

**Endocrine Integrated Pharmaceutical Care and Science (ICARE)**  
**Shenandoah University**  
**Bernard J. Dunn School of Pharmacy**  
**REMIEDIATION COURSE SYLLABUS**

**746: Endocrine Integrated Pharmaceutical Care and Science (ICARE)**

**COURSE DESCRIPTION:**

Endocrine ICARE will present the students with the pathophysiology of common diseases in endocrinology, 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 contain some comprehensive questions. *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 diabetes mellitus and related complications, and endocrinologic disorders of the thyroid, adrenal gland and pituitary.
2. Recognize and describe the pharmacology of different classes of medications used to treat diabetes mellitus and related complications, and endocrinologic disorders of the thyroid, adrenal gland and pituitary.
3. Evaluate and select education and treatment options for diabetes mellitus and related complications, and endocrinologic disorders of the thyroid, adrenal gland and pituitary.
4. Evaluate clinical outcomes of treatment and management plans for diabetes mellitus and related complications, and endocrinologic disorders of the thyroid, adrenal gland and pituitary.
5. Apply an evidence-based approach to selective patient cases.

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)
- Chabner BA, Brunton LL, Knollman BC, eds. *Goodman & Gilman's The Pharmacological Basis of Therapeutics*. 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:**

- Medications for the Management of Diabetes Mellitus (DM)
- Pathophysiology of Diabetes
- Pharmacology of Diabetes Agents
- Management of Type 2 DM
- Type 2 DM Cases
- Other Considerations in DM
- Management of Type 1 DM
- Management of DM in Pregnancy
- Insulin Management Cases
- Pharmacology of Thyroid and Antithyroid Drugs
- Thyroid Therapeutics
- Thyroid Cases
- Pathophysiology of Adrenal System
- Management of Adrenal Disorders
- Drug-Induced Endocrine Disorders

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