

Disease Processes and Therapeutics III: PHAR 587 Section 01

I. Contact Information

Shawn M. Manor, Pharm.D, BCPS
Claiborne Bldg 112
Shreveport Campus: (318)632-2007
Ext.: 230
E-mail: smanor@lsuhsc.edu

Tibb F. Jacobs, Pharm.D., BCPS
Claiborne Bldg 124
Shreveport Campus: (318)632-2007
Ext.: 225
tjacob@lsuhsc.edu

II. Course Prerequisites/Corequisites

Prerequisite: 414, 418, 586

III. Course Description

Pathogenesis, diagnosis and rational therapeutic approaches to treatment of selective disease states in humans.

IV. Curricular Outcomes

See Attachment 1

V. Course Objectives and Outcomes

Upon completion of this course, the student should be able to:

A. PHARMACEUTICAL CARE Provide pharmaceutical care in cooperation with patients, prescribers, and other members of an interprofessional health care team based upon sound therapeutic principles and evidence-based data, taking into account relevant legal, ethical, social, economic, and professional issues, emerging technologies, and evolving pharmaceutical, biomedical, sociobehavioral, and clinical sciences that may impact therapeutic outcomes.

1. Provide patient-centered care.
 - a. Design, implement, monitor, evaluate, and adjust pharmaceutical care plans that are patient-specific and evidence-based.
 - b. Retrieve, analyze, and interpret the professional, lay, and scientific literature to provide drug information to patients, their families, and other involved health care providers.
2. Provide population-based care.
 - a. Develop and implement population-specific, evidence-based disease management programs and protocols based upon analysis of epidemiologic and pharmaco-economic data, medication use criteria, medication use review, and risk reduction strategies.
 - b. Retrieve, analyze, and interpret the professional, lay, and scientific literature to provide drug information to other health care providers and to the public.

B. PUBLIC HEALTH Promote health improvement, wellness, and disease prevention in cooperation with patients, communities, at-risk populations, and other members of an interprofessional team of health care providers.

1. Assure the availability of effective, quality health and disease prevention services.
 - a. Apply population-specific data, quality assurance strategies, and research processes to develop identify and resolve public health problems.

VI. Course Topics

Infectious diseases, pediatrics, geriatrics, hepatic diseases, and thyroid disorders.

VII. Instructional Methods and Activities

Instructional methods may include: traditional lectures, distance learning, in-class discussion of patient cases, small group discussion, problem-based learning, case-

based learning, and individual projects. Given the nature of the topics offered during this course, students are expected to have an understanding of the various antibiotic classes. While this information has been presented in prior courses, quizzes will be administered at the beginning of this course to ensure all students have the necessary knowledge to be successful in this course. In addition, OPTIONAL review sessions will be scheduled to review the antibiotics prior to the quizzes. The students are encouraged to take advantage of this additional learning opportunity.

VIII. Evaluation and Grade Assignment

- There will be three examinations and a final examination, each encompassing new material and may include comprehensive material as necessary.
- Quizzes will be given, **announced or unannounced**, as deemed necessary by each faculty member.
- Quizzes and extra assignments will count for 100 points towards the final course grade. This grade will be based on a percentage of quiz/assignment points and then given its equivalent score out of 100 points.
 - *Example: The student obtains 100 of the available 130 possible quiz/assignment points which results in a 77%. The student will receive 77 points towards the final course grade.*
- All exams will be two-hour exams. The first three exams will be given during regularly scheduled class periods.
- Exam dates are scheduled in the course syllabus and will only be changed in the event of University closure.
- Exams may be multiple choice, fill in the blank, short-answer, case or scenario based discussion, essay, or any other format deemed necessary by the lecturers and course coordinator.
- Sample exam questions as follows:
 1. Describe the structural reason between Gram-positive and Gram-negative cells' response to this stain, include difference in resultant color. BE SPECIFIC (4 points)
 2. Which of the following would be the best option of antibiotic therapy for a non-type I penicillin allergy? (2pts)
 - a. Amoxicillin
 - b. Bactrim
 - c. Cefdinir
 - d. Augmentin
 3. Ms. Agnes is an 81-year old female who is referred to your medication management clinic with complaints of loss of large volumes of urine, a sense of urinary urgency and increased nighttime frequency, causing her to get up every 2 hours during the night to urinate. She claims that she always remembers to take her medications in the morning, but that memory problems frequently cause her to forget many doses of her meds later in the day. She also admits to taking "catnaps" in the afternoon after watching *All My Children*, but states she has difficulty falling asleep since her husband passed away last year. She has read in the newspaper that the Council on Aging is having a vaccination clinic next week and she has questions about the new shingles vaccine. She states she has not received any vaccinations since she got her last tetanus shot & the pneumonia vaccine 8 years ago. PMH is positive for HTN, osteoarthritis, shingles, & depression. As requested, she brought all of her medications for evaluation.

Meds:
amlodipine (Norvasc®) 10 mg every morning
hydrochlorothiazide 12.5 mg every morning
clonidine (Catapres®) 0.1 mg TID
propoxyphene/APAP 100/650 mg (Darvocet-N 100®) BID prn arthritis pain
amitriptyline 50 mg every morning for depression

According to the *Beers Criteria for Potentially Inappropriate Medication Use in Older Adults*, which of the following drug(s) is/are considered inappropriate for Ms. Agnes?

- A. amitriptyline 50 mg every morning
- B. propoxyphene/APAP 100/650 mg BID prn
- C. hydrochlorothiazide 12.5 mg every morning
- D. A and B
- E. A, B, and C

4. Which of the following statements is/are correct concerning drug induced hepatotoxicity?

- I. Women are more predisposed than men because they tend to have a higher expression of CYP 3A4 and 2E1
- II. Nutrition only alters phase II reactions
- III. Oral contraceptives can predispose women to injury due to altered bile flow

- I only
- III only
- I and III only
- II, III only
- I, II, III

- Normal laboratory values will be provided for all questions, unless otherwise specified during class. Lab values that are specific to a particular disease state will not be provided.
- Information acquired from previous lectures in the course and from other courses in the professional pharmacy curriculum may be needed in preparing for these examinations.
- Exams will cover material (readings, outside assignments) not covered in class.
- **Acceptable exam behavior:**
 - Only a writing instrument and calculator should be at your desk. All book bags and other bags should be left at the front of the room.
 - Cell phones should be turned off and left with your belongings in the front of the room.
 - Students will not be allowed to leave the room to go to the restroom during the exam, unless accompanied by a faculty member of the same sex, provided there is another proctor to remain in the room.
 - Use of programmable calculators will not be allowed during quizzes or exams.
- **In the event that a question is eliminated from an exam after it has been printed, the exam will be graded based on the remaining number of questions and adjusted to represent correct number of points.**
 - For example, on a 100 point exam if one 2 point question is eliminated, the exam will now be worth 98 points, not 100 points. No credit will be given for the eliminated question.
 - Students wishing to challenge a question on the test must provide the course coordinator with a **written (email preferred)** statement that identifies which question(s) being challenged, why the student feels his or her answer(s) is/are correct and references from recent (published within the last 1-2 years) primary or tertiary literature to support the claim. Problems or issues with question(s) should be first directed, via e-mail, to the faculty member who presented the material. The course coordinator should be copied on this communication. In the event that the faculty member and the student cannot arrive at an acceptable conclusion, the course coordinator should be contacted regarding the issue. Discussion of a dispute will occur only after a written

query is submitted. Challenges of test questions will only be considered ***within 2 weeks*** of when the test scores are posted.

- Individual test grades for the course will be based strictly upon these percentages. There will be no curving or adjustments of grades except in the case of an incorrect question.
- Service Learning project
 - Will be assigned according to Dr. Andrews
 - **Final course grade for PHAR 587 will be held pending completion of the service project**
 - See Attachment 2

Grading Scale:

89.5 – 100%	A
79.5 – 89.4%	B
69.5 - 79.4%	C
59.5 – 69.4%	D
<59.5%	F

There will be no curving or adjustment of grades except in cases of incorrect or inappropriate individual questions.

Exam breakdown:

Each exam will be proportional to time spent in class on each subject.

Exam I	100 points
Exam II	110 points
Exam III	100 points
Quizzes/Assignments	100 points
Final	
New material	70 points
<u>Old Material</u>	<u>130 points</u>
Total	200 points
Total for class	
	610 points

Undergraduate mid-term grades will be posted on-line for students to view via Arrow. Mid-term grades indicate a student's status at mid-semester only and do not indicate the final performance outcome of a student.

IX. Class Policies and Procedures

At a minimum, all policies stated in the current ULM *Student Policy Manual & Organizational Handbook* should be followed (see <http://www.ulm.edu/studentpolicy/>). Additional class policies include:

A. Textbook(s) and Materials:

1. Required: Dipiro JT, Talbert RL, Yee G, et al. *Pharmacotherapy: A Pathophysiologic Approach*. 6th edition, New York, McGraw-Hill, Inc., 2005.
2. Additional reading materials may be posted on Blackboard by course faculty.

B. Attendance Policy:

Class attendance is regarded as an obligation as well as a privilege, and students are expected to know attendance regulations and to attend regularly and punctually at classes in which they are enrolled. Failure to do so: (1) may prevent access to the classroom during regularly scheduled times; (2) may jeopardize a student's scholastic

standing; and (3) may lead to suspension from the college or University. Students shall follow the ULM COP Excused Absence Policy. Please refer to official document for details. All excused absences must be validated by OSPA according to the policy timeline. The course coordinator is the only person who can grant an “excused absence”. Professors shall accept an official University excuse. With the following exceptions professors are to determine whether absences are excused or unexcused: 1) Absences arising from authorized trips away from the University or from special duties at the University shall be excused. 2) Absences arising from a student’s confinement in a hospital or other in-patient facility or doctor’s excused absences shall be excused. Students are responsible for verifying this information to the faculty. 3) Absences arising from a death in the immediate family shall be excused. The immediate family is defined as spouse, child, step-child, mother, father, sister, brother, grandmother, grandfather, step-mother, step-father, step-brother, step-sister, aunt, uncle, mother-in-law or father-in-law.

C. Make-up Policy:

Each student is expected to attend each exam at the date and time specified. If a student cannot attend an exam due to valid University excuse, he/she must speak directly with the course coordinator, as soon as possible. The course coordinator **must** be notified **prior** to an examination if a student misses an exam. The ULM COP Excused Absence Policy must be followed. Please refer to the official document for details. In case of emergency, the course coordinator must be notified within 48 hours of the emergency. Failure to do so will result in a zero (0) grade for that exam. Make-up exams will be prepared at the same or higher level than the original exam. The format of the make-up exam may be written or oral. Failure to attend a scheduled make-up exam will result in a zero (0) grade for that exam. *Students missing an exam due to a University approved excuse will take the make-up exam during the week of finals, or as determined by the course coordinator.*

D. Academic Integrity:

Faculty and students must observe the ULM published policy on Academic Dishonesty (see Page 4 in ULM *Student Policy Manual* - <http://www.ulm.edu/studentpolicy/>).

E. Course Evaluation Policy:

At a minimum, students are expected to complete the on-line course evaluation.

F. Student Services:

Information concerning student services in the College of Pharmacy can be found in the College of Pharmacy Student Handbook. In particular, students pay special attention to the Colleges technical standards and policies concerning students with special needs. The OSPA “Students with Special Needs” policy will be followed. Students must contact faculty the first week of class to discuss their special needs. ULM student services, such as Student Success Center (<http://ulm.edu/cass/>), Counseling Center (<http://ulm.edu/counselingcenter/>), and Student Health Services, is available at the following Student Services web site <http://ulm.edu/studentaffairs/>

G. Emergency Procedures:

Please review the emergency escape plan in the classrooms and hallways of the Bienville Building. Move quickly and orderly to the appropriate stairwell

and exit the building. The meeting place for this class will be at the ULM College of Pharmacy sign on the lawn in the front of the Bienville building. Under no circumstances is the elevator to be used for emergency evacuation. Any student needing assistance should notify the professor immediately.

H. Discipline/Course Specific Policies:

Not Applicable

X. Tentative Course Schedule

The instructor reserves the right to adjust the schedule as needed.

Lecture	Day	Date	587 Dr. Manor Room 170 T, R 1-2:50 pm. F 11-11:50 am		Pts on Exam/Due Date	Pts on Final/Due Date	Quizzes
			Topic	Instructor			
1	T	25-Aug	Microbiology Review	Akins	50 pts/Sept 14	22 pts/Dec 1	
2	H	27-Aug	Microbiology Review	Akins			Abx Quiz
3	F	28-Aug	Lab/PK-PD	Akins			
4	T	1-Sep	Antimicrobial Therapy	Akins			
5	TH	3-Sep	Antimicrobial Resistance	Akins			Abx Quiz
6	F	4-Sep	Skin & Soft Tissue	Biglane	20 pts/Sept 14	8 pts/Dec 1	
	M	7-Sep	Labor Day				
7	TU	8-Sep	Bone and Joint	Biglane			
8	TH	10-Sep	Catheter Related/Endocarditis	Akins	10 pts/Sept 14	4 pts/Dec 1	Abx Quiz
9	F	11-Sep	Intraabdominal	Jastram	20 pts/Sept 14	8 pts/Dec 1	
10	TU	15-Sep	Meningitis	Jastram			
11	TH	17-Sep	UTI/STD	Biglane	20 pts/Oct 12	8 pts/Dec 1	
12	F	18-Sep	STD	Biglane			
	TU	22-Sep	Exam 1: Lectures 1-10 (100 pts)				
13	TH	24-Sep	Pneumonia	Leader	30 pts/Oct 12	14 pts/Dec 1	
14	F	25-Sep	Pneumonia	Leader			
15	TU	29-Sep	Pneumonia/TB	Leader			
16	TH	1-Oct	Fungal Infections	Akins	20 pts/Oct 12	8 pts/Dec 1	
17	F	2-Oct	Fungal Infections	Akins			
18	TU	6-Oct	Sepsis	Riley	30 pts/Oct 12	12 pts/Dec 1	
19	TH	8-Oct	Sepsis	Riley			
20	F	9-Oct	Sepsis	Riley			
21	TU	13-Oct	Otitis Media	Tice	10 pts/Oct 12	22 pts/Dec 1	
22	TH	15-Oct	Immunizations	Tice			
23	F	16-Oct	Pediatrics	Tice	40 pts/Nov 4		
	TU	20-Oct	Exam 2: Lectures 11-21 (110 pts)				
24	TH	22-Oct	Pediatrics	Tice			
	F	23-Oct	Fall Holiday				
	M	26-Oct	Fall Holiday				
25	TU	27-Oct	Pediatrics	Tice			Peds Quiz
26	TH	29-Oct	HIV	Caldwell	30 pts/Nov 4	12 pts/Dec 1	
27	F	30-Oct	HIV	Caldwell			

28	TU	3-Nov	HIV	Caldwell			
29	TH	5-Nov	Geriatrics	Zagar	30 pts/Nov 4	12 pts/Dec 1	Geriatrics Quiz
30	F	6-Nov	Geriatrics	Zagar			
31	TU	10-Nov	Geriatrics	Zagar			
	TH	12-Nov	Exam3: Lectures 22-31 (100 points)				
32	F	13-Nov	Path of Hepatic System/LFT	Manor		50 pts/Dec 1	
33	TU	17-Nov	Drug induced Liver Disease	Manor			Hepatic Quiz
34	TH	19-Nov	Hepatitis	Manor			
35	F	20-Nov	Hepatitis	Manor			
36	TU	24-Nov	Cirrhosis and Hepatic Failure	Manor			Hepatic Quiz
	W	25-Nov	Thanksgiving Holiday				
	TH	26-Nov	Thanksgiving Holiday				
	F	27-Nov	Thanksgiving Holiday				
37	TU	1-Dec	Cirrhosis and Hepatic Failure	Manor			
38	TU	3-Dec	Thyroid	Andrews			
39	F	5-Dec	Thyroid	Andrews		20 pts/Dec 1	
	M	7-Dec	Finals Week				

Attachment 1

Competency Statements/Educational Outcomes

1. Provide Comprehensive Patient Specific Pharmaceutical Care.

- A. Evaluate the appropriateness of a given prescription or medication order based on patient and disease-specific factors.
 - i. Analyze the prescription regarding the medication, dose, delivery form, and duration of use as being appropriate for the patient and disease state.
 - a. Collect patient-specific data regarding demographics, medical history, diagnosis, physical assessment, and medication history.
 - 1) Identify and collect pertinent information from the medical chart, database, and/or the patient/caregiver interview.
 - a) Recognize appropriate patient- and drug-specific factors that will impact the drug regimen.
 - b. Analyze and interpret information gathered to identify any drug-related problem.
 - 1) Assess the prescription for interaction potential, including interactions with other medications (both prescription and non-prescription), disease states, foods, and herbals.
 - 2) Identify appropriate duration of therapy for that disease state.
- C. Develop and implement an evidence-based care plan. (pharmacology, med chem., physiology, pathology, etc.)
 - i. Identify goals of therapy that are individualized to the patient.
 - ii. Develop a plan of care that includes interventions to resolve drug therapy problems, achieve the goals of therapy, and prevent drug therapy problems.
 - iii. Develop a schedule to follow-up and evaluate the effectiveness of outcomes from drug therapies and assess any adverse events experienced by the patient.
 - iv. Evaluate patient outcomes with respect to the achievement of goals of therapy, patient adherence, patient safety, and the development of new drug therapy problems.

2. Think Critically.

- A. Identify, retrieve, understand, analyze, synthesize, and evaluate information needed to make informed, rational, and ethical decisions.
 - i. Systematically gather, organize, and extract relevant information using a variety of methods and research tools.
 - ii. Analyze information within appropriate scientific, social, and clinical contexts.

- iii. Synthesize information in order to draw conclusions, hypothesize, conjecture alternatives, or plan a course of action.
 - iv. Evaluate conclusions and solutions according to appropriate criteria, and revise as necessary.
 - v. Provide support for rationale, solutions, and results.
- B. Solve complex problems that require an integration of one's ideas and values within a context of scientific, social, cultural, legal, clinical, and ethical issues.
- i. Interpret problems within appropriate contexts.
 - ii. Prioritize problems based on identifiable criteria and standards.
 - iii. Apply systematic problem-solving strategies.
 - iv. Articulate and implement a defensible solution and apply appropriate criteria to monitor outcomes.
 - v. Implement modifications based on monitoring data.
- C. Display habits, attitudes, and values associated with mature critical thinking.
- i. Evaluate personal assumptions, biases, prejudices, and opinions.
 - ii. Display an openness to new ideas and a tolerance for ambiguity.
 - iii. Display inquisitiveness and commitment to the pursuit of truth.
- 3. Demonstrate Appropriate Interpersonal, Professional, and Ethical Behaviors.**
- A. Maintain professional competence.
- i. Continually strive to maintain knowledge and maintain professional competence.
 - ii. Continually assess his or her learning needs and develop the ability to respond appropriately.

ATTACHMENT 2

University of Louisiana at Monroe College of Pharmacy

Service Learning Projects

Contact Information

Coordinator: Laurel Andrews, Pharm.D. **Office Hours:** Monday through Friday
Office: Beinville 174F by appointment
Phone: 318-342-1721
e-mail: landrews@ulm.edu

Course Prerequisite

- Enrollment in the College of Pharmacy

Course Description

Course Objectives and Outcomes

Professional Practice-Based Outcomes

- I.F.1.b. Observe legal and ethical guidelines for protecting the confidentiality of patient information.
- I.G. Display the attitudes, habits, and values required to render pharmaceutical care.
- I.G.1. Provide pharmaceutical care ethically and compassionately.
- I.G.1.a. Give the well being of the patient highest consideration in provision of pharmaceutical care.
- I.G.1.b. Exhibit empathy and a caring attitude when dealing with patients.
- I.G.1.d. Respect the dignity and autonomy of individual patients.
- I.G.2. Provide pharmaceutical care in a professional manner.
- I.G.2.a. Dress and speak in ways that convey a professional image.
- I.G.2.b. Maintain personal self-control and professional decorum.
- IV.B. Promote public awareness of health and disease.
- IV.B.1. Provide disease prevention/detection programs to the public.
- IV.B.1.b. Select and implement an appropriate strategy to prevent (e.g., immunizations) or detect (e.g., blood cholesterol screening) disease in the target population.
- IV.B.1.c. Provide recommendations for follow-up and/or refer patients for further medical evaluation.
- V.A. Provide pharmaceutical information to health professionals and the general public.
- V.B. Design, develop and present educational materials tailored to the needs and educational background of a given audience.
- V.B.1. Identify the educational needs and background of the intended audience.
- V.B.2. Choose appropriate media to communicate effectively.
- V.B.3. Choose health education strategies that are appropriate to the type of health care education program.
- V.B.4. Use health education strategies effectively.
- V.B.5. Demonstrate effective oral and written communication tailored to the individual needs of the audience and type of setting.
- V.B.6. Evaluate the impact of an educational program on the behaviors/performance of program participants.

General Ability-Based Outcomes

- I.C. Display habits, attitudes, and values associated with mature critical thinking.
- I.C.1. Evaluate personal assumptions, biases, prejudices, and opinions.
- I.C.2. Display an openness to new ideas, a tolerance for ambiguity, and incompleteness.
- I.C.4. Adopt multiple perspectives in personal thinking to avoid ethno-centricity and intolerance.
- II. Communicate clearly, accurately, and persuasively with various audiences using a variety of methods and media.
- II.A. Read and listen effectively.
- II.B. Effectively communicate in speaking and writing, choosing strategies and media that are appropriate to the purpose of the interaction and to the ideas, values, and background of the audience.
- II.B.1. Speak and write clearly, using logical patterns of organization.
- II.B.2. Communicate persuasively by establishing trustworthiness, incorporating appropriate use of emotion, and providing sufficient logical arguments and evidence.
- II.B.3. Adapt topics, content, style, tone, and arguments to the beliefs, attitudes, values and backgrounds of the audience.
- II.B.5. Communicate effectively through a variety of media and strategies.
- III. Make rational, ethical decisions regarding complex personal, societal, and professional situations within a context of personal and professional values.
- III.A.1. Recognize the influence of personal values in personal and professional settings.
- III.A.3. Respect the values of others within decision making.
- IV.B. Demonstrate sensitivity and tolerance within multicultural interactions and settings.
- V. Demonstrate an appreciation of the obligation to participate in efforts to help individuals and to improve society and the health care system.
- V.A. Demonstrate personal growth through volunteer activities in the community.
- V.B. Demonstrate leadership abilities in community activities that involve health and human service initiatives focused on individuals or groups.
- V.C. Advocate improved professional approaches to meet the pharmacy-related needs of society and individual patients.
- V.D. Promulgate a philosophy of care within health care settings.
- VI. Function effectively in interactions with individuals, within group situations, and within professional organizations and systems.
- VI.A. Evaluate different types of interpersonal behaviors and their roles in effective social interactions.
- VI.B. Demonstrate interaction behaviors that are appropriate for a particular interpersonal situation.
- VI.C. Evaluate the process and outcomes of interpersonal interactions and modify as appropriate.

Course Requirements and Activities

Evaluation and Grade Assignment

To receive credit for the service learning project, ***all*** of the following requirements must be met:

- Arrive 10 minutes prior to assigned time.
- Complete the reflective writing assignment in PEMS within one week of completing the project.
- Provide a ***University-approved excuse*** for any missed projects.
- Participate in all group meetings and planning if project is a group project.
- For group projects, complete a peer evaluation form on all members of the group to which you are assigned.

You will receive an incomplete for this project if all of the above requirements are not met, which will then result in an incomplete for the class this project is assigned in. The project will have to

be made-up in order to receive credit for the project and your grade in the class. The make-up project will not necessarily be during the same semester as the assigned project, nor does it have to be the same exact project.

Course Policies and Procedures

At a minimum, all policies stated in the current ULM *Student Policy Manual & Organizational Handbook* should be followed (see <http://www.ulm.edu/studentpolicy/>). Additional class policies include:

- **Attendance Policy:**
 - Consistent and timely attendance. Absence or late arrival at the practice site must be approved by the professor.
- **Academic Integrity:**
 - Faculty and students must observe the ULM published policy on Academic Dishonesty (see Page 4 in ULM *Student Policy Manual* – <http://www.ulm.edu/studentpolicy/>).
- **Student Services:**
 - Information about ULM student services, such as Student Success Center (<http://ulm.edu/cass/>), Counseling Center (<http://ulm.edu/counselingcenter/>), Special Needs (<http://ulm.edu/counselingcenter/special.htm>) and Student Health Services, is available at the following Student Services web site <http://ulm.edu/studentaffairs/>.
- **Dress Code**
 - Personal appearance is regarded as an important aspect of a student's overall evaluation, and should reflect that of a professional. Any student found in violation of the dress code will be asked to leave their experience and will receive an unexcused absence. ***Students must be aware of the dress code in the institution they are working. If the institution's dress code is stricter, the institution's dress code must be followed.***
 - Lab coat - Students must wear a clean **short** (hip length) white lab jacket at all times with the University of Louisiana at Monroe School of Pharmacy name badge sewn on the left shoulder.
 - Name badge - A University approved name badge identifying the student as a ULM School of Pharmacy student must be worn at all times. In addition, an individual institutional identification must be worn if required.
 - Shirt and tie - Men must wear clean pressed collared-shirts with tie.
 - Hats and Scarves - Hats and other coverings should not be worn.
 - Miniskirts - Skirts should not be shorter than 2 inches above the knee.
 - Halter-tops and sundresses - Halter, tube, or sleeveless tops along with sheer or sleeveless sundresses should not be worn.
 - Jeans – Jeans of **any color** should not be worn.
 - Hosiery – Ladies should wear hosiery at all times. Men should wear socks.
 - Hair - Hair including beards and side burns should be neatly groomed.
 - Hygiene – Daily bathing and the use of deodorant are encouraged.
 - Make-up – Should be natural and inconspicuous.
 - Perfume/Cologne/After shave – Should be used sparingly or not at all.

- Hand and nails – Should be well manicured.
- Shoes – Should be polished and in good condition. High heeled and platform shoes over 2 inches should not be worn. Open toed shoes are discouraged and are not allowed in any hospital environment.
- Jewelry – Excessively large or dangling jewelry or earrings or several “clanging type” bracelets are unacceptable.