Hematology/Oncology Integrated Pharmaceutical Care and Science (ICARE)
Shenandoah University
Bernard J. Dunn School of Pharmacy
REMEDIATION COURSE SYLLABUS

709: Hematology/Oncology Integrated Pharmaceutical Care and Science (ICARE)

COURSE DESCRIPTION:
Hematology/Oncology ICARE will present the students with the pathophysiology of hematological disorders, common solid and hematologic malignancies, 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 3 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. Four 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 4 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 anemias, cancer and paraneoplastic syndromes.
2. Recognize and describe the pharmacology of different classes of medications used in the treatment and supportive care of cancer patients and solid organ transplant recipients.
3. Evaluate and select education and treatment options for anemias, iron toxicity, cancer and supportive care.
4. Evaluate clinical outcomes of treatment and management plans for anemias, iron toxicity, cancer and supportive care, and immunosuppressant usage in solid organ transplantation.
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:

- Hematology
- Anemia/Cases
- Heparin-Induced Thrombocytopenia
- Cancer Biology/Pathophysiology
- Principles of Cancer Treatment
- Pharmacology of Antineoplastic Agents
- Targeted Therapies for Cancer
- Breast Cancer
- Colorectal Cancer
- Cervical Cancer
- Prostate Cancer
- Lung Cancer
- Pain Management for Oncology Patient
- Diarrhea/Constipation in Oncology Patient
- Nutrition Support for Cancer Patient
- Cancer-Related Fatigue
- Oncologic Emergency Cases
- Pharmacology/Therapeutics of Antiemetics
- Hodgkin Lymphoma
- Non-Hodgkin Lymphoma
- Multiple Myeloma
- Acute Leukemias
- Chronic Leukemias

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