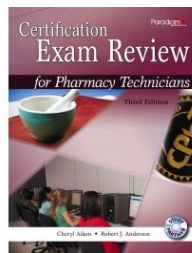


**PHAR 2060**  
**Advanced Pharmacy Technology Principles**  
**COURSE SYLLABUS**  
**Summer Semester 2016**

Semester: Summer 2016  
Course Title: Advanced Pharmacy Technology Principles  
Course Number: PHAR 2060  
Credit Hours/ Minutes: 3 / 3000  
Class Location: Room #720; #737 — Gillis Building  
Class Meets: Wednesday 8:30—2:30  
CRN: 60077

Instructor: Matt Brown, CPhT  
Office Hours: Mon. 8:00—12:00; 1:00—5:00 or By Appointment  
Office Location: #722 — Gillis Building  
Email Address: mbrown@southeasterntech.edu  
Phone: 912-538-3192  
Fax Number: 912-538-3106  
Tutoring Hours: By Appointment

**REQUIRED TEXT:** Certification Exam Review for Pharmacy Technicians, 3rd Edition, By Aiken and Anderson, Paradigm Publishing



**REQUIRED SUPPLIES & SOFTWARE:** Paper, Pens/Pencils, Folder, Computer Access, and a Basic Calculator

**COURSE DESCRIPTION:** This course presents the advanced concepts and principles needed in the pharmacy technology field. Topics include: physician orders, patient profiles, pharmacy data systems, job readiness, legal requirements, inventory and billing, pharmaceutical calculations review, and pharmacology review.

**MAJOR COURSE COMPETENCIES:**

1. Physician Orders
2. Patient Profiles
3. Pharmacy Data Systems
4. Job Readiness
5. Legal Requirements
6. Inventory and Billing
7. Pharmaceutical Calculations Review
8. Pharmacology Review

**PREREQUISITE(S):** All Required

|  |
|--|
| COMP 1000 - Introduction to Computers ( 201003L )                    |
| PHAR 1030 - Principles of Sterile Medication Preparation ( 201003L ) |
| PHAR 1050 - Pharmacy Technology Practicum ( 201003L )                |

**COREQUISITE(S):** One Required

|  |
|--|
| PHAR 2070 - Advanced Pharmacy Technology Practicum ( 201312L ) |
|--|

**COURSE OUTLINE:****Physician Orders**

| Order | Description  | Learning Domain | Level of Learning |
|-------|--|-----------------|-------------------|
| 1     | Correctly interpret and/or transcribe a prescription or medication order.  | Cognitive       | Knowledge         |
| 2     | Identify the required sections of a medication order or prescription.  | Cognitive       | Knowledge         |
| 3     | Correctly interpret clinical, diagnostic, and treatment terms, and distinguish them from medication orders.                                | Cognitive       | Knowledge         |
| 4     | Complete order processing ie: data entry, counting, pouring, packaging, and labeling, and distribution of medications.                     | Cognitive       | Knowledge         |
| 5     | Discuss the technician role in the health care team, how to function efficiently, and provide safe and effective treatment or the patient. | Affective       | Receiving         |
| 6     | Understand direct patient care delivery systems in multiple practice settings.   | Cognitive       | Comprehension     |

**Patient Profiles**

| Order | Description  | Learning Domain | Level of Learning |
|-------|--|-----------------|-------------------|
| 1     | Define the patient profile.  | Cognitive       | Knowledge         |
| 2     | Identify the required information that comprises a patient profile.  | Cognitive       | Knowledge         |
| 3     | Describe the advantages of maintaining patient profiles and the liabilities associated with not having them.   | Cognitive       | Knowledge         |
| 4     | Display the ability to assist pharmacist in collecting, organizing, and evaluating information for direct patient care, medication use review, medication reconciliation, and departmental management. | Cognitive       | Knowledge         |
| 5     | Use appropriate judgment in monitoring of medication therapy.  | Cognitive       | Application       |
| 6     | Participate in the facilities medication error prevention process to include assisting the pharmacist in improving direct patient care.  | Cognitive       | Application       |

**Pharmacy Data Systems**

| Order | Description  | Learning Domain | Level of Learning |
|-------|--|-----------------|-------------------|
| 1     | Summarize the pharmacy laws that pertain to computer maintained records and patient profiles.  | Cognitive       | Comprehension     |
| 2     | Describe the current laws and limitations on the use of fax machines in pharmacy practice.   | Cognitive       | Knowledge         |
| 3     | Give examples of the required security for computer maintained pharmacy records.   | Cognitive       | Comprehension     |
| 4     | List and describe different uses of computer systems in modern pharmacy.   | Cognitive       | Knowledge         |
| 5     | Compare the advantages and disadvantages of using computer systems in pharmacy practice.   | Cognitive       | Synthesis         |
| 6     | Demonstrate the ability to accurately interpret and enter data from a prescription or medication order into a computerized patient profile.          | Cognitive       | Application       |
| 7     | Demonstrate the ability to perform maintenance of computer hardware, including cleaning, replacing ribbon/ink, and replenishing paper/ label supply. | Cognitive       | Application       |

### Job Readiness

| Order | Description   | Learning Domain | Level of Learning |
|-------|---|-----------------|-------------------|
| 1     | Describe and exhibit the proper professional image, including dress, attitude, and conduct. | Affective       | Characterization  |
| 2     | Describe the steps required in conducting a successful job search.                          | Cognitive       | Knowledge         |
| 3     | Demonstrate the ability to write an effective résumé.                                       | Cognitive       | Application       |
| 4     | Demonstrate the ability to properly complete a job application.                             | Cognitive       | Application       |
| 5     | Describe and/or demonstrate the skills required to successfully complete a job interview.   | Cognitive       | Knowledge         |
| 6     | Describe desirable job performance skills necessary for job retention and advancement.      | Cognitive       | Knowledge         |
| 7     | Discuss job performance skills as they relate to retail and hospital pharmacy practice.     | Cognitive       | Comprehension     |

### Legal Requirements

| Order | Description   | Learning Domain | Level of Learning |
|-------|---|-----------------|-------------------|
| 1     | Explain the legal requirements for counseling patients.   | Cognitive       | Comprehension     |
| 2     | Discuss the legal requirements for prescription filling, filing, documentation, order taking, and routine procedures. | Cognitive       | Comprehension     |
| 3     | Discuss the legal requirements for proper prescription documentation.   | Cognitive       | Comprehension     |
| 4     | Explain the legal procedures of ordering and stocking schedule (2) medications.                                       | Cognitive       | Comprehension     |
| 5     | Explain the Bi-inventory inspection for all schedule medication.  | Cognitive       | Comprehension     |

### Inventory and Billing

| Order | Description   | Learning Domain | Level of Learning |
|-------|---|-----------------|-------------------|
| 1     | Demonstrate the ability to control the inventory of medications, equipment, and devices according to an established plan. | Cognitive       | Application       |
| 2     | Perform the function of billing and collecting payment for pharmacy services and goods.                                   | Cognitive       | Synthesis         |

### Pharmaceutical Calculations Review

| Order | Description  | Learning Domain | Level of Learning |
|-------|--|-----------------|-------------------|
| 1     | Review and interpret the following measurements: metric system, apothecary system, household and units.                        | Cognitive       | Comprehension     |
| 2     | Review and calculate the following concerning dispensing: oral, parenteral, IV drip rates, other routes; review safety issues. | Cognitive       | Comprehension     |
| 3     | Review dosage computation, children's dosage, and IV solutions.  | Cognitive       | Comprehension     |
| 4     | Review reference sources, origins, classifications, legal aspects, abbreviations, and prescriptions.                           | Cognitive       | Comprehension     |

### Pharmacology Review

| Order | Description   | Learning Domain | Level of Learning |
|-------|---|-----------------|-------------------|
| 1     | Understand the use and effects of prescription and OTC drugs used to treat common disease states. | Cognitive       | Comprehension     |

|   |  |           |           |
|---|--|-----------|-----------|
| 2 | Assist the pharmacist in the identification of patients who desire/require counseling. | Cognitive | Knowledge |
|---|--|-----------|-----------|

**GENERAL EDUCATION CORE COMPETENCIES:** STC has identified the following general education core competencies that graduates will attain:

1. The ability to utilize standard written English.
2. The ability to solve practical mathematical problems.
3. The ability to read, analyze, and interpret information.

**STUDENT REQUIREMENTS:** Students are expected to complete all assigned material by the given due date. Students will also be required to complete hands-on demonstrations needed to function properly in the pharmacy field. Students are responsible for all policies and procedures listed within the student catalog / program handbook. Students are responsible for keeping up with their grades. Do not ask instructor for grades during the semester.

**NATIONAL CERTIFICATION EXAM:** All PHAR students are required to take the Pharmacy Technician Certification Exam (PTCE) offered by the Pharmacy Technician Certification Board (PTCB) prior to the Exit Exam/Final Exam being given in order to complete the program requirements for this course. Upon completing the PTCE, the student will receive a print out of the unofficial results of the exam from the testing center. The student is required to turn in a copy of those results to the Program Director/Instructor. Failure to take the PTCE and/or turn in a copy of the student's PTCE unofficial results will result in the student not being allowed to sit for the PHAR 2060 Exit Exam/Final Exam. The current cost of the PTCE is \$129, and the student is responsible for this cost. Successfully passing the PTCE is not a requirement to sit for the Exit Exam/Final Exam. However, by passing the PTCE, the student would be considered a Certified Pharmacy Technician (CPhT).

**EXIT EXAM:** All PHAR students are required to take the PHAR Exit Exam at the end of the semester the student is enrolled in PHAR 2060. This exam will be in a multiple choice format, and will also serve as the Comprehensive Final Exam for the PHAR 2060 course. Students must score 70% or above on the exit exam to successfully complete the course. Students scoring below 70% will be required to retake PHAR 2060.

**ATTENDANCE GUIDELINES:** Class attendance is a very important aspect of a student's success. Being absent from class prevents students from receiving the full benefit of a course and also interrupts the learning process. Southeastern Technical College considers both tardiness and leaving early as types of absenteeism. Responsibility for class attendance rests with the student. Regular and punctual attendance at all scheduled classes is required for student success. Students will be expected to complete all work required by the instructor as described in the individual course syllabus.

Instructors have the right to give unannounced quizzes/assignments. Students who miss an unannounced quiz or assignment will receive a grade of 0. Students who stop attending class, but do not formally withdraw, may receive a grade of F and face financial aid repercussions in upcoming semesters.

Instructors are responsible for determining whether missed work may be made up and the content and dates for makeup work is at the discretion of the instructor.

Students will not be withdrawn by an instructor for attendance; however, all instructors will keep records of graded assignments and student participation in course activities. The completion dates of these activities will be used to determine a student's last date of attendance in the event a student withdraws, stops attending, or receives an F in a course.

**SPECIFIC ABSENCES:** Provisions for Instructional Time missed because of documented absences due to jury duty, military duty, court duty, or required job training will be made at the discretion of the instructor.

**SPECIAL NEEDS:** Students with disabilities who believe that they may need accommodations in this class based on the impact of a disability are encouraged to contact Jan Brantley, Room 1208 Swainsboro Campus, 478-289-2274, or Helen Thomas, Room 108 Vidalia Campus, 912-538-3126, to coordinate reasonable accommodations.

**PREGNANCY:** Southeastern Technical College does not discriminate on the basis of pregnancy. However, we can offer accommodations to students who are pregnant that need special consideration to successfully complete the course. If you think you will need accommodations due to pregnancy, please advise me and make

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appropriate arrangements with the Special Needs Office. Swainsboro Campus: Jan Brantley, Room 1208, (478) 289-2274 — Vidalia Campus: Helen Thomas, Room 108, (912) 538-3126.

**WITHDRAWAL PROCEDURE:** Students wishing to officially withdraw from a course(s) or all courses after the drop/add period and prior to the 65% portion of the semester (date will be posted on the school calendar) must speak with a Career Counselor in Student Affairs and complete a Student Withdrawal Form. A grade of "W" is assigned when the student completes the withdrawal form from the course.

Students who are dropped from courses due to attendance (see your course syllabus for attendance policy) after drop/add until the 65% point of the semester will receive a "W" for the course. Abandoning a course(s) instead of following official withdrawal procedures may result in a grade of 'F' being assigned.

After the 65% portion of the semester, the student will receive a grade for the course. (Please note: A zero will be given for all missed assignments.)

There is no refund for partial reduction of hours. Withdrawals may affect students' eligibility for financial aid for the current semester and in the future, so a student must also speak with a representative of the Financial Aid Office to determine any financial penalties that may be assessed due to the withdrawal. All grades, including grades of 'W', will count in attempted hour calculations for the purpose of Financial Aid.

**Remember** - Informing your instructor that you will not return to his/her course does not satisfy the approved withdrawal procedure outlined above.

**MAKEUP GUIDELINES (Tests, quizzes, homework, projects, etc...):** Assignments missed for any reason will be made up at the end of the semester on a date to be scheduled by the instructor. Any quizzes missed due to a student absence generally will not be allowed to be made up. If a lab assignment is missed, the student is completely responsible for arranging make-up lab time at the instructor's convenience.

The instructor may allow students to make up any assignments that were missed due to absence if the instructor is notified in advance of the absence, or if any unforeseen circumstances arise that cause the student to be absent from class. These situations will be dealt with on a case by case basis. The student is responsible for notifying the instructor of any absence, as well as supplying any available documentation concerning the absence in order for the instructor to consider allowing the assignments to be made up

**ACADEMIC DISHONESTY POLICY:** The STC Academic Dishonesty Policy states *All forms of academic dishonesty, including but not limited to cheating on tests, plagiarism, collusion, and falsification of information, will call for discipline.* The policy can also be found in the *STC Catalog and Student Handbook*.

#### **Procedure for Academic Misconduct**

The procedure for dealing with academic misconduct and dishonesty is as follows:

##### **--First Offense--**

Student will be assigned a grade of "0" for the test or assignment. Instructor keeps a record in course/program files and notes as first offense. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus. The Registrar will input the incident into Banner for tracking purposes.

##### **--Second Offense--**

Student is given a grade of "WF" for the course in which offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Registrar will input the incident into Banner for tracking purposes.

##### **--Third Offense--**

Student is given a grade of "WF" for the course in which the offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Vice President for Student Affairs, or designee, will notify the student of suspension from college for a specified period of time. The Registrar will input the incident into Banner for tracking purposes.

**STATEMENT OF NON-DISCRIMINATION:** Southeastern Technical College does not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, disabled veteran, veteran of Vietnam Era or citizenship status, (except in those special circumstances permitted or mandated by law). This school is in compliance with Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, or national origin; with the provisions of Title IX of the Educational Amendments of 1972, which

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prohibits discrimination on the basis of gender; with the provisions of Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of handicap; and with the American with Disabilities Act (ADA).

**GRIEVANCE PROCEDURES:** Grievance procedures can be found in the Catalog and Handbook located on STC's website.

**ACCESS TO TECHNOLOGY:** Students can now access Blackboard, Remote Lab Access, Student Email, Library Databases (Galileo), and BannerWeb via the mySTC portal or by clicking the Current Students link on the STC website at [www.southeasterntech.edu](http://www.southeasterntech.edu).

**GRADING POLICY**

|                   |            |
|-------------------|------------|
| Quiz/Exam Average | 40%        |
| Assignments/Labs  | 30%        |
| <u>Final Exam</u> | <u>30%</u> |
| Total Average =   | 100%       |

**GRADING SCALE**

A: 90-100  
B: 80-89  
C: 70-79  
D: 60-69  
F: 0-59

**TCSG GUARANTEE/WARRANTY STATEMENT:**

*The Technical College System of Georgia guarantees employers that graduates of State Technical Colleges shall possess skills and knowledge as prescribed by State Curriculum Standards. Should any graduate employee within two years of graduation be deemed lacking in said skills, that student shall be retrained in any State Technical College at no charge for instructional costs to either the student or the employer.*

**PHAR 2060**  
**Advanced Pharmacy Technology Principles**  
**SUMMER SEMESTER 2016 LESSON PLAN**

| Date                             | Chapters / Lesson                                       | Content  | Assignments & Exams Due   | Comp Area        |
|----------------------------------|---|--|---|------------------|
| <b>Week 1 (May 16 – May 22)</b>  |   |  |   |                  |
| 5/18<br>Wed.                     | Introduction<br>Chapters<br>1—2<br><br>Job<br>Readiness | Intro to course/syllabus/books<br><br>Chapter 1: The Importance of Certification<br>and Taking a High-Stakes Test<br><br>Chapter 2: Pharmacy Calculations<br><br>Job Readiness | Read and Review Chapter 1<br>Discuss Ch. 1 Thinking Beyond the Exam<br><br>Read and Review Chapter 2<br>Discuss Ch. 2 Thinking Beyond the Exam<br>Calculations Homework – Due 5/27<br><br>Job Readiness Guest Speaker<br>Job Readiness: Resume – Due 5/27   | 1—4 ; 7<br>A—C   |
| <b>Week 2 (May 23 – May 29)</b>  |   |  |   |                  |
| 5/25<br>Wed.                     | Chapters<br>1—2<br><br>Job<br>Readiness                 | Chapter 1: The Importance of Certification<br>and Taking a High-Stakes Test<br><br>Chapter 2: Pharmacy Calculations<br><br>Job Readiness<br><br>Exam #1: Chapters 1-2          | Review Chapter 2<br>Discuss Ch. 2 Thinking Beyond the Exam<br><br>Exam #1: Chapters 1-2<br><br>Job Readiness: Resume – Due 5/27<br><br>Read and Review Chapter 3<br>Practice Exam #1 – Due 6/3<br>(Student CD – Reported Feedback)  | 1—4 ; 7<br>A—C   |
| <b>Week 3 (May 30 – June 5)</b>  |   |  |   |                  |
| 6/1<br>Wed.                      | Chapters<br>3—4   | Chapter 3: Pharmacology for Technicians<br><br>Chapter 4: Pharmacy Law and Regulation  | Review Chapter 3<br>Discuss Ch. 3 Thinking Beyond the Exam<br><br>Read and Review Chapter 4<br>Discuss Ch. 4 Thinking Beyond the Exam<br><br>Practice Exam #2 – Due 6/10<br>(Student CD – Reported Feedback)  | 1—4 ; 8<br>A ; C |
| <b>Week 4 (June 6 – June 12)</b> |   |  |   |                  |
| 6/8<br>Wed.                      | Chapters<br>5—7   | Exam #2: Chapters 3—4<br><br>Chapter 5: Sterile and Nonsterile<br>Compounding<br><br>Chapter 6: Medication Safety<br><br>Chapter 7: Pharmacy Quality Assurance                 | Exam #2: Chapters 3—4<br><br>Read and Review Chapters 5<br>Discuss Ch. 5 Thinking Beyond the Exam<br><br>Read and Review Chapter 6<br>Discuss Ch. 6 Thinking Beyond the Exam<br><br>Read and Review Chapter 7<br>Discuss Ch. 7 Thinking Beyond the Exam<br><br>Lab<br><br>Practice Exam #3 – Due 6/17<br>(Student CD – Reported Feedback) | 1—5 ; 8<br>A ; C |

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| Week 5 (June 13 – June 19)                           |                           |   |   |                  |
|--|---------------------------|---|---|------------------|
| 6/15<br>Wed.   | Chapters<br>8—9           | Exam #3: Chapters 5—7<br><br>Chapter 8: Medication Order and Entry<br>Process<br><br>Chapter 9: Pharmacy Inventory<br>Management  | Exam #3: Chapters 5—7<br><br>Read and Review Chapter 8<br>Discuss Ch. 8 Thinking Beyond the Exam<br><br>Lab<br><br>Read and Review Chapter 9<br>Discuss Ch. 9 Thinking Beyond the Exam  | 1—4 ; 7<br>A—C   |
| Week 6 (June 20 – June 26)                           |                           |   |   |                  |
| 6/22<br>Wed.   | Chapters<br>10—11         | Exam #4: Chapters 8-9<br><br>Chapter 10: Pharmacy Billing and<br>Reimbursement<br><br>Chapter 11: Pharmacy Information System<br>Usage and Application<br><br>Exam #5: Chapters 10—11 | Exam #4: Chapters 8-9<br><br>Read and Review Chapter 10<br>Discuss Ch. 10 Thinking Beyond the<br>Exam<br><br>Read and Review Chapter 11<br>Discuss Ch. 11 Thinking Beyond the<br>Exam<br><br>Lab<br><br>Exam #5: Chapters 10—11<br><br>Practice Exam #4 – Due 7/8<br>(Student CD – Reported Feedback) | 1-3 ; 7-8<br>A—C |
| Week 7 (June 27 – July 3)                            |                           |   |   |                  |
| 6/29<br>Wed.   | Chapters<br>1—11          | PTCB Practice and Review  | PTCB Practice and Review<br><br>Practice Exam #5 – Due 7/15<br>(Student CD – Reported Feedback)   | 1-3 ; 6-8<br>A—C |
| Week 8 (July 4 – July 10)                            |                           |   |   |                  |
| <i>Summer Break (Student Holidays)</i>               |                           |   |   |                  |
| Week 9 (July 11 – July 17)                           |                           |   |   |                  |
| 7/13<br>Wed.   | Chapters<br>1—11          | PTCB Practice and Review  | PTCB Practice and Review  | 1-3 ; 6-7<br>A—C |
| Week 10 (July 18 – July 24)                          |                           |   |   |                  |
| 7/20<br>Wed.   | Chapters<br>1—11          | PTCB Practice and Review  | PTCB Practice and Review  | 1—8<br>A—C       |
| Week 11 (July 25 – July 31) – Final Exam (Exit Exam) |                           |   |   |                  |
| 7/27<br>Wed.   | Final Exam<br>(Exit Exam) | Final Exam Review<br>Comprehensive Final Exam   | Final Exam Review<br>Comprehensive Final Exam   | 1—8<br>A—C       |

**\* Competency Areas:**

1. Physician Orders
2. Patient Profiles
3. Pharmacy Data Systems
4. Job Readiness
5. Legal Requirements
6. Inventory and Billing
7. Pharmaceutical Calculations Review

**8. Pharmacology Review**

**\*\*General Core Educational Competencies**

- A. The ability to utilize standard written English.
- B. The ability to solve practical mathematical problems.
- C. The ability to read, analyze, and interpret information.

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## Southeastern Technical College Pharmacy Technology Diploma Program

I have read and understand the syllabus for PHAR 2060. I have also been given the opportunity to ask questions to clarify any requirements listed on the syllabi. By signing this agreement I am acknowledging that I fully understand my requirements and grading criteria that I am responsible for. I agree to follow the guidelines and rules listed on the syllabi.

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Print Name

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Student Signature

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Date

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