

# Course Outline

Health Science and Medical Technology

REVISED: August/2017

**Job Title:**

Pharmacy Technician

**77-90-60**

**Career Pathway:**

Patient Care

## Pharmacy Technician

**Industry Sector:**

Health Science and Medical  
Technology

**Credits:** 40

**Hours:** 540

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

29-2052.00

**Course Description:**

This competency-based course is designed to prepare students for employment in a pharmaceutical setting. The class consists of theory and clinical preparation to include: medical terminology, anatomy and physiology, pharmaceutical settings, duties and responsibilities of a pharmacy technician, pharmaceutical terms, abbreviations and symbols, metric and apothecary systems, drug requirements, record-keeping, dispensing prescriptions, knowledge of manufacturing, packaging, and labeling of drug products. At the successful completion of this course, students will be qualified to register with the California State Board of Pharmacy as a Pharmacy Technician. Students will perform community classroom activities while under the direct supervision of a pharmacist. The competencies in this course are aligned with the California High School Academic Content Standards and the California Career Technical Education Model Curriculum Standards.

**CBEDS Title:**

Healthcare Occupations

**Prerequisites:**

Enrollment requires a U.S. High School Diploma, high school equivalency, or A.A. Degree, math skill level equivalent to Math 2 (53-03-76), at least 18 years of age, possession of an AHA or BLS Healthcare Providers current Basic "C" CPR Certificate, tuberculosis clearance, and a physical exam.

**CBEDS No.:**

4257

**NOTE:** For Perkins purposes this course has been designated as an **introductory/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. 7-12

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)**

<b>COURSE OUTLINE COMPONENTS</b>	<b>LOCATION</b>
<p><b>INSTRUCTIONAL STRATEGIES</b></p> <p>Instructional techniques or methods could include laboratory techniques, lecture method, small-group discussion, grouping plans, and other strategies used in the classroom.</p> <p>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.</p>	p. 15
<p><b>UNITS OF STUDY, WITH APPROXIMATE HOURS ALLOTTED FOR EACH UNIT</b></p> <p>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.</p> <p>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.</p>	Cover pp. 7-12
<p><b>EVALUATION PROCEDURES</b></p> <p>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.</p> <p>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.</p>	p. 15
<p><b>REPETITION POLICY THAT PREVENTS PERPETUATION OF STUDENT ENROLLMENT</b></p> <p>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.</p>	Cover

## **ACKNOWLEDGMENTS**

Thanks to ROSS PATRICK WICKHAM and 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***

### **B. Patient Care Pathway**

The standards for the Patient Care pathway apply to occupations or functions involved in the prevention, treatment, and management of illness and the preservation of mental and physical well-being through the services offered by the medical and allied health professions. The standards specify the knowledge and skills needed by professional and technical personnel pursuing careers in this pathway.

#### **Sample occupations associated with this pathway:**

- ◆ Kinesiotherapist
- ◆ Nurse Anesthetist
- ◆ Respiratory Therapist
- ◆ Radiologic Technician
- ◆ Dental Hygienist

- B1.0 Recognize the integrated systems approach to health care delivery services: prevention, diagnosis, pathology, and treatment
- B2.0 Understand the basic structure and function of the human body and relate normal function to common disorders.
- B3.0 Know how to apply mathematical computations used in health care delivery system.
- B4.0 Recognize and practice components of an intake assessment relevant to patient care.
- B5.0 Know the definition, spelling, pronunciation, and use of appropriate terminology in the health care setting.
- B6.0 Communicate procedures and goals to patients using various communication strategies to respond to questions and concerns.
- B7.0 Apply observation techniques to detect changes in the health status of patients.
- B8.0 Demonstrate the principles of body mechanics as they apply to the positioning, transferring, and transporting of patients.
- B9.0 Implement wellness strategies for the prevention of injury and disease behaviors that prevent injury and illness
- B10.0 Comply with protocols and preventative health practices necessary to maintain a safe
- B11.0 Comply with hazardous waste disposal policies and procedures, including documentation, to ensure that regulated waste is handled, packaged, stored, and disposed of in accordance with federal, state, and local regulations.
- B12.0 Adhere to the roles and responsibilities, within the scope of practice, that contribute to the design and implementation of treatment planning
- B13.0 Research factors that define cultural differences between and among different ethnic, racial, and cultural groups and special populations.

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

**COMPETENCY-BASED COMPONENTS**  
**for the Pharmacy Technician Course**

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
<p>A. INTRODUCTION</p> <p>Demonstrate understanding of course policies and procedures.</p> <p>(Theory: 2 hours)</p>	<ol style="list-style-type: none"> <li>1. Describe class requirements.</li> <li>2. Describe pharmacy technician duties and responsibilities.</li> <li>3. Describe appropriate dress standards for classroom and clinical settings.</li> <li>4. Review course standards and state requirements including how felony conviction or history of substance abuse could prohibit registration and/or employment as a pharmacy technician.</li> <li>5. Describe professionalism in the health care setting.</li> </ol>	<p><b>Career Ready Practice:</b> 1, 2, 3, 4, 5, 7, 8, 9, 11, 12</p> <p><b>CTE Anchor:</b> Academics: 1.0 Communication: 2.4, 2.5, 2.6 Career Planning and Management: 3.1, 3.2 Technology: 4.1 Problem Solving and Critical Thinking: 5.1, 5.3, 5.4 Responsibility and Flexibility: 7.2, 7.3, 7.4, 7.7 Ethics and Legal Responsibilities: 8.2, 8.3, 8.4, 8.5 Leadership and Teamwork: 9.1, 9.2, 9.3, 9.7 Technical Knowledge and Skills: 10.5 Demonstration and Application: 11.1, 11.2</p> <p><b>CTE Pathway:</b> B4.1, B5.1, B6.2, B8.5, B10.2, B10.4, B10.5, B11.4, B12.2</p>

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
<p>B. SAFETY</p> <p>Describe safety and health standards in the workplace setting.</p> <p>Theory: 2 hours) (Community Classroom: 4 hours)</p>	<ol style="list-style-type: none"> <li>1. Describe Cal OSHA requirements in the workplace setting.</li> <li>2. Review classroom and lab safety rules and regulations.</li> <li>3. Describe health and safety procedures for the product and the dispenser.</li> <li>4. Describe the role of a pharmacy technician in reporting and documentation.</li> <li>5. Pass the safety test with 100% accuracy.</li> </ol>	<p><b>Career Ready Practice:</b> 1, 2, 5, 7, 8, 9, 11, 12</p> <p><b>CTE Anchor:</b> Academics: 1.0 Communication: 2.1, 2.2, 2.4, 2.6 Career Planning and Management: 3.1, 3.2 Problem Solving and Critical Thinking: 5.1, 5.2, 5.3, 5.4 Health and Safety: 6.1, 6.2, 6.5, 6.6, 6.8 Responsibility and Flexibility: 7.2, 7.7 Ethics and Legal Responsibilities: 8.1, 8.2, 8.4, 8.5 Leadership and Teamwork: 9.2, 9.3</p> <p><b>CTE Pathway:</b> B4.1, B4.4, B6.1, B6.3, B6.4, B8.1, B8.4, B8.5, B10.4, B10.7, B11.1, B11.4</p>
<p>C. COMMUNICATION</p> <p>Describe telephone etiquette, communication styles, ethics, and confidentiality.</p>	<ol style="list-style-type: none"> <li>1. Describe telephone etiquette between technician and client, health care personnel and outside agencies.</li> <li>2. Describe confidentiality and legal issues pertaining to clients.</li> <li>3. Describe the Health Insurance Portability and Accountability Act (HIPAA) of 1966.</li> <li>4. Demonstrate via role playing a client and technical situational procedure.</li> <li>5. Describe interdepartmental communication.</li> <li>6. Describe and demonstrate non-verbal communication.</li> </ol>	<p><b>Career Ready Practice:</b> 1, 2, 5, 7, 8, 10, 12</p> <p><b>CTE Anchor:</b> Academics: 1.0 Communication: 2.1, 2.2, 2.3, 2.4, 2.5, 2.6 Problem Solving and Critical Thinking: 5.1, 5.2, 5.3, 5.4</p>



COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
<p>(Theory: 4 hours) (Community Classroom: 4 hours)</p>		<p>Responsibility and Flexibility: 7.2, 7.3, 7.7 Ethics and Legal Responsibilities: 8.3, 8.4, 8.5, 8.7 Technical Knowledge and Skills: 10.1, 10.2, 10.4 Demonstration and Application: 11.1</p> <p><b>CTE Pathway:</b> B4.1, B4.4, B6.1, B6.2, B6.3, B6.4, B6.6</p>
<p>D. PHARMACOLOGY</p> <p>Demonstrate an understanding of medication and drug sources, abbreviations, actions and physician orders.</p> <p>(Theory: 44 hours) (Community Classroom: 50 hours)</p>	<ol style="list-style-type: none"> <li>1. List and define medical terminology related to pharmacology.</li> <li>2. Describe the various uses of drugs and their sources.</li> <li>3. Describe prescription and its written components.</li> <li>4. Describe basic drug actions and reactions.</li> <li>5. List and define drug abbreviations.</li> <li>6. Demonstrate an understanding of written physician's orders and translate to "every-day language."</li> <li>7. Describe delivery systems.</li> <li>8. List and describe chemical symbols.</li> <li>9. Describe therapeutic classifications.</li> <li>10. Describe differences between prescribed and "over-the-counter" drugs.</li> <li>11. Describe the role of the Food and Drug Administration (FDA).</li> </ol>	<p><b>Career Ready Practice:</b> 1, 2, 4, 5, 10, 11</p> <p><b>CTE Anchor:</b> Academics: 1.0 Communication: 2.3, 2.4, 2.6, 2.7, 2.8 Technology: 4.1, 4.5 Problem Solving and Critical Thinking: 5.6 Technical Knowledge and Skills: 10.1, 10.4 Demonstration and Application: 11.1, 11.2</p> <p><b>CTE Pathway:</b> B1.1, B2.1, B2.4, B5.1, B5.2, B5.3, B5.4, B5.5, B5.6, B5.7</p>

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
<p>E. MEASUREMENT AND CONVERSIONS</p> <p>Demonstrate various mathematical procedures required for prescription dosages.</p> <p>(Theory: 25 hours) (Community Classroom: 30 hours)</p>	<ol style="list-style-type: none"> <li>1. Demonstrate ability to add, subtract, multiply, and divide fractions, decimals, percents, and ratios.</li> <li>2. List and interpret metric and apothecary notations.</li> <li>3. Demonstrate knowledge of metric and household equivalents.</li> <li>4. Demonstrate ratio and proportion as they relate to pharmacy products.</li> <li>5. Describe documentation and reporting of errors.</li> </ol>	<p><b>Career Ready Practice:</b> 1, 5, 7, 8, 10</p> <p><b>CTE Anchor:</b> Academics: 1.0 Problem Solving and Critical Thinking: 5.2, 5.3, 5.5, 5.6 Responsibility and Flexibility: 7.2 Ethics and Legal Responsibilities: 8.2, 8.3, 8.5 Technical Knowledge and Skills: 10.1, 10.4</p> <p><b>CTE Pathway:</b> B3.1, B3.2, B3.3, B7.3</p>
<p>F. DRUGS</p> <p>Demonstrate and describe drugs, dosages, routes of administration, forms and storage requirements.</p>	<ol style="list-style-type: none"> <li>1. Recognize and describe various drug classifications.</li> <li>2. Describe various routes of drug administration.</li> <li>3. Demonstrate the set-up for dosage calculation, via ratio-proportion for a drug.</li> <li>4. Calculate pediatric dosages per kilogram of body weight.</li> <li>5. Explain extemporaneous compounding.</li> <li>6. Set up and solve calculations for percent solutions.</li> <li>7. Explain the use of milled equivalent (Meq) and units (U) in dosage calculations.</li> <li>8. Describe and demonstrate dosage calculation using the delegation method.</li> <li>9. Describe technician's role with client when explaining drug dosages.</li> </ol>	<p><b>Career Ready Practice:</b> 1, 2, 5, 8, 10, 11</p> <p><b>CTE Anchor:</b> Academics: 1.0 Communication: 2.1, 2.2, 2.3 Problem Solving and Critical Thinking: 5.2, 5.3, 5.5, 5.6 Ethics and Legal Responsibilities: 8.2 Technical Knowledge and Skills: 10.1, 10.4 Demonstration and Application: 11.1</p>

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(Theory: 62 hours) (Community Classroom: 100 hours)		<b>CTE Pathway:</b> B1.2, B2.3, B2.4, B3.1, B3.2, B3.3, B6.2, B6.3, B6.4
<p>G. MEDICATION DISTRIBUTION</p> <p>Demonstrate knowledge of medication distribution, record-keeping functions and prescription dispensing.</p> <p>(Theory: 75 hours) (Community Classroom: 100 hours)</p>	<ol style="list-style-type: none"> <li>1. Recognize and demonstrate centralized vs. decentralized medication distribution.</li> <li>2. Recognize and calculate unit dose systems.</li> <li>3. Demonstrate preparation of admixtures in PVC bags, glass containers, and plastic containers.</li> <li>4. Calculate I.V. infusion rates.</li> <li>5. Describe large volume and intravenous (I.V.) small volume (IVPB).</li> <li>6. Demonstrate aseptic and safety techniques utilized in preparing intravenous solutions and chemotherapeutic agents.</li> <li>7. Demonstrate procedure for reconstituting a powdered vial and breaking an ampoule.</li> <li>8. Explain parts of laminar flow hood and its function.</li> <li>9. Demonstrate syringe functions, usage and safety.</li> <li>10. Demonstrate understanding of robotics in pharmacy drug distribution locale.</li> <li>11. Type a prescription label with 100% accuracy.</li> <li>12. Demonstrate ability to prepare, package, and label various drug products with 100% accuracy.</li> </ol>	<p><b>Career Ready Practice:</b> 1, 2, 4, 5, 8, 9, 10, 11, 12</p> <p><b>CTE Anchor:</b> Academics: 1.0 Communication: 2.7, 2.8 Technology: 4.1, 4.2, 4.5 Problem Solving and Critical Thinking: 5.2, 5.3, 5.5, 5.6 Ethics and Legal Responsibilities: 8.1, 8.3, 8.5 Leadership and Teamwork: 9.2, 9.3, 9.7 Technical Knowledge and Skills: 10.1, 10.4 Demonstration and Application: 11.1, 11.2</p> <p><b>CTE Pathway:</b> B1.1, B3.1, B3.2, B4.5, B10.2, B10.3, B10.4, B10.6, B10.6, B10.7, B12.3</p>
<p>H. DRUG PRODUCTS</p> <p>Demonstrate knowledge of manufacturing, packaging, and labeling.</p>	<ol style="list-style-type: none"> <li>1. Describe procedures for manufacturing drug products.</li> <li>2. Demonstrate techniques related to effective packaging of drug products.</li> <li>3. Demonstrate complete product: manufacturing, packaging, and labeling of a variety of drugs.</li> <li>4. Describe the pharmacy technician's role with the pharmaceutical industry.</li> </ol>	<p><b>Career Ready Practice:</b> 1, 2, 4, 8, 9, 11, 12</p> <p><b>CTE Anchor:</b> Academics: 1.0</p>

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
<p>(Theory: 20 hours) (Community Classroom: 12 hours)</p>		<p>Communication: 2.1, 2.2, 2.3, 2.5, 2.6 Technology: 4.1, 4.2, 4.5 Ethics and Legal Responsibilities: 8.1, 8.3 Leadership and Teamwork: 9.2, 9.3, 9.4 Demonstration and Application: 11.1, 11.2, 11.5</p> <p><b>CTE Pathway:</b> B12.2, B12.3, B12.4</p>
<p>I. EMPLOYABILITY SKILLS</p> <p>Demonstrate the ability to prepare for and keep employment as a pharmacy technician.</p> <p>(Theory: 6 hours)</p>	<ol style="list-style-type: none"> <li>1. Describe opportunities in community and clinical based locations.</li> <li>2. Describe various sites to obtain employment information e.g. internet, newspaper, employment office.</li> <li>3. Describe application and résumé requirements.</li> <li>4. Prepare résumé.</li> <li>5. Complete a sample application form.</li> <li>6. Describe grooming for an interview.</li> <li>7. Describe and demonstrate interview techniques for employment.</li> <li>8. Describe resigning from a position including time element and letter format.</li> </ol>	<p><b>Career Ready Practice:</b> 2, 3, 6</p> <p><b>CTE Anchor:</b> Communication: 2.1, 2.2, 2.3, 2.4, 2.5, 2.6 Career Planning and Management: 3.1, 3.2, 3.4, 3.4, 3.5, 3.6 Technology: 4.1, 4.2 Problem Solving and Critical Thinking: 5.6 Demonstration and Application: 11.1, 11.5</p> <p><b>CTE Pathway:</b> B6.3, B1.1, B12.2, B12.4</p>

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

### **TEXTBOOKS**

Johnston, Mike. The Pharmacy Technician: Foundation and Practices. Pearson, 2008.

Fulcher, Robert M. and Eugenia M. Fulcher. Math Calculations for Pharmacy Technicians: A Worktext. Elsevier, 2006.

Hamilton, Richard J. Tarascon Pocket Pharmacopoeia Classic Shirt-Pocket Edition. Jones & Bartlett, 2011.

Ripepe, Suzette. AudioMeds: Medication Use and Pronunciation (Audio CD and Companion Booklet). American Society of Health-System Pharmacists, 2003.

Johnston, Mike. Certification Exam Review for the Pharmacy Technician, 2<sup>nd</sup> Edition. Pearson, 2011.

Mizner, James J. Mosby's Review for the Pharmacy Technician Certification Exam, 2<sup>nd</sup> Edition. Elsevier, 2010.

### **SUPPLEMENTAL MATERIALS**

Darvey, Diane. Legal Handbook of Pharmacy Technicians. American Society of Health System Pharmacists, 2008.

Makely, Sherry. Professionalism in Health Care: A Primer for Career Success, 3<sup>rd</sup> edition. Prentice-Hall, 2008.

### **INSTRUCTIONAL MATERIALS**

Finkel, Richard. Patient Care Management Lab: A Workbook for Prescription Practice, 2<sup>nd</sup> Edition. Lippincott Williams & Wilkins, 2011.

DAA Enterprises, Inc. Pharmacy Management Software for Pharmacy Technicians and Workbook, 2<sup>nd</sup> Edition. Elsevier, 2011.

Davis, Karen and Jason Sparks. Getting Started in Non-Sterile Compounding Workbook and DVD. American Society of Health System Pharmacists, 2008.

Davis, Karen and Jason Sparks. Getting Started in Aseptic Compounding Workbook and DVD. American Society of Health System Pharmacists, 2008.

## **RESOURCES**

Teacher prepared slides, films, transparencies, and instructional packages.

Employer Advisory Board members

Foundation Standards

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

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

California State Board of Pharmacy

1625 N. Market Blvd, Suite N219, Sacramento, CA 95834

Phone (916) 574-7900

Fax (916) 574-8618

Website: <http://www.pharmacy.ca.gov>

Pharmacy Technician Certification Board

2215 Constitution Avenue NW

Washington, DC 20037-2985

Phone (800) 363-8012

Fax (202) 429-7596

Website: <http://www.ptcb.org>

American Society of Health-System Pharmacists (ASHP)

7272 Wisconsin Avenue

Bethesda, MD 20814

Website: <http://www.ashp.org>

National Pharmacy Technician Association (NPTA)

P.O. Box 683148

Houston, TX 77268

Phone: 888-247-8700

Website: <http://www.pharmacytechnician.org>

American Association of Pharmacy Technicians (AAPT)

P.O. Box 1447

Greensboro, NC 27402

Phone (877) 368-4771

Website: <http://www.pharmacytechnician.org>

## **COMPETENCY CHECKLIST**

## ***TEACHING STRATEGIES and EVALUATION***

### **METHODS AND PROCEDURES**

- A. Lecture and discussion
- B. Demonstration/ participation
- C. Multi-sensory presentation
  - 1. Charts
  - 2. Brochures
  - 3. Pharmaceutical equipment and supplies
  - 4. Videos
  - 5. Overhead transparencies
- D. Individualized instruction
- E. Laboratory practice
- F. Community classroom experience
- G. Guest lecturers

### **EVALUATION**

SECTION A – Introduction – Pass all assignments and exams on introduction with a minimum score of 80% or higher.

SECTION B – Safety – Pass the safety test with 100% accuracy.

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

SECTION D – Pharmacology – Pass all assignments and exams on pharmacology with a minimum score of 80% or higher.

SECTION E – Measurement and Conversion – Pass all assignments and exams on measurement and conversion with a minimum score of 80% or higher.

SECTION F – Drugs – Pass all assignments and exams on drugs with a minimum score of 80% or higher.

SECTION G – Medication Distribution – Pass all assignments and exams on medication distribution with a minimum score of 80% or higher.

SECTION H – Drug Products – Pass all assignments and exams on drug products with a minimum score of 80% or higher.

SECTION I – Employability Skills – 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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