Course Number: NURS 730  
Course Title: Advanced Pharmacology and Genetics II  
Credit Hours: 3 Credits  
Prerequisites: NURS 704  
Placement in Curriculum: Year 1, Spring  
Course Description: Focuses on the clinical application of pharmacologic and pharmacy kinetics principles in the management of selected health problems of adults and children. Focus on drugs commonly used for adults and children in primary care settings. Focus on application of pharmacogenomics and pharmacogenetics to pharmacology.  
Delivery Method: Online  
Course Learning Outcomes:  
1. Demonstrate an advanced foundation in pharmacotherapeutics, pharmaco-dynamics, and pharmacokinetics.  
2. Describe drug actions, interactions and expected responses to treatment addressing life span stages.  
3. Evaluate common contraindications, interactions, and adverse effects of selected medications.  
4. Compare and contrast administration, complexity of treatment regimen, and cost to optimize compliance and outcome.  
5. Analyze individual choices within drug classes and make appropriate determinations for therapy based upon social, cultural, and financial considerations.  
6. Discuss potentially life threatening adverse events base upon drug class.  
7. Discuss genetics and genomics as related to pharmacotherapy in disease.  
Teaching and Learning Methods: Weekly Reading and Textbook Assignments  
Multimedia illustrations  
Deliberate Practice  
Asynchronous Interaction  
Evaluation Methods: Weekly Case Assignment  
Multiple Choice Quizzes  
Multiple Choice Exams
Grading Scale  Note: A passing grade for students taking graduate degree courses (600 or 700 level) is 83% (B) or above.

100-93  A 
92-90  A- 
89-88  B+ 
87-83  B 
82-80  B- 
79-78  C+ 
75-77  C 
74-70  C- 
69-68  D+ 
63-67  D 
60-62  D- 
< 59  F

Grading Plan  Grades in this course will be distributed based on points. There are 1000 points possible in this course.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly Cases</td>
<td>13 cases worth 10 points each</td>
<td>130</td>
</tr>
<tr>
<td>Homework</td>
<td>13 (weekly) – average 80% or higher for points</td>
<td>35</td>
</tr>
<tr>
<td>Quizzes</td>
<td>6 quizzes worth 20 points each</td>
<td>120</td>
</tr>
<tr>
<td>Midterm</td>
<td>56 questions covering modules 1-7</td>
<td>280</td>
</tr>
<tr>
<td>Deliberate Practice</td>
<td>Drug Name quiz during finals week</td>
<td>60</td>
</tr>
<tr>
<td>Final Exam</td>
<td>75 questions; covers full course</td>
<td>375</td>
</tr>
</tbody>
</table>

Late Assignments  The module week is Monday through Sunday. Assignments are due at midnight the first day (Monday) of the next module. Late work is not accepted. Each module is open for two weeks allowing students the opportunity to work around schedule conflicts. Students with emergencies should contact their instructor as soon as possible to be granted an extension.

Class Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Start Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>January 6</td>
<td>Foundations of Prescribing 1</td>
</tr>
<tr>
<td>2</td>
<td>January 13</td>
<td>Foundations of Prescribing 2</td>
</tr>
<tr>
<td>3</td>
<td>January 20</td>
<td>Autonomic Nervous System</td>
</tr>
<tr>
<td>4</td>
<td>January 27</td>
<td>Central Nervous System</td>
</tr>
<tr>
<td>5</td>
<td>February 3</td>
<td>Cardiovascular System</td>
</tr>
<tr>
<td>6</td>
<td>February 10</td>
<td>Respiratory System</td>
</tr>
<tr>
<td>7</td>
<td>February 17</td>
<td>Hematologic System</td>
</tr>
<tr>
<td>8</td>
<td>February 24</td>
<td>Midterm Exam</td>
</tr>
<tr>
<td>9</td>
<td>March 2</td>
<td>Gastrointestinal System</td>
</tr>
<tr>
<td>10</td>
<td>March 9</td>
<td>Endocrine System</td>
</tr>
<tr>
<td>11</td>
<td>March 16</td>
<td>Reproductive System</td>
</tr>
<tr>
<td></td>
<td>Date</td>
<td>Topic</td>
</tr>
<tr>
<td>-----</td>
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<td>-----------------------------</td>
</tr>
<tr>
<td>12</td>
<td>March 23</td>
<td>Musculoskeletal System</td>
</tr>
<tr>
<td>13</td>
<td>March 30</td>
<td>Anti-infective Therapy</td>
</tr>
<tr>
<td></td>
<td>April 6</td>
<td>Spring Break</td>
</tr>
<tr>
<td>14</td>
<td>April 13</td>
<td>Eyes, Ears, and Skin</td>
</tr>
<tr>
<td>15</td>
<td>April 20</td>
<td><strong>Final Exam</strong></td>
</tr>
</tbody>
</table>

**Course Alignment**  The following chart explains how the objectives of this course are aligned with the program objectives.
<table>
<thead>
<tr>
<th>COURSE LEARNING OUTCOME</th>
<th>MSN PROGRAM OUTCOME</th>
<th>FNP LEARNING OUTCOME</th>
<th>DNP PROGRAM LEARNING OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Demonstrate an advanced foundation in pharmacotherapeutics, pharmaco-dynamics, and pharmacokinetics</td>
<td>1. Integrate scientific findings from health and educational fields to include but not limited to nursing, social sciences, and humanities.</td>
<td>1. Competently assess, diagnose, prescribe, evaluate and create a holistic plan of treatment.</td>
<td>3. Provide evidence-based practice through the application of analytical methods, information systems technology, and clinical research. DNP Essential I</td>
</tr>
<tr>
<td>2. Describe drug actions, interactions and expected responses to treatment addressing life span stages</td>
<td>4. Utilize a systematic, scholarly approach to translate, apply, and disseminate evidence based research in clinical or educational settings.</td>
<td>4. Assess and monitor teaching/learning needs in a diverse client population. Practice ethically in the conduct of research, management and clinical professional practice.</td>
<td>3. Provide evidence-based practice through the application of analytical methods, information systems technology, and clinical research. DNP Essential I</td>
</tr>
<tr>
<td>3. Evaluate common contraindications, interactions, and adverse effects of selected medications</td>
<td>3. Apply continuous quality improvement measures to achieve positive outcomes in clinical or educational settings.</td>
<td>1. Competently assess, diagnose, prescribe, evaluate and create a holistic plan of treatment. 4. Assess and monitor teaching/learning needs in a diverse client population. Practice ethically in the conduct of research, management and clinical professional practice.</td>
<td>3. Provide evidence-based practice through the application of analytical methods, information systems technology, and clinical research. DNP Essential I</td>
</tr>
<tr>
<td>4. Compare and contrast administration, complexity of treatment regimen, and cost to optimize compliance and outcome.</td>
<td>5. Incorporate health related technologies to deliver, coordinate care, and analyze data to improve outcomes.</td>
<td>1. Competently assess, diagnose, prescribe, evaluate and create a holistic plan of treatment.</td>
<td>1. Provide advanced nursing care to improve patient and population health care outcomes in various direct and indirect settings DNP Essential III</td>
</tr>
</tbody>
</table>
| 5. Analyze individual choices within drug classes and make appropriate determinations for therapy based upon social, cultural, and financial considerations | 7. Employ culturally appropriate skills in communicating and collaborating with interdisciplinary teams to achieve positive outcomes in clinical or educational settings. | 3. Develop and monitor comprehensive, holistic plans of care that address the health promotion and disease prevention needs of diverse client populations. | 3. Provide evidence-based practice through the application of analytical methods, information systems technology, and clinical research.  
*DNP Essential I* |
| --- | --- | --- | --- |
| 6. Discuss potentially life threatening adverse events base upon drug class | 1. Integrate scientific findings from health and educational fields to include but not limited to nursing, social sciences, and humanities. | 1. Competently assess, diagnose, prescribe, evaluate and create a holistic plan of treatment. | 3. Provide evidence-based practice through the application of analytical methods, information systems technology, and clinical research.  
*DNP Essential I* |
| 7. Discuss genetics and genomics as related to pharmacotherapy in disease. | 1. Integrate scientific findings from health and educational fields to include but not limited to nursing, social sciences, and humanities. | 1. Competently assess, diagnose, prescribe, evaluate and create a holistic plan of treatment. | 3. Provide evidence-based practice through the application of analytical methods, information systems technology, and clinical research.  
*DNP Essential I* |
University Policies

Public Health Directives
Face coverings are mandatory for all faculty and students in the classroom. Students must follow all active UNLV public health directives while enrolled in this class. UNLV public health directives are found at https://www.unlv.edu/coronavirus/health-requirements. Students who do not comply with these directives may be asked to leave the classroom. Refusal to follow the guidelines may result in further disciplinary action according to the UNLV Code of Student Conduct, https://www.unlv.edu/sites/default/files/page_files/27/StudentConduct-Code.pdf, including being administratively withdrawn from the course.

Academic Misconduct
Academic integrity is a legitimate concern for every member of the University community. We all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility, and professionalism. By choosing to join the UNLV community, students accept the expectations of the Student Academic Misconduct Policy, and are encouraged to always take the ethical path whenever faced with choices. Students enrolling at UNLV assume the obligation to conduct themselves in a manner compatible with UNLV’s educational mission. An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another person, from the Internet or any other source without proper citation of the source(s). See the Student Conduct Code, https://www.unlv.edu/studentconduct/student-conduct.

Auditing Classes
Auditing a course allows a student to continue attending the lectures and/or laboratories and discussion sessions associated with the course, but the student will not earn a grade for any component of the course. Students who audit a course receive the same educational experience as students taking the course for a grade, but will be excused from exams, assessments, and other evaluative measures that serve the primary purpose of assigning a grade.

Classroom Conduct
Students have a responsibility to conduct themselves in class and in the libraries in ways that do not interfere with the rights of other students to learn, or of instructors to teach. Use of electronic devices such as pagers, cellular phones, or recording devices, or potentially disruptive devices or activities are only permitted with the prior explicit consent of the instructor. The instructor may rescind permission at any time during the class. If a student does not comply with established requirements or obstructs the functioning of the class, the instructor may initiate an administrative withdrawal of the student from the course.

Copyright
The University requires all members of the University Community to familiarize themselves with, and to follow copyright and fair use requirements. You are individually and solely responsible for violations of copyright and fair use laws. The University will neither protect nor defend you, nor assume any responsibility for employee or student violations of fair use laws. Violations of copyright laws could subject you to federal and state civil penalties and criminal liability, as well as disciplinary action under University policies. Additional copyright policy information is available at https://www.unlv.edu/provost/copyright.

Disability Resource Center (DRC)
The UNLV Disability Resource Center (SSC-A, Room 143, https://www.unlv.edu/drc, telephone 702-895-0866) provides resources for students with disabilities. Students who believe that they may need academic accommodations due to injury, disability, or due to pregnancy should contact the DRC as early as possible in the academic term. A Disabilities Specialist will discuss what options may be available to you. If you are registered with the UNLV Disability Resource Center, bring your Academic Accommodation Plan from the DRC to the instructor during office hours, so that you may work together to develop strategies for implementing the accommodations to meet both your needs and the requirements of the course. Any information you provide is private and will be treated as such. To maintain the confidentiality of your request,
please do not approach the instructor in front of others to discuss your accommodation needs.

**Final Examinations**
The University requires that final exams given at the end of a course occur on the date and at the time specified in the Final Exam schedule. The Final Exam schedule is typically available at the start of the semester, and the classroom locations are available approximately one month before the end of the semester. See the Final Exam Schedule, https://www.unlv.edu/registrar/calendars.

**Identity Verification in Online Courses**
All UNLV students must use their Campus-issued ACE ID and password to log in to WebCampus-Canvas.

UNLV students enrolled in online or hybrid courses are expected to read and adhere to the Student Academic Misconduct Policy, https://www.unlv.edu/studentconduct/misconduct/policy, which states that “acting or attempting to act as a substitute for another, or using or attempting to use a substitute, in any academic evaluation or assignment” is a form of academic misconduct. Intentionally sharing ACE login credentials with another person may be considered an attempt to use a substitute, and could result in investigation and sanctions, as outlined in the Student Academic Misconduct Policy.

UNLV students enrolled in online courses are also expected to read and adhere to the Acceptable Use of Computing and Information Technology Resources Policy, https://www.it.unlv.edu/policies/acceptable-use-computing-and-information-technology-resources-policy, which prohibits sharing university accounts with other persons without authorization.

To the greatest extent possible, all graded assignments and assessments in UNLV online courses should be hosted in WebCampus-Canvas or another UNLV-managed platform that requires ACE login credentials for access.

**Incomplete Grades**
The grade of “I” (Incomplete) may be granted when a student has satisfactorily completed three-fourths of course work for that semester/session, but cannot complete the last part of the course for reason(s) beyond the student’s control and acceptable to the instructor, and the instructor believes that the student can finish the course without repeating it. For undergraduate courses, the incomplete work must be made up before the end of the following regular semester. Graduate students receiving “I” grades in 500-, 600-, or 700-level courses have up to one calendar year to complete the work, at the discretion of the instructor. If course requirements are not completed within the period indicated, a grade of “F” will be recorded, and the student’s GPA will be adjusted accordingly. Students who are fulfilling an Incomplete grade do not register for the course, but make individual arrangements with the instructor who assigned the “I” grade.

**Library Resources**
Librarians are available to consult with students on research needs, including developing research topics, finding information, and evaluating sources. To make an appointment with a subject expert for this class, please visit the Libraries’ Research Consultation website, https://guides.library.unlv.edu/appointments/librarian. You can also ask the library staff questions via chat and text message at https://ask.library.unlv.edu/.

**Missed Classwork**
Any student missing class, quizzes, examinations, or any other class or laboratory work because of observance of religious holidays will be given an opportunity during that semester to make up the missed work. The make-up opportunity will apply to the religious holiday absence only. It is the responsibility of the
student to notify the instructor within the first 14 calendar days of the course for Fall and Spring courses (except for modular courses), or within the first 7 calendar days of the course for Summer and modular courses, of their intention to participate in religious holidays which do not fall on state holidays or periods of class recess. For additional information, please visit the Missed Work policy, under Registration Policies, on the Academic Policies webpage, https://catalog.unlv.edu/content.php?catoid=29&navoid=7326.

In accordance with the policy approved by the Faculty Senate regarding missed class time and assignments, students who represent UNLV in any official extracurricular activity will also have the opportunity to make up assignments, provided that the student provides official written notification to the instructor no less than one week prior to the missed class(es).

The spirit and intent of the policy for missed classwork is to offer fair and equitable assessment opportunities to all students, including those representing the University in extracurricular activities. Instructors should consider, for example, that in courses which offer a “Drop one” option for the lowest assignment, quiz, or exam, assigning the student a grade of zero for an excused absence for extracurricular activity is both contrary to the intent of the Faculty Senate’s policy, and an infringement on the student’s right to complete all work for the course.

This policy will not apply in the event that completing the assignment or administering the examination at an alternate time would impose an undue hardship on the instructor or the University that could be reasonably avoided. There should be a good faith effort by both the instructor and the student to agree to a reasonable resolution. When disagreements regarding this policy arise, decisions can be appealed to the Department Chair/School Director, College/School Dean, and/or the Faculty Senate Academic Standards Committee.

For purposes of definition, extracurricular activities may include, but are not limited to: academic recruitment activities, competitive intercollegiate athletics, fine arts activities, liberal arts competitions, science and engineering competitions, and any other event or activity sanctioned by a College/School Dean, and/or by the Executive Vice President and Provost.

Rebelmail
Rebelmail is UNLV’s official email system for students and by University policy, instructors and staff should only send emails to students’ Rebelmail accounts. Rebelmail is one of the primary ways in which students receive official University communications, information about deadlines, major Campus events, and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the University. Emailing within WebCampus-Canvas is also acceptable.

Tutoring and Coaching
The Academic Success Center (ASC) provides tutoring, academic success coaching, and other academic assistance for all UNLV undergraduate students. For information regarding tutoring subjects, tutoring times, and other ASC programs and services, please visit the ASC website, https://www.unlv.edu/asc, or call 702-895-3177. The ASC building is located across from the Student Services Complex (SSC). Academic success coaching is located on the second floor of SSC A, Room 254. Drop-in tutoring is located on the second floor of the Lied Library, and on the second floor of the College of Engineering building (TBE A 207).

UNLV Writing Center
One-on-one or small group assistance with writing is available free of charge to UNLV students at the Writing Center, https://writingcenter.unlv.edu/, located in the Central Desert Complex, Building 3, Room 301 (CDC 3–301). Walk-in consultations are sometimes available, but students with appointments receive priority assistance. Students may make appointments in person or by calling the Center, telephone 702-
895-3908. Students are requested to bring to their appointments their Rebel ID Card, a copy of the instructions for their assignment, and two copies of any writing they have completed on their assignment.

*Optional statement for inclusion in syllabi.*

**Diversity Statement**

As an institution of higher learning, UNLV represents a rich diversity of human beings among its faculty, staff, and students, and is committed to aspiring to maintain a Campus environment that values that diversity. Accordingly, the University supports understanding and appreciation of all members of its community, regardless of race, sex, age, color, national origin, ethnicity, creed, religion, disability, sexual orientation, gender, gender identity, marital status, pregnancy, genetic information, veteran status, or political affiliation. Please see [University Statements and Compliance](https://www.unlv.edu/about/statements-compliance).

A successful learning experience requires mutual respect and trust between the students and the instructor. Accordingly, the instructor asks that students be willing to listen to one another’s points of view, acknowledging that there may be disagreements, keep discussion and comments on topic, and use first person, positive language when expressing their perspectives.