c. role of the Division of Workers' Compensation (DWC)
	   d. adherence to Universal Precautions
	12. Pass the safety test with 100% accuracy.
		Career Ready Practice:
		1, 3, 5, 6, 7, 8, 9, 12
		
		CTE Anchor:
		Career Planning and Management:
		3.1, 3.2, 3.4, 3.5, 3.6, 3.9
		Technology:
		4.5
		Health and Safety:
		6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8
		Responsibility and Flexibility:
		7.2, 7.3, 7.7
		Ethics and Legal Responsibilities:
		8.1, 8.3, 8.4, 8.5
		
		CTE Pathway:
		C1.1, C1.5, C2.4, C4.2, C5.1, C5.2, C5.3, C6.3, C7.1, C14.2, C16.1

B. INTRODUCTION TO INTERNATIONAL CLASSIFICATION OF DISEASES (ICD) Understand, apply, and evaluate the content of the current edition of the	1. Apply terminology specific to the International Classification of Diseases. 2. Describe the format of the current edition of the ICD layout. 3. Identify the steps to correct coding. 4. Define WHO and NCHS and their role in the ICD. 5. Demonstrate how to use the Alphabetic Index and Tabular List. 6. Explain the function of the "main term." 7. Describe a 3-character category code through 7-character code. 8. List the chapters of the current edition of the ICD coding manual.	**Career Ready Practice:** 2 **CTE Anchor:** Academics: 1.0 Communications: 2.7, 2.8

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
International Classification of Diseases (ICD). (2 hours)	9. Pass an assessment on international classification of diseases (ICD).	Problem Solving and Critical Thinking: 5.6 Technical Knowledge and Skills: 10.1 **CTE Pathway:** C1.1, C1.2, C4.12, C12.1

C. OFFICIAL CODING GUIDELINES
 	
Understand, apply, and evaluate the basic coding guidelines, including coding and sequencing instructions.
 	
(8 hours)
	1. Apply terminology specific to the Official Guidelines of the current edition of the ICD.
	2. Locate and understand the conventions for the current edition of the ICD.
	3. Understand the importance and apply the correct ICD codes to medical documentation.
	4. Differentiate First Listed Diagnosis vs. Principle Diagnosis
	5. Describe the three additional sections of the Alphabetic Index
	6. Differentiate between three, four, five, six and seven digit codes.
	7. Recognize the use of the placeholder character "X."
	8. Explain the symbols used in the current edition of the ICD.
	9. Explain essential and non-essential modifiers.
	10. Understand etiology and manifestation.
	11. Recognize default codes.
	12. Understand the instructional notations when finding a code.
	13. Describe the following:
	    a. Signs and symptoms
	    b. Conditions that are an integral part of a disease process
	    c. Conditions that are not an integral part of a disease process
	    d. Multiple coding for a single condition
	    e. Acute and chronic conditions
	    f. Combination code
	    g. Impending or threatened condition
	    h. Laterality
	14. Pass an assessment on official coding guidelines.
		Career Ready Practice:
		2
		
		CTE Anchor:
		Problem Solving and Critical Thinking:
		5.6
		Technical Knowledge and Skills:
		10.1
		
		CTE Pathway:
		C1.2, C12.1

D. CODING GUIDELINES Understand, apply and evaluate the chapter specific guidelines of the chapters of the current edition of the ICD.	1. Apply terminology specific to the chapters of the current edition of the ICD. 2. Locate appropriate codes utilizing the Chapter Specific Guidelines for chapters of the current edition of the ICD. 3. Pass an assessment on coding guidelines.	**Career Ready Practice:** 1, 2, 5, 10, 11 **CTE Anchor:** Academics: 1.0

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
		Problem Solving and Critical Thinking: 5.2, 5.3, 5.4, 5.6 Responsibility and Flexibility: 7.3, 7.8 Technical Knowledge and Skills: 10.1, 10.2 Demonstration and Application: 11.1 **CTE Pathway:** C1.2, C8.2, C12.1, C12.2, C15.2, C15.4
(75 hours)		
E. EMPLOYABILITY SKILLS REVIEW Review, apply, and evaluate the employability skills required in the health information business.	1. Review a career plan that reflects career interests, pathways, and postsecondary options. 2. Review potential employers and required qualifications. 3. Re-evaluate personal character traits such as integrity, respect, professionalism, and responsibility and understand the impact they can have on career success. 4. Review soft skills to include punctuality, dependability, attendance, attitude, and work quality. 5. Review changing employment trends, societal needs, and labor market trends into career planning. 6. Review a cover letter and résumé formats. 7. Review information and complete an application for employment. 8. Review successful current interview types and techniques, to include demonstration of professional work attire. 9. Review appropriate follow-up procedures. 10. Review the importance of the continuous upgrading of career skills.	**Career Ready Practice:** 1, 2, 3, 5, 7, 8, 9, 10, 12 **CTE Anchor:** Communications: 2.1, 2.2, 2.3, 2.4, 2.5 Career Planning and Management: 3.1, 3.3, 3.4, 3.5, 3.8, 3.9 Technology: 4.1, 4.3, 4.6 Problem Solving and Critical Thinking: 5.6 Responsibility and Flexibility: 7.7 Leadership and Teamwork: 9.1, 9.2, 9.3 Technical Knowledge and Skills: 10.1, 10.2 Demonstration and Application: 11.2, 11.5

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(3 hours)		**CTE Pathway:** C1.1, C2.4, C5.1, C5.2, C6.1, C6.2, C6.3, C6.4, C6.5, C16.1

SUGGESTED INSTRUCTIONAL MATERIALS and OTHER RESOURCES

TEXTS AND SUPPLEMENTAL MATERIAL

Patterson, Leanne, and Green, LaJuana. ICD-10-CM, Expert for Physicians; The Complete Official Code Set, Optum360°, 2022

Newby, Cynthia. Medical Coding Workbook for Physician Practices and Facilities, 8th Edition. McGraw-Hill Companies, 2018.

RESOURCES

Employer Advisory Board members

California Career Technical Education Model Curriculum Standards
https://www.cde.ca.gov/ci/ct/sf/documents/healthmedical.pdf

ICD-10
http://www.who.int/classifications/icd/en/
http://apps.who.int/classifications/apps/icd/icd10online/

A.D.A.M. Medical Encyclopedia
http://ww.www.adam.com

American Academy of Professional Coders
http://www.aapcnati.org

American Health Information Management Association (AHIMA),
http://www.ahima.org

Office of the Inspector General
http://www.os.dhhs.gov/progorg/oig/

COMPETENCY CHECKLIST

TEACHING STRATEGIES and EVALUATION

METHODS AND PROCEDURES

A.   Lectures and discussions

B.   Multimedia presentations

C.   Demonstrations and participation

D.   Individualized instruction

E.   Peer teaching

F.   Role-playing

G.   Guest speakers

H.   Field trips and field study experiences

I.   Projects

EVALUATION

SECTION A – Introduction and Safety – Pass the safety test with a score of 100%.

SECTION B – Introduction to International Classification of Diseases (ICD) – Pass all assignments and assessments on introduction to international classification of diseases with a minimum score of 80% or higher.

SECTION C – Official Coding Guidelines – Pass all assignments and assessments on official coding guidelines with a minimum score of 80% or higher.

SECTION D – Coding Guidelines – Pass all assignments and assessments on coding guidelines with a minimum score of 80% or higher.

SECTION E – Employability Skills Review – Pass all assignments and assessments on employability skills with a minimum score of 80% or higher.

Standards for Career Ready Practice

1. **Apply appropriate technical skills and academic knowledge.**
   Career-ready individuals readily access and use the knowledge and skills acquired through experience and education. They make connections between abstract concepts with real-world applications and recognize the value of academic preparation for solving problems, communicating with others, calculating measures, and performing other work-related practices.

2. **Communicate clearly, effectively, and with reason.**
   Career-ready individuals communicate thoughts, ideas, and action plans with clarity, using written, verbal, electronic, and/or visual methods. They are skilled at interacting with others: they are active listeners who speak clearly and with purpose, and they are comfortable with terminology that is common to workplace environments. Career-ready individuals consider the audience for their communication and prepare accordingly to ensure the desired outcome.

3. **Develop an education and career plan aligned with personal goals.**
   Career-ready individuals take personal ownership of their educational and career goals and manage their individual plan to attain these goals. They recognize the value of each step in the educational and experiential process, and they understand that nearly all career paths require ongoing education and experience to adapt to practices, procedures, and expectations of an ever-changing work environment. They seek counselors, mentors, and other experts to assist in the planning and execution of education and career plans.

4. **Apply technology to enhance productivity.**
   Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring and using new technology. They understand the inherent risks—personal and organizational—of technology applications, and they take actions to prevent or mitigate these risks.

5. **Utilize critical thinking to make sense of problems and persevere in solving them**
   Career-ready individuals recognize problems in the workplace, understand the nature of the problems, and devise effective plans to solve the problems. They thoughtfully investigate the root cause of a problem prior to introducing solutions. They carefully consider options to solve a problem and, once agreed upon, follow through to ensure the problem is resolved.

6. **Practice personal health and understand financial literacy.**
   Career-ready individuals understand the relationship between personal health and workplace performance. They contribute to their personal well-being through a healthy diet, regular exercise, and mental health activities. Career-ready individuals also understand that financial literacy leads to a secure future that enables career success.

7. **Act as a responsible citizen in the workplace and the community.**
   Career-ready individuals understand the obligations and responsibilities of being a member of a community and demonstrate this understanding every day through their interactions with others. They are aware of the impacts of their decisions on others and the environment around them, and they think about the short-term and long-term consequences of their actions. They are reliable and consistent in going beyond minimum expectations and in participating in activities that serve the greater good.

8. **Model integrity, ethical leadership, and effective management.**
Career-ready individuals consistently act in ways that align with personal and community-held ideals and principles. They employ ethical behaviors and actions that positively influence others. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the direction and actions of a team or organization, and they recognize the short-term and long-term effects that management's actions and attitudes can have on productivity, morale, and organizational culture.

9. **Work productively in teams while integrating cultural and global competence.**
Career-ready individuals contribute positively to every team, as both team leaders and team members. To avoid barriers to productive and positive interaction, they apply an awareness of cultural differences. They interact effectively and sensitively with all members of the team and find ways to increase the engagement and contribution of other members.

10. **Demonstrate creativity and innovation.**
Career-ready individuals recommend ideas that solve problems in new and different ways and contribute to the improvement of the organization. They consider unconventional ideas and suggestions by others as solutions to issues, tasks, or problems. They discern which ideas and suggestions may have the greatest value. They seek new methods, practices, and ideas from a variety of sources and apply those ideas to their own workplace practices.

11. **Employ valid and reliable research strategies.**
Career-ready individuals employ research practices to plan and carry out investigations, create solutions, and keep abreast of the most current findings related to workplace environments and practices. They use a reliable research process to search for new information and confirm the validity of sources when considering the use and adoption of external information or practices.

12. **Understand the environmental, societal, and economic impacts of decisions.**
Career-ready individuals understand the interrelated nature of their actions and regularly make decisions that positively impact other people, organizations, the workplace, and the environment. They are aware of and utilize new technologies, understandings, procedures, and materials and adhere to regulations affecting the nature of their work. They are cognizant of impacts on the social condition, environment, workplace, and profitability of the organization.

Statement for Civil Rights

All educational and vocational opportunities are offered without regard to race, color, national origin, gender, or physical disability.