

# Course Outline

Health Science and Medical Technology

REVISED: August/2017

**Job Title:**

Health Information Technician

**Career Pathway:**

Healthcare Administrative Services

**Industry Sector:**

Health Science and Medical Technology

**O\*NET-SOC CODE:**

29-2071.00

**CBEDS Title:**

Intro to Health Information & Records Systems

**CBEDS No.:**

4263

**76-15-90**

**Health Information Tech/5:  
Ambulatory Coding Systems**

**Credits:** 5

**Hours:** 90

**Course Description:**

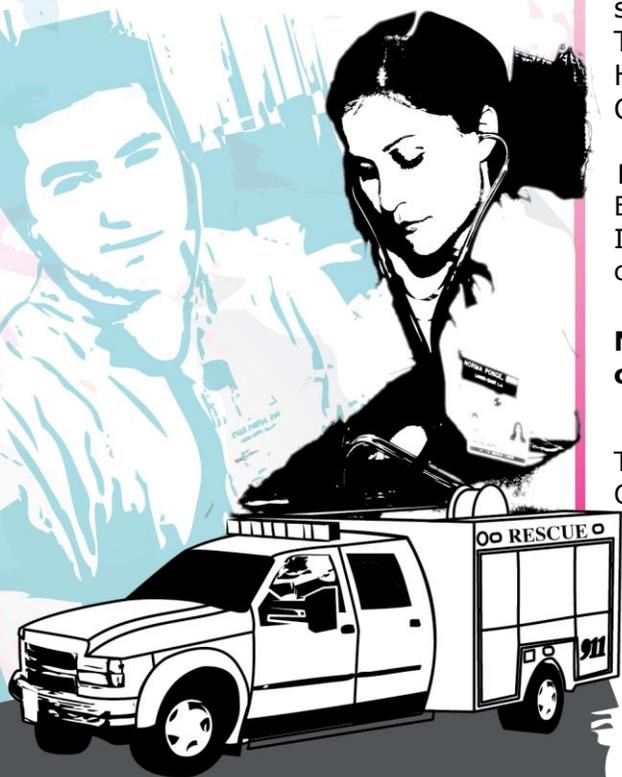
This competency-based course is the last in a sequence of five designed for health information technology. It provides students with project-based experiences in ambulatory coding used in medical offices, hospitals, clinical laboratories, private and governmental insurance agencies, and other health-care related facilities. Technical instruction includes an introduction as well as reviews of workplace safety policies and procedures and employability skills. Emphasis is placed on the official coding guidelines of the latest editions of the Current Procedural Terminology® (CPT®) Manual and the Healthcare Common Procedure Coding System (HCPCS) Levels I and II code books. The coding applications of the Evaluation and Management (E&M), Anesthesia, Surgery, Radiology, Pathology and Laboratory, and Medicine Sections and subsections of the said code books are covered extensively. The 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 Health Information Tech/4: Diagnostic Coding Systems (76-15-80) course and keyboarding speed 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. 7-13

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 COMPETENCY-BASED COMPONENTS**  
**(continued)**

**COURSE OUTLINE COMPONENTS**

**LOCATION**

**INSTRUCTIONAL STRATEGIES**

p. 15

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 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.

pp. 7-13

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**

pp. 15-16

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***

Thanks to AARON SAENZ for developing and editing this curriculum. Acknowledgment is also given to ERICA ROSARIO for designing the original artwork for the course covers

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**CALIFORNIA CAREER TECHNICAL EDUCATION MODEL CURRICULUM STANDARDS Health  
Science and Medical Technology Industry Sector  
Knowledge and Performance Anchor Standards**

**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.

## ***Health Science and Medical Technology Pathway Standards***

### **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.

**CBE**  
**Competency-Based Education**

**COMPETENCY-BASED COMPONENTS**  
**for the Health Information Tech/5: Ambulatory Coding Systems Course**

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
<p>A. INTRODUCTION AND SAFETY</p> <p>Review, apply, and evaluate classroom and workplace policies and procedures used in accordance with federal, state, and local safety and environmental regulations.</p> <p>(3 hours)</p>	<ol style="list-style-type: none"> <li>1. Review the scope and purpose of the course.</li> <li>2. Review the overall course content as a part of the Linked Learning Initiative.</li> <li>3. Review classroom policies and procedures.</li> <li>4. Review the different occupations in the Health Science and Medical Technology Industry Sector which have an impact on the role of health information technicians.</li> <li>5. Review the opportunities available for promoting gender equity and the representation of non-traditional populations in the health information field.</li> <li>6. Review the purpose of the California Occupational Safety and Health Administration (Cal/OSHA) and its laws governing health information technicians.</li> <li>7. Review the impact of Environmental Protection Agency (EPA) legislation on the Health Science and Medical Technology Industry Sector practices.</li> <li>8. Review and demonstrate the procedures for contacting proper authorities for the removal of hazardous materials based on the EPA standards.</li> <li>9. Review classroom and workplace first aid and emergency procedures according to American Red Cross (ARC) standards.</li> <li>10. Review how each of the following insures a safe workplace:               <ol style="list-style-type: none"> <li>a. employees’ rights as they apply to job safety</li> <li>b. employers’ obligations as they apply to safety</li> <li>c. role of the Division of Workers’ Compensation (DWC)</li> <li>d. adherence to Universal Precautions</li> <li>e. avoidance of falls and filing cabinet mishaps</li> </ol> </li> <li>11. Pass the safety test with 100% accuracy.</li> </ol>	<p><b>Career Ready Practice:</b> 1, 3, 5, 6, 7, 8, 9, 12</p> <p><b>CTE Anchor:</b> 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</p> <p><b>CTE Pathway:</b> C1.1, C1.5, C2.4, C4.2, C5.1, C5.2, C5.3, C6.3, C7.1, C14.2, C16.1</p>
<p>B. CPT® MANUAL AND HCPCS LEVEL II CODE BOOK</p> <p>Understand, apply, and evaluate the formats of the CPT® Manual and the HCPCS Level II code book.</p>	<ol style="list-style-type: none"> <li>1. Define the following:           <ol style="list-style-type: none"> <li>a. American Medical Association (AMA)</li> <li>b. Current Procedural Terminology® (CPT®) Editorial Panel</li> <li>c. Relative Value Unit (RVU)</li> <li>d. Health Insurance Portability and Accountability Act of 1996 (HIPAA)</li> <li>e. Healthcare Common Procedure Coding System (HCPCS)</li> <li>f. CMS-1500 form</li> <li>g. CMS-1450 form</li> </ol> </li> </ol>	<p><b>Career Ready Practice:</b> 1, 3, 5, 6, 7, 8, 9, 12</p> <p><b>CTE Anchor:</b> Career Planning and Management: 3.1, 3.2, 3.4, 3.5, 3.6, 3.9</p>

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(15 hours)	<ol style="list-style-type: none"> <li>2. Define the following terms:               <ol style="list-style-type: none"> <li>a. anesthesia</li> <li>b. surgery/surgical</li> <li>c. radiology</li> <li>d. pathology</li> <li>e. medicine</li> </ol> </li> <li>3. Describe the following about the CPT®:               <ol style="list-style-type: none"> <li>a. history</li> <li>b. purpose</li> <li>c. licensing fees</li> <li>d. implementation</li> <li>e. updating process</li> <li>f. versions                   <ol style="list-style-type: none"> <li>i. Category I CPT Code(s)</li> <li>ii. Category II CPT Code(s) - Performance Measurement</li> <li>iii. Category III CPT Code(s) - Emerging Technology</li> </ol> </li> </ol> </li> <li>4. Identify, locate, and discuss the following CPT® guidelines on:               <ol style="list-style-type: none"> <li>a. symbols</li> <li>b. sections</li> <li>c. subsections</li> <li>d. modifiers</li> <li>e. Evaluation and Management (E&amp;M) Section’s general coverage</li> <li>f. Anesthesia Section’s general coverage</li> <li>g. Surgical Section’s general coverage</li> <li>h. Radiology Section’s general coverage</li> <li>i. Laboratory/Pathology Section’s general coverage</li> <li>j. Medicine Section’s general coverage</li> </ol> </li> <li>5. Describe the following about the HCPCS:               <ol style="list-style-type: none"> <li>a. history</li> <li>b. impact of the HIPAA</li> <li>c. Medicare applications</li> <li>d. meanings of the source document</li> <li>e. importance of modifiers</li> <li>f. intermediary organizations needed to obtain codes and regulatory updates</li> <li>g. versions                   <ol style="list-style-type: none"> <li>i. Level I - numeric and consists of AMA’s CPT®</li> <li>ii. Level II - alphanumeric and primarily consists of non-physician services</li> </ol> </li> </ol> </li> </ol>	<p>Technology: 4.5</p> <p>Health and Safety: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8</p> <p>Responsibility and Flexibility: 7.2, 7.3, 7.7</p> <p>Ethics and Legal Responsibilities: 8.1, 8.3, 8.4, 8.5</p> <p><b>CTE Pathway:</b> C1.1, C1.5, C2.4, C4.2, C5.1, C5.2, C5.3, C6.3, C7.1, C14.2, C16.1</p>

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
<p>C. COMPLIANCE</p> <p>Understand, apply, and evaluate the policies and procedures used to avoid fraud and abuse of laws and regulations in a day-to-day medical setting.</p> <p>(8 hours)</p>	<ol style="list-style-type: none"> <li>1. Define the following:               <ol style="list-style-type: none"> <li>a. medical necessity</li> <li>b. compliance</li> <li>c. risk adjustment system</li> <li>d. fraud</li> <li>e. abuse</li> <li>f. upcoding (a.k.a. coding creep)</li> <li>g. unbundling (a.k.a. fragmentation)</li> <li>h. rebundling</li> </ol> </li> <li>2. Locate and describe the following:               <ol style="list-style-type: none"> <li>a. essential elements of a compliance program</li> <li>b. HIPPA requirements and confidentiality</li> <li>c. government fraud and abuse initiatives and preventive strategies</li> <li>d. role of Medicare carriers and state Medicaid agencies</li> <li>e. Correct Coding Initiative</li> <li>f. how upcoding undermines risk adjustment</li> <li>g. rampant upcoding in Medicare Advantage</li> </ol> </li> <li>3. Analyze three cases that show false, fraudulent, and fictitious claims.</li> </ol>	<p><b>Career Ready Practice:</b> 1, 2, 5, 7, 8, 12</p> <p><b>CTE Anchor:</b> Problem Solving and Critical Thinking: 5.2, 5.3, 5.4, 5.6 Ethics and Legal Responsibilities: 8.1, 8.7 Technical Knowledge and Skills: 10.1, 10.2 Demonstration and Application: 11.1</p> <p><b>CTE Pathway:</b> C1.2, C12.1, C15.7</p>
<p>D. EVALUATION AND MANAGEMENT (E&amp;M) SECTION</p> <p>Understand and evaluate the coding conventions for primary care services covered by the Evaluation and Management Section of the CPT® Manual and their coding applications in the HCPCS Level II code book.</p>	<ol style="list-style-type: none"> <li>1. Define the following:               <ol style="list-style-type: none"> <li>a. Medicare Global Surgery</li> <li>b. Medicare Physician Fee Schedule</li> <li>c. contributing elements</li> <li>d. consultations</li> <li>e. critical care</li> <li>f. prolonged care</li> <li>g. preventive medicine services</li> <li>h. modifiers</li> </ol> </li> <li>2. Describe the following:               <ol style="list-style-type: none"> <li>a. Alphabetical Index</li> <li>b. history of the Evaluation and Management (E &amp; M) Section</li> <li>c. E &amp; M section codes and guidelines</li> <li>d. subsections and subcategories</li> <li>e. qualifying circumstances</li> <li>f. applicable modifiers</li> <li>g. HCPCS Level II Modifiers</li> </ol> </li> <li>3. Describe and demonstrate the following:               <ol style="list-style-type: none"> <li>a. CPT® section and subsection codes</li> <li>b. appropriate CPT® modifier</li> <li>c. HCPCS I and II codes and modifiers</li> <li>d. strategies for preserving integrity</li> <li>e. strategies for achieving cost effectiveness</li> </ol> </li> </ol>	<p><b>Career Ready Practice:</b> 1, 2, 5, 10, 11</p> <p><b>CTE Anchor:</b> Academics: 1.0 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</p> <p><b>CTE Pathway:</b> C1.2, C8.2, C12.1, C12.2, C15.2, C15.4</p>

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(10 hours)	4. Pass an exam demonstrating correct E&M Section coding procedures with 100% accuracy.	
<p>E. ANESTHESIA SECTION</p> <p>Understand and evaluate the coding conventions for primary care services covered by the Anesthesia Section of the CPT® manual and their coding applications in the HCPCS Level II code book.</p> <p>(10 hours)</p>	<p>1. Locate and describe the following:</p> <ul style="list-style-type: none"> <li>a. Anesthesia Section codes and guidelines</li> <li>b. subsections and subcategories</li> <li>c. qualifying circumstances</li> <li>d. applicable modifiers</li> <li>e. HCPCS Level II Modifiers</li> </ul> <p>2. Abstract three Anesthesia cases that show the following:</p> <ul style="list-style-type: none"> <li>a. CPT section and subsection codes</li> <li>b. applicable CPT® modifiers</li> <li>c. HCPCS I and II applications</li> </ul> <p>3. Pass an examination demonstrating correct coding procedures from each Anesthesia subsection with 100% accuracy.</p>	<p><b>Career Ready Practice:</b> 1, 2, 5, 10, 11</p> <p><b>CTE Anchor:</b> Academics: 1.0 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</p> <p><b>CTE Pathway:</b> C1.2, C8.2, C12.1, C12.2, C15.2, C15.4</p>
<p>F. SURGERY SECTION</p> <p>Understand and evaluate the coding conventions for primary care services covered by the Surgery Section of the CPT® manual and their coding applications in the HCPCS Level II code book.</p>	<p>1. Define the following:</p> <ul style="list-style-type: none"> <li>a. global surgical package</li> <li>b. starred procedure</li> <li>c. add-on</li> <li>d. separate procedures</li> <li>e. multiple procedures</li> </ul> <p>2. Locate and describe the following:</p> <ul style="list-style-type: none"> <li>a. Surgery Section codes and guidelines</li> <li>b. subsections and subcategories</li> <li>c. professional components</li> <li>d. technical components</li> <li>e. qualifying circumstances</li> <li>f. applicable modifiers for reduced services</li> <li>g. HCPCS Level II Modifiers</li> <li>h. samples of multiple procedures and utilization of CCI edits to rebundling procedure codes</li> <li>i. elements of the operative report and key words which lead to selection of correct code</li> </ul>	<p><b>Career Ready Practice:</b> 1, 2, 5, 10, 11</p> <p><b>CTE Anchor:</b> Academics: 1.0 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</p>

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(10 hours)	3. Abstract three Surgery cases that show the following: <ol style="list-style-type: none"> <li>CPT® section and subsection codes</li> <li>applicable CPT® modifiers</li> <li>HCPCS I and II applications</li> </ol> 4. Pass an examination demonstrating correct coding procedures from each Surgery subsection utilizing correct coding procedures with 100% accuracy.	Demonstration and Application: 11.1  <b>CTE Pathway:</b> C1.2, C8.2, C12.1, C12.2, C15.2, C15.4
<b>G. RADIOLOGY SECTION</b>  Understand and evaluate the coding conventions for primary care services covered by the Radiology Section of the CPT® manual and their coding applications in the HCPCS Level II code book.	1. Define the following: <ol style="list-style-type: none"> <li>clinical tomography (CT)</li> <li>diagnostic imaging</li> <li>diagnostic ultrasound</li> <li>magnetic resonance imaging (MRI)</li> <li>nuclear medicine</li> <li>radiation oncology</li> </ol> 2. Locate and describe the following: <ol style="list-style-type: none"> <li>Radiology Section codes and guidelines</li> <li>subsections and subcategories</li> <li>professional components</li> <li>technical components</li> <li>qualifying circumstances</li> <li>applicable modifiers</li> <li>HCPCS Level II Modifiers</li> </ol> 3. Abstract three Radiology cases that show the following: <ol style="list-style-type: none"> <li>CPT® section and subsection codes</li> <li>applicable CPT® modifiers</li> <li>HCPCS I and II applications</li> </ol> 4. Pass an examination demonstrating correct coding procedures from each Radiology subsection with 100% accuracy.	<b>Career Ready Practice:</b> 1, 2, 5, 10, 11  <b>CTE Anchor:</b> Academics: 1.0 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  <b>CTE Pathway:</b> C1.2, C8.2, C12.1, C12.2, C15.2, C15.4
<b>H. PATHOLOGY AND LABORATORY SECTION</b>  Understand and evaluate the coding conventions for primary care services covered by the Pathology and Laboratory Section of the CPT® manual and their coding applications in the HCPCS Level II code book.	1. Define the following: <ol style="list-style-type: none"> <li>medical necessity</li> <li>organ and disease-oriented panels</li> <li>drug testing</li> <li>therapeutic drug assay</li> <li>consultations</li> <li>surgical pathology</li> </ol> 2. Locate and describe the following: <ol style="list-style-type: none"> <li>Pathology and Laboratory Section codes and guidelines</li> <li>subsections and subcategories</li> <li>professional components</li> <li>technical components</li> <li>specific drug testing codes and rules</li> </ol>	<b>Career Ready Practice:</b> 1, 2, 5, 10, 11  <b>CTE Anchor:</b> Academics: 1.0 Problem Solving and Critical Thinking: 5.2, 5.3, 5.4, 5.6 Responsibility and Flexibility: 7.3, 7.8

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(10 hours)	<ul style="list-style-type: none"> <li>f. qualifying circumstances</li> <li>g. applicable modifiers</li> <li>h. HCPCS Level II Modifiers</li> </ul> <p>3. Abstract three Pathology and Laboratory cases that show the following:</p> <ul style="list-style-type: none"> <li>a. CPT® section and subsection codes</li> <li>b. applicable CPT® modifiers</li> <li>c. HCPCS I and II applications</li> </ul> <p>4. Pass an examination demonstrating correct coding procedures from each Pathology and Laboratory subsection with 100% accuracy.</p>	<p>Technical Knowledge and Skills: 10.1, 10.2</p> <p>Demonstration and Application: 11.1</p> <p><b>CTE Pathway:</b> C1.2, C8.2, C12.1, C12.2, C15.2, C15.4</p>
<p>I. MEDICINE SECTION</p> <p>Understand and evaluate the coding conventions for the Medicine Section of the CPT® manual and their coding applications in the HCPCS Level II code book.</p> <p>(10 hours)</p>	<ul style="list-style-type: none"> <li>1. Define the following: <ul style="list-style-type: none"> <li>a. invasive cardiovascular procedures</li> <li>b. miscellaneous services</li> </ul> </li> <li>2. Locate and describe the following: <ul style="list-style-type: none"> <li>a. Medicine Section codes and guidelines</li> <li>b. subsections and subcategories</li> <li>c. CPT® and HCPCS injections</li> <li>d. applicable modifiers</li> <li>e. components of invasive cardiovascular procedures</li> <li>f. miscellaneous services</li> </ul> </li> <li>3. Abstract three Medicine Section cases that show the following: <ul style="list-style-type: none"> <li>a. CPT® section and subsection codes</li> <li>b. applicable CPT® modifiers</li> <li>c. HCPCS I and II applications</li> </ul> </li> <li>4. Pass an examination demonstrating correct coding procedures from each Medicine subsection with 100% accuracy.</li> </ul>	<p><b>Career Ready Practice:</b> 1, 2, 5, 10, 11</p> <p><b>CTE Anchor:</b> Academics: 1.0 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</p> <p><b>CTE Pathway:</b> C1.2, C8.2, C12.1, C12.2, C15.2, C15.4</p>
<p>J. EMPLOYABILITY SKILLS REVIEW</p> <p>Review, apply, and evaluate the employability skills required in the health information business.</p>	<ul style="list-style-type: none"> <li>1. Review employer requirements for the following: <ul style="list-style-type: none"> <li>a. punctuality</li> <li>b. attendance</li> <li>c. attitude toward work</li> <li>d. quality of work</li> <li>e. teamwork</li> <li>f. timeliness</li> <li>g. communication skills</li> </ul> </li> </ul>	<p><b>Career Ready Practice:</b> 1, 2, 3, 5, 6, 7, 8, 10, 11, 12</p> <p><b>CTE Anchor:</b> Career Planning and Management: 3.1, 3.3, 3.5, 3.6, 3.7, 3.9</p>

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(4 hours)	<ol style="list-style-type: none"> <li>2. Update list of potential employers through traditional and internet sources.</li> <li>3. Review the role of electronic social networking in job search.</li> <li>4. Update sample résumés.</li> <li>5. Review the importance of filling out a job application legibly, with accurate and complete information.</li> <li>6. Complete job application forms correctly.</li> <li>7. Review the importance of enthusiasm on a job.</li> <li>8. Review the importance of appropriate appearance on a job.</li> <li>9. Review the importance of the continuous upgrading of job skills.</li> <li>10. Review the importance of customer service as a method of building permanent relationships between the organization and the customer.</li> <li>11. Review and demonstrate appropriate interviewing techniques.</li> <li>12. Review the informational materials and resources needed to be successful in an interview.</li> <li>13. Review and demonstrate appropriate follow-up procedures.</li> </ol>	<p>Problem Solving and Critical Thinking: 5.3, 5.6</p> <p>Health and Safety: 6.2, 6.8</p> <p>Ethics and Legal Responsibilities: 8.2</p> <p>Technical Knowledge and Skills: 10.2</p> <p><b>CTE Pathway:</b> C1.1, C1.2, C1.3, C1.4, C1.5, C1.6, C1.7, C3.1, C3.2, C3.3, C4.2, C4.4, C6.5</p>

## ***SUGGESTED INSTRUCTIONAL MATERIALS and OTHER RESOURCES***

### **TEXTS AND SUPPLEMENTAL MATERIAL**

American Medical Association. CPT 2010 Professional Edition. 2009.

Andress, Alice Anee, Coding Notes. Davis, F.A. Company, 2006.

Austin, Peg and Anne Mettler. Medical Office Coding. Prentice Hall, 2005.

Burgos, Marlyn, James Keogh, and Donya Johnson. Medical Billing and Coding Demystified. McGraw-Hill Companies, 2006.

Buck, Carol J. 2010 ICD-9-CM for Hospitals, Volumes 1, 2, and 3. Professional Edition. Elsevier Health Services, 2009.

Diamond, Marsha. Mastering Medical Coding. Elsevier Health Sciences, 2006.

Johnson, Sandra L. and Connie McHugh. Understanding Medical Coding: A Comprehensive Guide. Cengage Learning, 2006.

Newby, Cynthia. Basic Medical Coding for Physician Practices. McGraw-Hill Companies, 2004.

Sinclair, Loretta. Medical Billing, Coding, and Reimbursement. Annotation Press, 2007.

### **RESOURCES**

Employer Advisory Board members

Foundation Standards

<http://www.cde.ca.gov/ci/ct/sf/documents/ctestandards.pdf>

<http://www.cde.ca.gov/be/st/ss/documents/ctestandards.doc>

A.D.A.M. Medical Encyclopedia

<http://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 – CPT Manual and HCPCS Level II Code Book – Pass all assignments and exams on resource management with a minimum score of 80% or higher.

SECTION C – Compliance – Pass all assignments and exams on communication with a minimum score of 80% or higher.

SECTION D – Evaluation and Management (E&M) Section – Pass all assignments and exams on clinical experience with a minimum score of 80% or higher.

SECTION E – Anesthesia Section – Pass all assignments and exams on employability skills with a minimum score of 80% or higher.

SECTION F – Surgery Section – Pass all assignments and exams on employability skills with a minimum score of 80% or higher.

SECTION G – Radiology Section – Pass all assignments and exams on employability skills with a minimum score of 80% or higher.

SECTION H – Pathology and Laboratory Section – Pass all assignments and exams on employability skills with a minimum score of 80% or higher.

SECTION I – Medicine Section – Pass all assignments and exams on employability skills with a minimum score of 80% or higher.

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

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### Statement for Civil Rights

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

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