SYLLABUS

DATE OF LAST REVIEW: 02/2013
CIP CODE: 24.0101
SEMESTER: DEPARTMENTAL SYLLABUS
COURSE TITLE: INTRODUCTION TO CLINICAL LABORATORY SCIENCES
COURSE NUMBER: BIOL0210
CREDIT HOURS: 2
INSTRUCTOR: DEPARTMENTAL SYLLABUS
OFFICE LOCATION: DEPARTMENTAL SYLLABUS
OFFICE HOURS: DEPARTMENTAL SYLLABUS
TELEPHONE: DEPARTMENTAL SYLLABUS
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KCKCC-issued email accounts are the official means for electronically communicating with our students
PREREQUISITE(S): None

REQUIRED TEXT AND MATERIALS: Please check with the KCKCC bookstore, http://www.kckccbookstore.com for the required text for your particular class.

COURSE DESCRIPTION: Students will be introduced to the profession of clinical laboratory science and the role of clinical laboratorians in the health care team. Introduction to the profession will include a discussion of the major areas of the clinical laboratory, education requirements to enter the profession and issues impacting the laboratory and health care as a whole. In the broader scope, students are exposed to basic rules of medical terminology. Finally a systems approach will be utilized to introduce students to medical laboratory tests that aid in diagnosis and monitoring of body functions.

METHOD OF INSTRUCTION: A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, and panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE:
I. Introduction to Medical Terminology—Basic Rules
II. The history of laboratory medicine; Overview of the all areas of laboratory medicine.
   Laboratory simulating tissue sectioning/section planes
III. The major areas within “clinical laboratory practice”;
IV. The role of the clinical laboratory scientist in the healthcare system. Educational requirements;
   Certification, licensure, and registration
V. Professional Organizations associated with Clinical Laboratory Sciences and Professional Issues
VI. Hematopoietic/Lymphatic System and the Clinical Laboratory tests used to assess its function
    Laboratory utilizing differential slides.
VII. Immune system and Clinical Laboratory tests used to assess its function
    Laboratory—serum protein electrophoresis Laboratory---bacterial agglutination reaction
VIII. Immunohematology
    Laboratory—ABO blood typing
IX. Renal System and tests used to assess its function
X. Laboratory—urinalysis
XI. Cardiovascular system
    Laboratory
XII. Microbiology—system to use
    Laboratory—culture
XIII. Molecular Biology and its application in Clinical Laboratory Sciences
XIV. Hot Topics in Clinical Laboratory Sciences - student presentations

EXPECTED LEARNER OUTCOMES:
A. The students will be able to demonstrate a scientific framework of the work requirements necessary to be a
   Clinical Laboratory Scientist; and the knowledge of Clinical Laboratory Sciences terminology, attributes,
   and other basic requisites needed to be a Clinical Laboratory Scientist.
B. The students shall demonstrate the significance of Clinical Laboratory Science personnel in any and all
   healthcare settings.

COURSE COMPETENCIES:
   The students will be able to demonstrate a scientific framework of the work requirements necessary to be a
   Clinical Laboratory Scientist; and the knowledge of Clinical Laboratory Sciences terminology,
   attributes,
   and other basic requisites needed to be a Clinical Laboratory Scientist.
1. The students will be able to define medical terms associated with laboratory medicine.
2. The students will be able to briefly describe the history of laboratory science.
3. The students will be able to list the major areas of laboratory practice.
4. The students will be able to briefly discuss each area of CLS laboratory practice.
5. The students will be able to describe the educational requirements for a clinical laboratory scientist.
6. The students will be able to describe the educational requirements for a medical technologist.
7. The students will be able to explain what medical technology is.
8. The students will be able to explain what molecular diagnostics is.
9. The students will be able to explain what histology and cytology is.
   The students shall demonstrate the significance of Clinical Laboratory Science personnel in any and all
   Healthcare settings.
10. The students will be able to differentiate between certification and licensure in relation to clinical
    laboratory science.
11. The students will be able to differentiate between certification and registration in relation to clinical
    laboratory science.
12. The students will be able to differentiate between licensure and registration in relation to clinical
    laboratory science.
13. The students will be able to describe the role of the clinical laboratory scientist in the healthcare system.
14. The students will be able to list the professional organizations that are associated with clinical
    laboratory science.
15. The students will be able to present a short 5-10 minute presentation on a current hot topic in
    clinical laboratory science.
ASSESSMENT OF LEARNER OUTCOMES:
Student is evaluated by regularly scheduled exams and other graded assessments.

SPECIAL NOTES:
This syllabus is subject to change at the discretion of the instructor. Material included is meant to provide an outline of the course and rules that the instructor will adhere to in evaluating the student's progress. However, this syllabus is not intended to be a legal contract. Questions regarding the syllabus are welcome anytime.

Kansas City Kansas Community College complies with the Americans with Disabilities Act. If you need accommodations due to a documented disability, please contact the Director of the Academic Resource Center, in Rm. 3354 or call at: 288-7670.

Kansas City Kansas Community College is committed to an appreciation of diversity with respect for the differences among the diverse groups comprising our students, faculty, and staff that is free of bigotry and discrimination. Kansas City Kansas Community College is committed to providing a multicultural education and environment that reflects and respects diversity and that seeks to increase understanding and tolerance.