

Drug Literature Analysis & Interpretation
SHENANDOAH UNIVERSITY
Bernard J. Dunn School of Pharmacy
REMIEDIATION COURSE SYLLABUS

662: Drug Literature Analysis & Interpretation

COURSE DESCRIPTION:

The staggering size and varying quality of the biomedical literature require pharmacy students to understand the clinical research process, statistics used to analyze the data, develop methods for managing the biomedical literature and critically evaluate the data presented in that literature. This course will provide the student with the knowledge and tools necessary to manage this area of practice. This course is 3 credit hours for Shenandoah University visiting students.

COURSE FORMAT:

The course consists of series of lectures and discussions to develop the students' skills to assess, evaluate and apply information in order to make better informed, rational, responsible and ethical therapeutic decisions in patient care. Two 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 will assess application of the material. *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. Differentiate between the research designs of clinical studies
2. Categorize components of a clinical drug study
3. Evaluate the validity of the study
4. Evaluate the appropriateness of statistical methods used in research studies
5. Determine how population-based medical literature influences the development of clinical guidelines and evidence-based practices

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:

- Malone PM, Malone MJ, Park SK, eds. Drug Information: A Guide for Pharmacists. New York, NY: McGraw-Hill. *(most recent edition)*
- Dawson B, Trapp RG, eds. Basic and Clinical Biostatistics. New York, NY: McGraw-Hill. *(most recent edition)*
- Gallin JI, Ognibene FP, ed. Principles and Practice of Clinical Research. Waltham, MA: Academic Press. *(most recent edition)*

Note: Editions may vary depending on availability. Supplemental readings are linked directly to each lecture. Some will be assessed through exams, and others serve as additional resources for understanding the material. 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:

- History and Ethics of Research
- Basic Research Design
- Article Components
- Descriptive Studies
- Statistical Concepts
- Case-Control Studies
- Cross-Sectional Studies
- Cohort Studies
- Experimental Research and Studies
- Observational vs Experimental Research and Studies
- Review Articles: Narrative Overviews, Systemic Reviews and Meta-Analyses
- Clinical Guidelines
- Information Request
- Article Review
- Peer Review
- Evidence-Based Medicine

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