

APPLICATION FOR CHANGE IN EXISTING COURSE: MAJOR & MINOR

1. Submitted by College of: Health Sciences Date: April 30, 2003
Department/Division offering course: Clinical Sciences/Clinical Laboratory Sciences
2. Changes proposed:
 - (a) Present prefix & number: CLS 833 Proposed prefix & number: same
 - (b) Present Title: Basic Clinical Hematology and Body Fluid Analysis
New Title: Basic Hematology
 - (c) If course title is changed and exceeds 24 characters (Including spaces), include a sensible title (not to exceed 24 characters) for use on transcripts: Hematology
 - (d) Present credits: 5 Proposed credits: 1
 - (e) Current lecture: laboratory ratio: 2:3 Proposed: 1:0
 - (f) Effective Date of Change: (Semester & Year): Fall, 2004
3. To be Cross-listed as: NA
Prefix and Number Signature: Department Chair
4. Proposed change in Bulletin description:
Present description (including prerequisite(s):
 - (a) The theory and practice of clinical hematology laboratory testing, including the performance of manual and automated procedures, instrumentation principles, quality assurance, and problem-solving. Hematopoiesis, hemostasis, blood cell function and body fluid physiology are discussed as they relate to clinical laboratory practice. Special emphasis is placed on the relationship of clinical hematology and body fluids analysis testing to pathophysiology and on the acquisition of valid test results.
Prerequisite(s): Admission into the Clinical Laboratory Sciences Program or consent of the instructor
 - (b) New description: The theory and practice of clinical hematology laboratory testing, including manual and automated procedures, instrumentation principles, quality assurance, and problem-solving. Hematopoiesis, hemostasis and blood cell function are discussed as they relate to clinical laboratory practice. Special emphasis is placed on the relationship of clinical hematology testing to pathophysiology and on the acquisition of valid test results
 - (c) Prerequisite(s) for course as changed: Admission into the Clinical Laboratory Sciences program or consent of instructor
5. What has prompted this proposal?
This course change is part of an overall program change (a) to improve clinical practice that is guided and reinforced by UK CLS faculty members and (b) to increase program flexibility with regard to students and faculty
6. If there are to be significant changes in the content or teaching objectives of this course, indicate changes:
Psychomotor objectives of this course will be completed in CSC 528 and clinical rotation
7. What other departments could be affected by the proposed change? None
8. Will changing this course change the degree requirements in one or more programs?* X-Yes
No
If yes, please attach an explanation of the change.*
See Request for Change in Undergraduate Program
9. Is this course currently included in the University Studies Program? Yes X-No
If yes, please attach correspondence indicating concurrence of the University Studies Committee.
10. If the course is a 100-200 level course, please submit evidence (e.g., correspondence) that the Community College System has been consulted.

*NOTE: Approval of this change will constitute approval of the program change unless other program modifications are proposed.

OBJECTIVES FOR CLS 833: BASIC CLINICAL HEMATOLOGY

Following completion of this course, the student should be able to:

- Discuss hemoglobin synthesis.
- Discuss the presently accepted theories of blood cell formation (hemopoiesis)
- List the normal circulating leukocytes
- Explain the mechanisms of normal hemostasis
- For each of the procedures a-o, explain or provide the following information. For procedures a-f. provide the following information for both Coulter and Bayer Multichannel Instruments.
 - Specimen collection, handling, storage and preparation requirements
 - Principle of method
 - Technical, instrument, physiologic causes of problems or unexpected test results
 - Quality control procedures
 - Reference ranges
 - a. Automated red blood cell (RBC) counts
 - b. Automated white blood cell (WBC) counts
 - c. Automated hemoglobin
 - d. Automated hematocrit
 - e. Automated platelet counts
 - f. Automated WBC differentials
 - g. Manual hematocrit
 - h. Manual platelet counts
 - i. Red Cell Indices (manual and automated)
 - j. Manual WBC differentials
 - k. Reticulocyte count including corrected reticulocyte count and reticulocyte production index
 - l. Westergren erythrocyte sedimentation rate (ESR)
 - m. Activated partial thromboplastin time (APTT)
 - n. Prothrombin time (PT)
 - o. Modified template bleeding time (IBT)

Performance criteria for cognitive objectives: Achievement of a minimum 70%-score for Hematology Examination I and II