PATHOLOGY AND MICROBIOLOGY

M-ID 720 CLINICAL LABORATORY IN PATIENT CARE 4 Credit Hours

SELECTIVE

Objectives:
- Encourage use of the library and other resources
- Train students in morphology of peripheral blood and bone marrow cells
- Correlate clinical diseases, laboratory methods and their underlying principles

Course Topics:
- The use and limitation of lab tests as aids to diagnosis
- Sources of error due to patient factors (pre-analytical) or due to sample, reagent or equipment problems (analytical)
- Automated instrumentation and unique sources of error with these technologies
- Pre-transfusion tests, problems in testing, and sources of discrepancy in blood typing
- Red cell membrane abnormalities and disease
- Clinical chemistry testing and disease
- Immunohematology and adverse outcomes of transfusion
- Methods of molecular diagnostic testing, chemistry, histocompatibility testing and immunopathology
- Testing for bleeding and thrombosing disorders
- Methods of long-term living cell preservation
- Microbiology topics
- Introduction to flow cytometry and immunopathology methods

Course Format:
The course consists of morning didactic sessions, some case reviews and practical lab cases, as well as participation in bone marrow signout with hematopathology faculty during afternoons as available. The selective requirement for student independent intellectual effort is fulfilled by library research in preparation for a short (20-minute) student oral presentation to the other members and faculty of the course, plus a short written paper due on the last day of the course. A final written examination is required.

*Note: If registration for this course offering is less than the minimum number (3), the course will not be offered at that time.

Instructor: Sara Shunkwiler, M.D.
Contact: Kimberly Curry.
Typically Offered: March.
Visiting Student Information: This course is NOT available to visiting students.