BMED 1103 – Introductory Cell Biology

Course Syllabus (Fall 2015)

Instructor: Dr. Netter J Ortiz
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Office Phone: Office Hours:

Class time & location: Fri 10:50-12:30 (BRHP 1.207)

*Please note that the course schedule in the syllabus may change and you will be updated promptly via blackboard when any changes are made.

Course Description

This course introduces you to cells and organelles as relevant to understanding human cellular biology and human diseases. The course will give you an introduction to the structure of cells and processes and function of organelles including plasma membrane, cytoplasm and organelles, extracellular matrix and epithelia and glands.

Student Learning Outcomes

At the end of this course, the students are expected to be able to:

- Be familiar with the terminology and concepts of basic areas of cell biology: plasma membrane, cytoplasm and organelles, extracellular matrix and epithelia and glands
- Display the ability to communicate scientific information clearly and precisely utilizing the terminology in the discipline
- Have the ability to read and understand scientific literature in the cell biology field
- Be capable of applying and linking concepts learned in this course to other discipline within the biomedical field

Departmental Learning Outcomes

Departmental learning outcomes that are met by this course are:

- Students will be able to demonstrate a substantial factual knowledge base and a grasp of the major concepts of biochemistry and be able to relate them to the medical field
- Students will perform satisfactorily in standardized graduate examinations
- Students will be able to research a topic using standard electronic and non-electronic methods
- Students will be able to communicate complex scientific ideas, concepts, and theories by oral and written means
- Students will appreciate the role of research in the biological, biomedical, and clinical sciences

Course Pre-Requisites, Co-Requisites, and/or Other Restrictions

Enrollment in this course requires approval of Departmental Advisor

Grading Policy/Evaluation

❖ Attendance (15%)

❖ In-class Group Activities and Presentations (35%)

During class, you may be asked to perform an activity as a group that will help you further understand the objectives of the lesson of the week. If you do not attend class that day, you will get a zero for the in-class group activity. You may also be given homework for certain topics for the course which will be due at the start of the next class. Late assignments will not be accepted.

❖ Final Exam (50%)

Exam will be based on presentation made by the students. Keep in mind that every topic discussed in class can be considered for your exam.

Textbook(s) & Other Resources

• BRS Cell Biology and Histology by Gartner, et al. 6th edition, ISB: 978-1-60831-321-1

Class Schedule

WEEK	DATE	TOPICS	Reading Assignments
1	Fri, 10/30	Plasma Membrane I I. Overview—The Plasma Membrane (Plasmalemma; Cell Membrane) II. Fluid Mosaic Model of the Plasma Membrane	Chapter 1: Plasma Membrane (Pg 1-5)
2	Fri, 11/6	Plasma Membrane II III. Plasma Membrane Transport Processes IV. Cell-to-Cell Communication V. Plasmalemma-Cytoskeleton Association	Chapter 1: Plasma Membrane (Pg 5-11)
3	Fri, 11/13	Cytoplasm and Organelles I I. Overview—The Cytoplasm II. Structural Components	Chapter 3: Cytoplasm and Organelles (Pg 33-49)
4	Fri, 11/20	Cytoplasm and Organelles II III. Interactions Among Organelles	Chapter 3: Cytoplasm and Organelles (Pg 49-57)
5	Fri, 11/27	II. Fibers Extracellular Matrix I I. Overview—The Extracellular Matrix II. Ground Substance	Chapter 4: Extracellular Matrix (Pg 61-71)
6	Fri, 12/4	Epithelia and Glands I I. Overview—Epithelia II. Lateral Epithelial Surfaces III. Basal Epithelial Surfaces Epithelia and Glands II IV. Apical Epithelial Surfaces V. Glands	Chapter 5: Epithelia and Glands (Pg 75-83)
7	Fri, 12/11	No Class EXAM (FINAL)	Chapter 5: Epithelia and Glands (Pg 83-88)

SYLLABUS ADDENDUM - UNIVERSITY POLICIES

ACADEMIC STANDING

To remain in good academic standing undergraduate students are expected to maintain a cumulative grade point average (GPA) of at least 2.00 ("C" average) for all work attempted at UTB. Academic standing is computed each regular semester (i.e., Fall or Spring) for every UTB student, including transfer and dual coursework and BECHS and MSA students; transient students are held to the standards of their home institution, not to those of UTB. Students who fail to maintain the minimum required grade point average of 2.00 in all work attempted at UTB will be placed on academic probation. At the end of the probationary semester, students who have earned a *cumulative* GPA of 2.00 or higher will be changed to GOOD STANDING status. At the end of the probationary semester, students who have NOT earned a *cumulative* GPA of 2.00 and who have NOT earned a *semester* GPA of 2.00 or higher will be changed to SUSPENSION status. At the end of the probationary semester, students who have NOT earned a *cumulative* GPA of 2.00, but who have earned a *semester* GPA of 2.00 or higher will continue on PROBATION until their *cumulative* GPA is 2.00, as long as each *semester* GPA is 2.00 or higher. The purpose of measuring academic standing is to keep students on track for successful completion of a degree and to prevent unnecessary financial burden on those students who do not finish a program. Academic Standing is calculated separately from Financial Aid Satisfactory Academic Progress. If you are on financial assistance, please visit http://www.utb.edu/em/fa/Pages/SatisfactoryAcademicProgress.aspx for specific academic progress requirements.

STUDENTS' ACADEMIC RESPONSIBILITIES

Students are required to be diligent in their studies and regular in class attendance. The number of absences permitted in any one course varies with instructor and course. Some programs have very strict attendance policies. Attendance requirements are printed in the course syllabus and announced by the instructor at the initial class meeting. On recommendation of the instructor concerned, students will be dropped from courses for failure to meet the attendance requirements or other good cause. This will result in a W or an F on students' academic records with negative consequences for financial aid eligibility, and international student visas.

ADMINISTRATIVE WITHDRAWAL

Students who miss more than half of the required activities within the first 25% of the course without contacting the course professor may be administratively withdrawn from the course. Administrative withdrawal has serious consequences. Students may have to repay funds to Title IV financial aid programs. Administrative withdrawal will count toward the six-drop rule limiting the number of courses students are allowed to drop to no more than six courses over the entire undergraduate career. International students will not be eligible to continue enrollment if an administrative withdrawal results in a course load less than full-time.

SCHOLASTIC DISHONESTY

Students who engage in scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and expulsion from the University. Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student, or the attempt to commit such acts. Since scholastic dishonesty harms the individual, all students and the integrity of the University, policies on scholastic dishonesty will be strictly enforced (Board of Regents Rules and Regulations). All scholastic dishonesty incidents will be reported to the Dean of Students. Do not allow your peers to pressure you to cheat. Your grade, academic standing and personal reputation are at stake.

GRADING POLICY

Grades are awarded in courses in which students are officially enrolled after the official record date. The deadline to withdraw is specified in the <u>Academic Calendar</u> for each semester or term. After the deadline to drop with a grade of W has passed, students may not be awarded a W as a final grade. Final grades are available to students within 24 hours after all final examination grades have been submitted online after the end of each semester or term. Grade reports are not mailed to students. Students interested in obtaining their grades may log on to <u>UTB Online</u>.

AMERICANS WITH DISABILITIES ACT (ADA)

Students with disabilities, including learning disabilities, who wish to request accommodations in a course should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide documentation of his/her disability to the Disability Services counselor. For more information, visit Disability Services in Cortez or call 956-882-7374.

EMERGENCY POLICY STATEMENT

In compliance with the Emergency UTB Academic Continuity Program, academic courses, partially or entirely, will be made available on the Blackboard course management system. This allows faculty members and students to continue their teaching and learning via Blackboard, in case the university shuts down as a result of a hurricane or any other natural disaster.

The university will use Blackboard to post announcements notifying faculty members and students of their responsibilities as a hurricane approaches our region. If the university is forced to shut down, faculty will notify their course(s). To receive credit for a course, it is the student's responsibility to complete all the requirements for that course. Failure to access course materials once reasonably possible can result in a reduction of your overall grade in the class. To facilitate the completion of class, most or all of the communication between students and the institution, the instructor, and fellow classmates will take place using the features in your Blackboard and UTB email system. Therefore, all students must use UTB Online to provide a current email address. In the event of a disaster that disrupts normal operations, all students and faculty must make every effort to access an internet enabled computer as often as possible to continue the learning process.

EMERGENCY NOTIFICATION SYSTEM

UTB has implemented an emergency communication system to provide students, faculty, staff and visitors with important information in the event of an impending threat. This system allows UTB to send time sensitive notifications via telephones, computers, indoor speakers in classrooms and laboratories, outside speakers, e-mail messages, and announcements on http://www.utb.edu/Pages/default.aspx. The notification methods used will vary depending on the level of the emergency. Messages will communicate the current situation and provide guidance for what action needs to be taken immediately.

General Student Support Services

ACADEMIC ADVISING CENTER

EDBC 1.400 • 956-882-7362 • utb.edu/advising

- Academic Advising, including
 - Academic goal setting and major exploration
 - Degree and course planning
 - Academic standing and strategies for academic success
 - Information on University policies and procedures
- Referrals to other campus resources as needed
- myEdu https://www.myedu.com

BLACKBOARD - STUDENT AND FACULTY SUPPORT

RUSTEBERG 108 • 956-882-4357 • utb.edu/online

- Online and hybrid course support, UTB Mobile
- ePortfolios, My Cloud, Web Conferencing, Instant Messenger

CAMPUS RECREATION

CASA BELLA CLUBHOUSE • 956-882-5969 • utb.edu/campusrec

- Intramurals/club sports
- Fitness Center with cardio and strength equipment

CAREER SERVICES

CORTEZ • 956-882-5627 • utb.edu/career

- Career fairs
- Classroom presentations
- Computer lab with reference library
- Internships
- Job interview coaching
- Job referrals and connection with employers
- MyEdu https://www.myedu.com
- On campus recruitment
- Résumé and cover letter writing
- Student Employment Initiative (SEI)

DEAN OF STUDENTS

CORTEZ • 956-882-5141 • utb.edu/dos

- Student grievances
- Student handbooks
- Medical withdrawals
- Requests for assistance
- Academic dishonesty and student discipline
- Student Government Association

LEARNING ENRICHMENT CENTER

STUDENT UNION, ROOM 2.10 • 956-882-8208 • utb.edu/le

- Free tutoring in most subject areas
- Link2Success
- Test preparation workshops
- Online tutoring
- Supplemental Instruction
- Summer Bridge Program

OFFICE OF GLOBAL ENGAGEMENT

EDBC 1.308, • 956-882-7092 • utb.edu/global

- Study Abroad Programs –semester and summer
- International projects

RESIDENTIAL LIFE AND FOOD SERVICES

CASA BELLA CLUBOUSE, 2651 FJRM Ave • 956-882-7191 • utb.edu/housing

- On campus housing
- Food service and meal plans
- Vending services

STUDENT HEALTH SERVICES

CORTEZ, ROOM 237 • 956-882-3896 • utb.edu/shs

- Health assessment, physical exams
- Medical visits and prescriptions
- Laboratory tests
- Over the counter medications
- Immunizations
- Health education on STI and HIV Prevention
- HIV testing
- Nutrition information
- Family planning
- Counseling (individual, couples, and group therapy)
- Psychiatric evaluations and medications
- Training on suicide prevention

STUDENT LIFE

STUDENT UNION, ROOM 1.28 • 956-882-5138 • utb.edu/stuact

- Campus activities
- Student organizations
- Events and programs
- Leadership development

STUDENT MEDIA

STUDENT UNION, ROOM 1.16 • 956-882-5143 • utb.edu/studentmedia

- The Collegian, a weekly multi-format newspaper offering campus news and Information
- UTB Radio, a 24-hour, Internet-based radio station featuring rock, pop and indie music, public service announcements and talk shows on campus issues

Specialized Student Support Services

C.A.M.P. (COLLEGE ASSISTANCE MIGRANT PROGRAM)

CORTEZ, ROOM 138 • 956-882-7871 • utb.edu/camp

Note: For eligible students, immediate family members of migrants or seasonal farm workers.

- Academic planning, financial assistance
- · Peer tutoring and mentoring
- Cultural events
- Academic and enrichment workshops
- Housing scholarships
- Book assistance

DISABILITY SERVICES

CORTEZ • 956-882-7374 • utb.edu/ability

- Resources for students with disabilities
- Sign language interpreters
- Special testing accommodations
- Assistive technology lab
- Advocacy

OFFICE OF GLOBAL ENGAGEMENT

EDBC 1.308, • 956-882-7092 • utb.edu/global

- International Student Admission
- International Student Services
- International Scholar and Staff immigration services
- Study Abroad Programs –semester and summer
- International projects

STUDENT SUPPORT SERVICES PROGRAM/ASPIRE

CORTEZ, ROOM 108 • 956-882-8250 • utb.edu/aspire

Note: First generation, low income and disabled students

- Tutoring
- Academic planning, financial literacy assistance
- Academic and informational workshops
- Cultural and educational events
- Peer Mentor and Guidance Program
- Grant aid

VETERANS RESOURCE CENTER and VETERANS UPWARD BOUND

STUDENT UNION, ROOM 2.28 • 956-882-8980 • utb.edu/veterans

- Tutoring in math, reading, writing, and more
- Enrollment assistance
- Financial aid, academic advising
- Vocational Rehab and Montgomery G.I. Bill