

Special Populations Integrated Pharmaceutical Care and Science (ICARE)
SHENANDOAH UNIVERSITY
Bernard J. Dunn School of Pharmacy
REMIEDIATION COURSE SYLLABUS

748: Special Populations Integrated Pharmaceutical Care and Science (ICARE)

COURSE DESCRIPTION:

Special Populations ICARE will present the students with the pathophysiology of common diseases in specialized patient populations (including geriatric, pediatric, pregnant, lactating, and status post-transplant), as well as the chemical, pharmacodynamic and pharmacokinetic properties of the drugs used to treat the diseases, and the therapeutic management of patients. This course is 2 credit hours for Shenandoah University visiting students

COURSE FORMAT:

The course consists of a series of lectures and case discussions to develop the students' skills to assess, evaluate and apply information in order to make better informed, rational, responsible and ethical therapeutic decisions. Three exams will be given during the course, which are equally weighted to determine the course grade for Shenandoah University visiting students. Question types will vary, and include patient cases to assess application of the material. Exam 3 will be cumulative. *Note: The number of exams may vary based on the academic year in which the course is offered.*

COURSE OBJECTIVES:

At the completion of this course, the student will be able to:

1. Recognize and describe the pathophysiology of disorders in the geriatric, pediatric, pregnant, lactating and post-solid organ transplant populations.
2. Recognize and describe the pharmacology of different classes of medications used to treat disorders in the geriatric, pediatric, pregnant, lactating and post-solid organ transplant populations.
3. Evaluate and select education and treatment options for disorders in the geriatric, pediatric, pregnant, lactating and post-solid organ transplant populations.
4. Evaluate clinical outcomes of treatment and management plans for disorders in the geriatric, pediatric, pregnant, lactating and post-solid organ transplant populations.
5. Apply an evidence-based approach to selective patient cases in disorders in the geriatric, pediatric, pregnant, lactating and post-solid organ transplant populations.

In addition to the global course objectives noted above, individual lecture objectives and outcomes will be provided prior to each lecture or lecture series.

REQUIRED TEXTS AND MATERIALS:

- DiPiro JT, Talbert RL, Yee GC, Matzke GR, Wells BG and Posey LM, editors. *Pharmacotherapy: A Pathophysiologic Approach*. McGraw-Hill. (*most recent edition*)

Note: Editions may vary depending on availability. Required readings may also be drawn from other references as indicated by the lecturers, but are not required if they are not provided. Exam questions on required readings will primarily come from the DiPiro text above. Course content may be subject to copyright.

GRADING SCALE (for students completing the course as a Shenandoah University visiting student)

A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	< 60%

TOPICS:

- Contraception and Menopause
- Pharmacology/Pharmacotherapy of Osteoporosis
- Transgender Therapeutics
- Drugs in Pregnancy and Lactation
- Sedation, Pain, and Neuromuscular Blockades in ICU
- Pharmacokinetic/Pharmacodynamic Changes in Elderly and Pediatric Populations
- Geriatrics Overview and Clinical Considerations
- Parkinson's Disease
- Neurocognitive Disorders
- Erectile Dysfunction
- Urologic Disorders in Older Adults
- Glaucoma/Ophthalmics
- Pediatrics Overview and Clinical Considerations
- Cystic Fibrosis
- NICU Care Considerations and Patent Ductus Arteriosus
- Pharmacology/Pharmacotherapy of Solid Organ Transplant

Note: Topics may vary based on the academic year in which the course is offered.