

Elective Course Descriptions

College of Pharmacy

University of Florida

2009-2010

The following is a general list of elective course descriptions. An elective may not be offered in a particular semester even if it is listed here. Please check the current course schedule for your campus to determine which electives will be offered during any given semester.

Tuition and fees for electives can vary depending on the following conditions. Please check the charges that appear on ISIS for your registration:

- ❖ If an elective has a PHA 5000 level designation, this course is included in the annualized tuition and fees for the Doctor of Pharmacy degree.
- ❖ If an elective has a non-PHA prefix at the 5000 level, this course is NOT included in the annualized tuition and fees. The charge for this non-PHA elective course is the graduate tuition per credit hour. This amount is added to the annualized tuition and fees for that semester.
- ❖ If an elective has a PHA prefix at the 6000 level, this course is a graduate course for the Doctor of Philosophy degree program and is NOT included in the annualized tuition and fees for the Doctor of Pharmacy degree program. The charge for this PHA 6000 level elective course is the graduate tuition per credit hour. This amount is added to the annualized tuition and fees for that semester.
- ❖ If an elective is selected that is offered through graduate distance education programs for the Masters of Pharmaceutical Science degree (Forensic Science and Regulatory Affairs programs), this course is NOT included in annualized tuition and fees for the Doctor of Pharmacy degree. These two masters distance education degree programs are “off-book” with charges designed to support their operation and delivery. These course fees are added to the annualized tuition and fees for that semester.

Note: The annualized tuition and fees arrangement is approved by the Board of Trustees and the President’s Office in conjunction with the Dean’s Office. The above stipulations are established by University regulation regarding annualized tuition and fees for professional degree programs.

Elective Course Descriptions

Fall Semester

PHA 5009 Global Health Seminar 1 credit
(Fall Semester)

The purpose of this course is to expose professional and graduate students in the College of Pharmacy, in collaboration with other Health Science Center students, to global health issues that affect people, animals and the environment. This elective course addresses global climate change and public health; AIDS/HIV; tuberculosis; malaria; emergency response; sustainable agriculture, hunger and poverty; animal control; rabies; traditional (folk) medicine; global vaccine initiatives; public health; water quality and public health and wildlife conservation.

PHA 5172 Biotechnology and Drug Development 2 credits
(Fall Semester)

This course will focus on both the development (industry research), use, and marketing of biotechnology products, and especially how they differ from drugs. The class will be an interactive format with student questions / discussion being fostered in class, along with student product presentation by each student. Lectures for biotechnology will include the many research methodologies for product discovery and product discussions with therapeutic applications. Biotechnology topics include molecular biology, monoclonal antibodies, recombinant proteins, molecular engineering, gene therapy, and economic issues. Lectures for the biopharma industry involve the challenges regarding discovery research, development, formulations and manufacturing, regulatory, government, marketing, costs, and business issues in the creation of new products for patient care, both biologicals and drugs. The course will require students to assimilate the information from pharmacology and pharmacotherapy and be able to write out and verbally present biotech and industry issues. (Dr. Ron Evens)

PHA 5895 Introduction to Clinical Teaching in Academia 1 credit
(Fall Semester)

The goal of this course is to provide students with an interest in pursuing a position in academia with exposure to pharmacy education and the requirements of faculty positions. Students will complete assignments for the discussions and those sessions will be interactive. Students are also required to provide a brief presentation to the class. (Professor Tom Munyer)

PHA 5922C Thinking Skills 2 credits
(Fall Semester)

This course meets for one two-hour session each week. All materials are available on Blackboard. The course has two main parts, critical thinking and lateral thinking. Students must purchase two books with required readings. Multiple assignments must be completed on Blackboard for each session. Class sessions require assignments to be turned in, student presentations, discussion of assignments and readings. There are two debates during the semester. Students work in a group for many assignments. Groups consist of 4-5 students with the group remaining the same composition for the entire semester. (The course has an enrollment minimum of at least 10 students per distance education campus site and a cap of 20 students on the Gainesville campus site.) (Dr. Michael Schwartz)

HUN 5246 Current Issues in Dietary Supplements

2 credits

(Fall Semester)

Not included in annualized tuition and fees. Graduate tuition will be charged extra.

This course includes federal laws and regulations covering the definition, marketing, and labeling of dietary supplements. Discussions are held on specific vitamins, minerals, herbs, and ergogenic aids. Scientific literature and public information on dietary supplements are examined. (Dr. Sue Percival)

GEB 6156 Entrepreneurial Opportunities

2 credits

(Fall & Spring—first 8 weeks)

Not included in annualized tuition and fees. Graduate tuition will be charged extra.

This course is designed to provide students from all disciplines an introduction to entrepreneurship. The entrepreneurial approach is defined as pursuit of opportunity without regard to initial resources. This view of management requires planning, risk control, leadership, and team building. This is a seven-week module based course. All lectures are pre-taped and converted to streaming video. Students use ELearning. This is a modular course. (Arnold A. Heggstad, Holloway Professor of Finance and Entrepreneurship, College of Business)

Spring Semester: First Eight Weeks

3PD

PHA 5222 Pharmacy Management

2 credits

(Spring Semester – first 8 weeks)

This course covers the roles and responsibilities of a pharmacy manager including planning, organizing, directing, and controlling business operations. There will be weekly discussion sections that focus on applications in community and institutional pharmacy settings. As part of the course students will prepare a strategic plan for exploring a managerial career and plan structured observations of managerial functions during their advanced practice experiences. Prerequisites: 3PD standing or higher. Course includes one pre-recorded lecture per week and one LIVE audio-visual discussion section per week. The discussion joins students at all four campuses and attendance is required. (Dr. Earlene Lipowski)

PHA 5554 Clinical Toxicology I – Pharmaceuticals

2 credits

(Spring Semester – first 8 weeks)

This course will provide a review of the field of toxicology focusing on toxicity produced from pharmaceutical agents. The role of the pharmacist in the evaluation and management of poisoned patients will be emphasized. Topics such as toxidromes, gastrointestinal decontamination, and antidotes will be discussed. ((Dr. Dawn Sollee/Coordinator \\ Dr. Sven Normann/Facilitator)

PHA 5609 Pediatric Pharmacy

2 credits

(Spring Semester – first 8 weeks)

This course provides instruction through a combination of lectures, brief presentations, and small group case discussions. Each student will be asked to make a 5 minute presentation on a pediatric topic of their choice during class time. Each student will also be asked to prepare a case discussion for presenting during small group discussions. The cases will be identified by the instructor and relate to topics covered during the previous week. Topics in the course may include: infections, immunization practices, poisonings, attention deficit hyperactivity disorder, diabetes mellitus, asthma, cystic fibrosis, prematurity, pediatric critical care, oncological diseases, hematological diseases, immune disorders, and transplantation in children. (Dr. Jennifer Williams)

PHA 5737 Drugs and Society

2 credits

(Spring Semester – first 8 weeks)

This course focuses on the issues surrounding illegal drug use as well as social drug use in society. Students are expected to understand the mechanism of action, adverse drug events, and social adverse outcomes that result from illegal drug use. The pharmacist's role in drug education and drug abuse prevention is emphasized. The legal enforcement of drug laws is also reviewed. The class has limited enrollment from the 1PD, 2PD, and 3PD class students who express an interest. (Professor Paul Doering, Dr. Sven Normann, Dr. Carol Motycka)

PHA 5842 Basic Principles of Pain Management and Communication in Palliative Medicine
(Spring Semester – first 8 weeks) 2 credits

The purpose of the course is to prepare the student to develop rational drug therapy plans for patients with pain and other symptoms commonly occurring at the end-of-life, as well as develop plans for monitoring pharmacotherapy in these patients. As patients live longer with chronic debilitating illness, pharmacists in all settings will be faced with providing pharmaceutical care in this population (Angela Huskey, PharmD, CPE and Jennifer Strickland, PharmD, BCPS). All lectures are pre-taped and converted to streaming video. Students use WebCT to view weekly lecture content. Grades are comprised from 2 live discussion sessions and one final exam.

(Dr. Angela Huskey)

GEB 6156 Entrepreneurial Opportunities 2 credits
(Fall & Spring—first 8 weeks)

Not included in annualized tuition and fees. Graduate tuition will be charged extra.

This course is designed to provide students from all disciplines an introduction to entrepreneurship. The entrepreneurial approach is defined as pursuit of opportunity without regard to initial resources. This view of management requires planning, risk control, leadership, and team building. This is a seven-week module based course. All lectures are pre-taped and converted to streaming video. Students use WebCT. This is a modular course. (Arnold A. Heggestad, Holloway Professor of Finance and Entrepreneurship, College of Business)

HUN 6939 Enteral Nutrition 2 credits
(Spring Semester – first 8 weeks)

Not included in annualized tuition and fees. Graduate tuition will be charged extra.

The course goals are to 1. Familiarize student with the basic metabolic and physiological principles of nutrition support using oral feeding of table food and tube feeding of nutrition formulas, 2. Familiarize student with the practical aspects of choosing a commercial enteral formula and administering it to a patient, 3. Develop student's ability to use the Internet as a learning tool for continuous professional development in the field of enteral nutrition support, and to enhance student's skills in presenting nutrition information to professional colleagues and to the general public. Course will be completely online using E-Learning. There are weekly written projects and no exams. (Dr. Peggy R. Borum)

Spring Semester: Last Eight Weeks

4PD

PHA 5177C Advanced Pharmaceutical Compounding

2 credits

(Spring Semester – last 8 weeks)

The objectives of this course are to reinforce concepts of various pharmaceutical compounding techniques from didactic coursework to real world problem-based settings. The class will be divided into two-sections: the lecture portion will focus on newly emerging concepts and, the lab portion will focus on contemporary compounded prescriptions. The student will be assigned a therapeutically relevant problem. In collaboration with the instructors, the student will research the disease state, and the prescribed drug therapy. Students will then design and compound a dosage form to treat the disease state. (Dr. Tony Palmieri)

PHA 5262 Medication Safety

2 credits

(Spring Semester – last 8 weeks)

This course will provide a comprehensive review of the field of medication errors. Medication errors and human perspectives, the shared responsibility in preventing medication errors, and specific medication errors relating to specific diseases and conditions will be examined. Emphasis will be placed on the identification of measures to prevent medication errors. (Dr. Sven Normann)

PHA 5229 Shaping Your Pharmacy Future

2 credits

(Spring Semester – last 8 weeks)

This course is intended to help students learn how to make the most of the transition from pharmacy student to pharmacist regardless of which career path is chosen. The instructor will introduce you to basic concepts behind managing this income shift effectively. These basics include: the ability to establish financial goals, and the ability to find a way to meet these goals. These areas of knowledge and skills are important in order to help the student to achieve levels of professional success and financial freedom. This course does not instruct the student how to invest, analyze financial situations nor does it give advice regarding financial decisions. This course simply exposes the student to the financial world, enabling the student to research personal finance on their own. (Professor Munyer)

PHA 5263 Pharmaceutical Industry and Public Policy

2 credits

(Spring Semester – last 8 weeks)

Course provides an overview of the pharmaceutical industry. Topics will cover issues in the development, pricing, promotion and distribution of prescription drugs in the US and abroad. The class is taught as a live, online seminar with discussions regarding current public policy debates on these issues, and an evaluation of the evidence available to support various positions on the issues. Students prepare an oral presentation and written paper selected from a list of issues provided by the instructor in place of a final exam. Course is taught in Elluminate with two live sessions each week. Participation in live discussions and through the course discussion board is a significant component of your grade. You must have reliable access to the Internet and a headset with microphone to effectively participate in this class. (Dr. Earlene Lipowski)

PHA 5555 Clinical Toxicology II – Non-pharmaceuticals 2 credits
(Spring Semester – last 8 weeks) (PHA 5554 *not* a pre-req!)

This course will cover the adverse consequences of non-drug (plants, envenomations, chemical, etc.) related poisonings and present information on prevention and management. (Dr. Dawn Sollee/Coordinator \ Dr. Sven Normann/Facilitator)

PHA 5618 Geriatric Pharmacy 2 credits
(Spring Semester – last 8 weeks)

This course focuses on the sociological and therapeutic issues that influence drug therapy decision making as well drug therapy monitoring for patients in the elderly years. (TBD)

PHA 5841 Human Immunodeficiency Virus: Challenges and Treatments 2 credits
(Spring Semester – last 8 weeks)

This course is intended to expand the pharmacy student's knowledge of HIV treatment received in the pharmacotherapy series. The students will be able to recommend and monitor treatments for patients who are naïve to antiretroviral therapy as well as those with treatment experience. Additionally, the student will develop confidence in the treatment recommendations for those individuals with occupational, non-occupational and perinatal exposure and timelines of such therapeutic interventions. These skills will be developed by viewing taped lectures and reading primary literature guidelines in conjunction with on-campus patient care discussions.
(Dr. Lisa Inge)

HUN 6939 Parenteral Nutrition 2 credits
(Spring Semester – last 8 weeks)

Not included in annualized tuition and fees. Graduate tuition will be charged extra.

The goals of the course are to 1. Familiarize student with the basic metabolic and physiological principles of parenteral nutrition support; 2. Familiarize student with the practical aspects of writing parenteral nutrition orders and administering it in both the hospital and home settings; and 3. Develop student's ability to use the Internet as a learning tool for continuous professional development in the field of parenteral nutrition support; 4. Enhance student's skills in presenting nutrition information to professional colleagues and to the general public. Course will be completely online using E-Learning. There are weekly written projects and no exams. (Dr. Peggy R. Borum)

Fall, Spring, and Summer Semesters

Research in Pharmacy Courses per Department (Fall, Spring, Summer Semesters)

1-3 credits

These courses are offered in each department and require that the student make arrangements with a faculty member to supervise the student's participation in an aspect of a research project. Grading is a satisfactory/unsatisfactory format. There are no lectures or classroom meetings. The student may work in a laboratory or do research in the library or on a computer depending on the nature of the project and the activities assigned. Generally, for each credit hour for one of these courses, the student is expected to work 3 hours per week. Thus, if you register for 2 credits for one of the courses below, you will be expected to devote about 6 hours per week toward the project.

Research In...

PHA 5901 Pharmaceutical Outcomes & Policy 1-3 credits (Instructor TBA)

PHA 5902 Pharmacodynamics 1-3 credits (Instructor TBA)

PHA 5905 Pharmaceutics 1-3 credits (Instructor TBA)

PHA 5906 Medicinal Chemistry 1-3 credits (Instructor TBA)

PHA 5907 Pharmacotherapy and Translational Research 1-3 credits (Instructor TBA)