

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 832 Proposed prefix & number: same
(b) Present Title: Basic Clinical Chemistry
 New Title: same
(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: Basic Clin Chem
(d) Present credits: 5 Proposed credits: 1
(e) Current lecture: laboratory ratio: 1:1 Proposed: 1:0
(f) Effective Date of Change: (Semester & Year): Fall, 2004
3. To be Cross-listed as: NA
Chair Prefix and Number Signature: Department
4. Proposed change in Bulletin description:
(a) Present description (including prerequisite(s)): The study of the theory and practice of clinical chemistry laboratory testing, including quality control, instrumentation principles, problem-solving, and appreciation of accuracy of and confidentiality for patient laboratory findings. Pre-requisite: admission into the Clinical Laboratory Sciences Professional Program and Biochemistry (may be taken concurrently)
(b) New description: No change
(c) Prerequisite(s) for course as changed: Pre-requisite: admission into the Clinical Laboratory Sciences Professional 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:
Cognitive objectives for the interpretation of case studies that present the clinical chemistry of organs and tissue will be completed in CLS 890. Cognitive objectives for acid base analysis will be completed in CLS 844. Psychomotor objectives 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
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.

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11. Is this a minor change? Yes No

(NOTE: See the description on this form of what constitutes a minor change. Minor changes are sent directly from the Dean of the College to the Chair of the Senate Council. If the latter deems the change not to be minor, it will be sent to the appropriate Council for normal processing.)

12. Within the Department, who should be consulted for further information on the proposed course change?

Name: Jean Brickell Phone Extension: 7-9222 ext 263

Signatures of Approval:

Department Chair *Ariss J. Ball* Date *5/27/2003*

Dean of the College *Sharon R. Stewart* Date *5-27-2003*

Date of Notice to the Faculty

**Undergraduate Council Date

**Graduate Council Date

**Academic Council for the Medical Center Date *7/8/03*
Terry R. Malone

**Senate Council Date of Notice to University Senate

**If applicable, as provided by the Rules of the University Senate.

ACTION OTHER THAN APPROVAL

The Minor Change route for courses is provided as a mechanism to make changes in existing courses and is limited to one or more of the following:

- change in number within the same hundred series;
- editorial change in description which does not imply change in content or emphasis;
- editorial change in title which does not imply change in content or emphasis;
- change in prerequisite which does not imply change in content or emphasis;
- cross-listing of courses under conditions set forth in item 3.0;
- correction of typographical errors. [University Senate Rules, Section III - 3.1]

OBJECTIVES FOR CLS 832: BASIC CLINICAL CHEMISTRY

Following completion of this course, the student will be able:

Cognitive objectives:

1. For each of the following analytical categories (i-vi),
 - a. Describe the function, metabolic or kinetic process, and clinical significance in the body
 - b. Describe the collection and handling of specimens to be tested
 - c. Describe procedures that are used for laboratory determination
 - i. Carbohydrates
 - ii. Proteins and enzymes
 - iii. Lipids
 - iv. Electrolytes and minerals
 - v. Non-protein nitrogen compounds
 - vi. Bilirubin
2. For each of the following laboratory procedures (i-iv),
 - a. State the principle(s)
 - b. Identify components of testing equipment
 - c. List the mode(s) of operation of the testing equipment
 - d. Describe clinical applications
 - e. Discuss common trouble-shooting protocols
 - i. Spectrophotometry, to include light, atomic absorption, turbidimetry, nephelometry, and fluorometry spectrophotometry
 - ii. Electrochemical testing, to include ion selective electrodes
 - iii. Osmometry
 - iv. Automation
3. Discuss the use of glassware and pipettes in the clinical chemistry laboratory
4. Apply mathematic formulas to practice in the clinical chemistry laboratory.
5. Apply and interpret statistical calculation for quality assurance in the clinical chemistry laboratory
6. Discuss common trouble-shooting protocols for quality assurance problems

Affective objective:

1. Demonstrate professionalism in clinical chemistry by communicating in positive, constructive and polite verbal and written form; participating in group endeavors; and adhering to the policies of the program