CLS 365: BODY FLUID ANALYSIS COURSE SYLLABUS

Instructor: Mitch Rasmussen

Office: D124A Science Bldg. UWSP

Office hours: By appointment

Phone: 715 – 346-4701 (Office)

e-mail: mrasmuss@uwsp.edu

COURSE DESCRIPTION:

Body Fluid Analysis (CLS 365 – 2 credits)

Theoretical and practical aspects of chemical and microscopic analysis of urine, cerebrospinal fluid, synovial fluid, serous fluid and other miscellaneous body fluid.

FORMAT:

Tuesdays - Three hours lecture and 2 hours laboratory per week for four weeks. Wednesdays - Hybrid day – Includes, but not limited to:

Assignments, Readings, Quizzes, On-line training, Competencies

TEXTBOOK:

Fundamentals of Urine & Body Fluid Analysis, 3rd ed., Nancy A. Brunzel

GENERAL GOALS AND OBJECTIVES:

The student shall:

- 1. Recognize the critical importance of body fluid analysis
- 2. Identify chemical tests and reactions performed on various body fluids
- 3. Accurately perform basic urinalysis laboratory testing
- 4. Identify causes of false negative and false positive reactions
- 5. Differentiate normal from abnormal results
- 6. Recognize and explain the clinical significance of abnormal results
- 7. Develop an awareness of general record keeping and quality control
- 8. Demonstrate an adherence for laboratory maintenance, cleanliness, and safety while in the laboratory
- 9. Acquire an introduction to automated principles used in body fluid analysis
- 10. Correlate laboratory data and interpret as to disease/disorder

GRADING SYSTEM:

93 - 100	A	77 - 79	C+
90 - 92	A-	73 - 76	C
87 - 89	B+	70 - 72	C-
83 - 86	В	67 - 69	D+
80 - 82	B-	60 - 65	D
		Below 60	F

EXAMS AND ASSIGNMENTS:

- 1. (3) D2L Unit exams (See note)
- 2. MTS modules and quizzes (See note)
- 3. Written lecture exam (Comprehensive)
- 4. Laboratory performance and post lab quizzes
- 5. Final laboratory exam (Comprehensive)
- 6. Other assignments as given during course

All assignments are to be complete by the start of the class period or lab in which they are due. Any assignment not completed in full will result in a zero. It is the student's responsibility to complete all work as assigned. If work cannot be completed due to an extenuating circumstance, the student must obtain instructor consent to turn in work late *PRIOR* to the due date. There will be no exceptions to this policy.

If work is due on a date the student will be absent, excused or not, the work is still due at that time. It is the student's responsibility to have work turned in ahead of time, or brought in a dropped off by somebody else. Please note — should somebody drop off work for the student, it is the student's responsibility to make sure the person dropping off the work gets it to the proper place ahead of when it is due. Any misplaced work, or work dropped off late will not be accepted and will result in a zero.

Assignments may be given or altered at the discretion of the instructor in the lecture periods. It is the student's responsibility to adhere to any assignment changes and complete any assigned work given during the lecture periods. If the student misses a class where an assignment is given or changed, the student is still responsible for this. It is the student's responsibility to get any of this information from your fellow classmates. The instructor is not responsible for communicating this information to students that miss lecture.

<u>D2L Exams</u> – Exams for the class, with exception to the written final, will be on D2L. Notes and other materials may be used in completing these quizzes,

however, each will be assigned a time in which they must be completed. Failure to prepare ahead of time may hinder the student's ability to score well or even finish the quizzes. Each quiz will be open for a specified time in which to complete the quiz. The quizzes will be open from 0001 on the day of the quiz and will close at 2359 the same day of the quiz. This will allow the student to complete the quiz as they see fit. Please allow time to have quiz completed prior to 2359. Failure to do so will result in the quiz closing before the student completes the quiz. Quizzes will not be re-opened in this event. Quizzes are randomized and any indication or evidence of cheating will result in a zero for the parties involved. It is the expectation these quizzes are to be completed individually.

Medtraining Quizzes – You will be assigned medtraining modules throughout the class. You are to complete the readings and take the quizzes at the end of each module as specified by the instructor. You are to take the end of module quizzes until you reach 80% proficiency. Your grade for the quiz however, will be determined from the average of the first two attempts. Each module and quiz is to be completed by the date indicated by the instructor. Failure to complete the module and quizzes by this date will result in a zero for the assignment. These modules and quizzes are important in the overall understanding of each topic covered in the class, and may be the only means in which to cover the assigned material. Please complete the readings and quizzes with integrity

DERIVATION OF COURSE GRADE:

- 1. D2L Unit exams 20%
- 2. Written Lecture comprehensive 20%
- 3. Laboratory performance 30%
- 4. Final laboratory exam -20%
- 5. Written assignments / Attendance / Participation in class 10%

ATTENDANCE POLICY

All students are required to attend all lectures and laboratory experiences. Attendance will be taken for each lecture and lab and is included in your overall grade for the class. If you need to miss your scheduled lab session, you may be allowed to attend an alternate section of the class with the instructor's permission *PRIOR* to the alternate section meeting time. Due to the nature of the unknowns given in the lab, there will be no make-up labs offered. Any lab or lecture not attended will result in a zero for that day's activities.

Exceptions to this policy will only be granted in the event of a death in the family, and absence due to illness. A health care provider note is required for the absence to be excused. Any other extenuating circumstance must be brought to the instructor's attention *PRIOR* to the absence. The instructor may or may not excuse the absence. If there is any doubt, it is the student's responsibility to meet with and discuss it with the instructor. Please note – do not assume the absence will be excused.

UNIVERSITY POLICIES

Academic Integrity

The board of regents, administrators, faculty, academic staff and students of the University of Wisconsin system believe that academic honesty and integrity are fundamental to the mission of higher education and of the University of Wisconsin system. The university has a responsibility to promote academic honesty and integrity and to develop procedures to deal effectively with instances of academic dishonesty. Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others' academic endeavors. Students who violate these standards must be confronted and must accept the consequences of their actions. (Excerpt from UWSP 14.01 STATEMENT OF PRINCIPLES

Academic Accommodations

Support services are available for students with disabilities. Any student who has a disability and is in need of classroom and/or exam accommodations, please contact the instructor and the Office of Disability Services as soon as possible.

GENERAL COURSE OUTLINE

- 1. Introduction to body fluids/analysis
- 2. Kidney function
- 3. Kidney disease
- 4. Metabolic diseases

EXAM #1

5. Urinalysis

Physical examination Chemical examination Microscopic examination Quality assurance/control Special tests EXAM #2

- 5. Cerebrospinal fluid
- 6. Other body fluids
- 7. Fecal analysis
- 8. Automated principles EXAM #3

FINAL EXAM

A course outline/calendar will be distributed to all students in class and via the Content of D2L indicating dates, along with the activities, assignments, and exams scheduled for the course.