COURSE DESCRIPTION: This course examines cell structure and function, tissues, and the skeletal, muscular, and nervous systems. Emphasis is on structure, function, and the interrelationships of the human systems. (3 Lec/3 Lab) 4 credit hours.

PREREQUISITE: Developmental Reading 0093 or English as a Second Language (ESOL) 0044 or have met the Texas Success Initiative (TSI) standard in Reading.

WECM Courses—Designated by the Texas Higher Education Coordinating Board as workforce education (technical) courses offered for credit and CEUs (Continuing Education Units). While these courses are designed to transfer among state community colleges, they are not designed to automatically transfer to public four year colleges and universities.

MATERIALS FOR INSTRUCTION:

1. REQUIRED:
   - Scantrons - FIVE 882E
   - Dissecting gloves, Goggles (available in the College Bookstore)

2. SUGGESTED:
   - Colored MAP pencils.
   - Loose leaf notebook and dividers for Lecture and Lab notes and assignments.

EXEMPLARY EDUCATIONAL OBJECTIVES (set forth by the Texas Higher Education Coordinating Board)

1. Understand and apply methods and appropriate technology to the study of the natural sciences.
2. Recognize scientific and quantitative methods and the differences between these approaches and other methods of inquiry and to communicate findings, analyses, and interpretation both orally and in writing.
3. Identify and recognize the differences among competing scientific theories.
4. Demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policies.
5. Demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to modern culture.

INTELLECTUAL COMPETENCIES IN THE FOLLOWING AREAS (defined by the Texas Higher Education Coordinating Board)

1. Reading – The ability to analyze and interpret a variety of printed materials – books, documents, and articles above the 12th grade level.
2. Writing – The ability to produce clear, correct and coherent prose adapted to purpose, occasion and audience above the 12th grade level.
3. Speaking – The ability to communicate orally in clear, coherent and persuasive language appropriate to purpose, occasion, and audience.
4. Listening – Analyze and interpret various forms of spoken communication, possess sufficient literacy skills of writing, and reading.
5. Critical Thinking – Think and analyze at a critical level.

COURSE OBJECTIVES: This course is divided into 4 units. All objectives, which are decided by the district curriculum committee, are measurable or observable and will be evaluated. Different modes of instruction will be utilized for presentation and evaluation. Upon successful completion of SCIT 1407, the following lecture topics and laboratory activities will be mastered by the student:
LECTURE TOPICS
General chemistry and biochemistry
Cytology
Cell Replication, Transcription and Translation
Energy Transfer
General body structure
Anatomical Orientation
Tissues
Integument
Articulations
Skeletal structure
Muscular system anatomy and physiology
Nervous system
Related endocrine functions

LABORATORY ACTIVITIES
Demonstrated use of a microscope
Application of metric system and British system conversions
Demonstrate membrane permeability
Identify the phases of the cell cycle and mitosis
Demonstrate process of protein synthesis
Identification of Anatomical positions and directions
Identification of selected tissues
Identification of selected bones and bone parts
Identification of various articulations
Dissect and identification of selected muscles
Dissection & examination of neural tissues

STUDENT LEARNING OUTCOMES
1. Students will be able to follow and explain the sequence of events in the following biological processes: diffusion, osmosis, cellular respiration, mitosis, DNA replication, protein synthesis (transcription and translation), muscle contraction and neural impulse conduction.
2. Students will be able to demonstrate the proper use of scientific equipment and technology to carry out a scientific investigation including the proper use of the microscope and metric conversions.
3. Students will be able to collect data, analyze data and apply that knowledge to interpret test results and evaluate a mock patient for a possible disease.
4. Students will correctly identify tissue specimen, articulations, designated bones and bone parts, neural tissue, and designated muscles on both the human and cat.
5. Students will present an oral or written assignment to the class over a global health care issue.

COURSE OUTLINE AND EXAM SUMMARY
FORMAT FOR ALL LECTURE EXAMS: True/False, Multiple Choice, and Matching

UNIT 1
LECTURE EXAM #1 - PURCHASE ONE #882E SCANTRON
Textbook Chapters 1, 2 & 3
Topics include: Homeostasis, Chemistry and Organic Chemistry, Cells, Cell Cycle and Mitosis, Cell Membranes, DNA RNA and Protein Synthesis

LABORATORY EXAM #1 - EXAM ANSWER SHEET WILL BE PROVIDED. ONE HOUR TIME LIMIT.
Topics include: Safety, Microscope, Metric System, Membrane Function, Cells, Mitosis, Four-Amino Acid Protein, and Protein Synthesis

UNIT #2
LECTURE EXAM #2—PURCHASE ONE #882E SCANTRON
Textbook Chapters 1, 4-6
Topics include: Anatomical Orientation and Terminology, Tissues, Skeletal System

UNIT #3
LECTURE EXAM #3—PURCHASE ONE #882E SCANTRON
Textbook Chapters 8—10
Topics include: Articulation (Joints) and Muscles and Muscle Physiology

LABORATORY EXAM #2 - ONE HOUR TIME LIMIT.
Topics include: Tissues, Skin, Bones, Joints (Articulations), Muscles

UNIT #4
LECTURE EXAM # 4- PURCHASE ONE #882ESCANTRON
Textbook Chapters 11-15
Topics include: Nervous System, Spinal Cord, Spinal Nerves & Spinal Reflexes, Brain and Cranial Nerves, Higher Centers, Sensory Receptors, Somatic and Autonomic Nervous System and Special Senses

LABORATORY EXAM #3 - PURCHASE ONE #882E SCANTRON. ONE HOUR TIME LIMIT.
Topics include: Neuron, Spinal Cord, Meninges, Brain, Cranial Nerves, Special Senses, Eye, Ear, Taste, Smell
COURSE CALENDAR: See back page

CLASS PROCEDURES – Successful completion of this course should be accomplished if you:
1) attend and participate in class and lab
2) read and study the textbook and lab manual
3) use the resources available on eCampus (i.e. outlines, study guides, websites)
4) watch all lecture power point presentations on eCampus
5) ALL STUDENTS MUST HAVE YOUR NAME, COURSE AND SECTION NUMBER, STUDENT ID#, AND FACULTY NAME ON ALL ASSIGNMENTS TO RECEIVE CREDIT.

• LECTURES—Lecture topics will be covered on eCampus.
  1. LECTURE EXAMS: Given IN CLASS and in the Testing Center (S-2101); phone number 214-860-8571. See course calendar for exam dates.
     • Needed to take lecture exam:
       ▪ 1) #2 pencils
       ▪ 2) proper Scantron forms (available in the bookstore). You MUST use the correct Scantron form (see exam summary) to receive your grade.
       ▪ 3) MVC student ID.
     • LECTURE EXAMS MUST BE TAKEN BY THE EXAM DEADLINE (SEE COURSE CALENDAR). In the event of a missed exam the instructor must be notified within 24 hours of the scheduled exam and documentation will be required for absence. EXAMS WILL NOT BE GIVEN PAST THE EXAM DEADLINE.
     • LATE WORK WILL BE ACCEPTED UP TO ONE WEEK AFTER DUE DATE BUT IT WILL BE PENALIZED AND DEDUCTIONS WILL ACCRUE DAILY.
     • DO NOT MARK ON THE EXAM BOOKLETS! ANY marks on the exam booklet will result in the loss of curve on your exam.
     • Study Guides, Study Sheets and Outlines for Lecture Exams are posted on eCampus.
     • CELL PHONES AND OTHER ELECTRONIC DEVICES ARE NOT PERMITTED TO RING IN THE CLASS OR LAB. PLEASE SET ON SILENT OR VIBRATE.
     • PLEASE DO NOT SEND OR RECEIVE TEXT MESSAGES IN CLASS OR LAB. STUDENTS WHO BRING COMPUTERS TO CLASS WILL ONLY BE ALLOWED TO USE THEM FOR CLASSWORK.

• LABORATORY:
  ATTENDANCE IS MANDATORY and each exercise requires laboratory participation. Attendance will be taken at the beginning of each class period.
  • Instructions are given at the beginning of each lab and WILL NOT be repeated. For your safety, students who miss instruction will not be allowed to participate in lab that day and will lose credit for the lab exercise that day.
  • Lab exercises require full participation for full credit.
  • Gloves and goggles are required for all Dissection labs and labs using chemicals. Please purchase them before class (see Course Calendar). NO GLOVES, NO GOGGLES, NO LAB!
  • HAZARDOUS MATERIALS ARE USED IN THE LABORATORY AREAS. MATERIAL SAFETY DATA SHEETS (MSDS), REQUIRED BY OSHA, ARE AVAILABLE FOR ALL STUDENTS TO OBSERVE UPON REQUEST.
  • Study Guides for Lab Exams are posted on eCampus.
  • CHILDREN ARE NOT ALLOWED IN THE LABORATORY OR UNSUPERVISED ON CAMPUS AT ANY TIME.
  • EATING AND/OR DRINKING AND APPLYING MAKE-UP ARE NOT ALLOWED IN THE LABORATORY OR LECTURE ROOMS AT ANY TIME.

LABORATORY EXAMS:
• LAB EXAMS MUST BE TAKEN DURING THE SCHEDULED LAB EXAM TIME (see course calendar).
• Answer sheets will be provided for unit 1 lab exam. You are required to purchase a Scantron answer sheet (882E) for the unit 2 and unit 3 lab exams in the college bookstore.

ATTENDANCE—ATTENDANCE IS MANDATORY and class participation is expected. It is important that you arrive in class prepared by reading the assignment before class. Students are responsible for attending classes in which they are enrolled. If for some reason you must leave class early, you should inform the instructor prior to the start of class of your reason for leaving early. If an absence occurs, you MUST contact your instructor regarding work you have missed. If you are unable to complete this course, YOU must withdraw by: WEDNESDAY, JUNE 27, 2012 to receive a “W” on your grade report. Withdrawal from a course is a formal procedure, which YOU must initiate; your instructor cannot do it for you. You may withdraw at the Admissions or Counseling Offices.
Students must begin attendance in all classes of enrollment. NO EXCEPTIONS. Financial Aid will not be granted to students who have been certified as not attending, by the certification date. For this lecture course, your physical participation in class, on or before the certification date will allow you to receive credit for FA purposes. For certification dates, check with the division or FAO for further information. Students who are not certified as beginning class, are responsible for any payments due as a result of non-certification, to include the dropping of courses.

If you stop attending class and fail to withdraw, YOU will receive a grade, usually an "F". NOTE: Students often drop courses when help is available that would enable them to continue. I hope you will discuss your plans with your instructor if you feel the need to withdraw.

If you are not present in lecture or lab when attendance is taken you will be counted absent. You will not be allowed to take quizzes or receive credit for assignments that day.

**GRADING**

- **LECTURE** = 75% of Final Grade—from 4 lecture exams worth 100 points each.
- **LABORATORY** = 25% of the Final Grade—3 Lab Practicals worth 100 points each
- **CURVE**—You will not receive a curve on lecture exams if you are late to class, late turning in assignments, do not participate, are not prepared for class or lab or have too many absences.

**GRADING SCALE:**

- A = 90 -100
- B = 80 - 89
- C = 70 - 79
- D = 60 - 69
- F ≤ 59

**GRADE POSTING:** Grades are posted on eCampus by e + your student ID. eCampus: Students are encouraged to use the resources available on eCampus regularly. Go to the website: http://ecampus.dcccd.edu. Your login is an “e” and your seven digit student identification number (example: e1234567). Your password is the same as your user name until you change it under personal information. Announcements will be posted on eCampus. A variety of materials will be available to help you learn the required material.

**FINALGRADE POSTING:** Final grades will be on eConnect.
MATERIAL SAFETY DATA SHEETS (MSDS)

The Occupational Safety and Health Administration (OSHA) established a Hazard Communication Standard in November 1985. This standard provides information and training for workers/students encountering chemical exposure. The Hazard Communication Standard requires that labels and Material Safety Data Sheets (MSDS) be used to identify hazards associated with chemicals being used. Upon request, these sheets are made available in the Laboratory Prep area for worker and student inspection.

The chemicals found in the laboratory display a label divided into four categories. These categories, designated by the National Fire Protection Agency, rank that chemical's hazard potential in the following areas: Health (H) (Blue Square), Flammability (F) (Red Square), Reactivity (R) (Yellow Square), and Special Hazards (White Square). Within each category there are rankings of hazard on a scale of 0—4, with 0 being no hazard and 4 indicating severe hazard. The Special Hazards square has abbreviations it uses for noting the specific hazard (see below).

RED SQUARE (FLAMMABILITY)

BLUE SQUARE (HEALTH)

YELLOW SQUARE (REACTIVITY)

WHITE SQUARE (SPECIAL HAZARDS)

SYMBOL HAZARD WARNINGS – Provide basic information in determining what precautionary measures to use in handling hazardous chemical substances and/or dealing with a fire.

BLUE SQUARE – HEALTH HAZARD

- 4 – DEADLY
- 3 – EXTREME DANGER
- 2 – HAZARDOUS
- 1 – SLIGHTLY HAZARDOUS
- 0 – NORMAL MATERIAL

YELLOW SQUARE – REACTIVITY

- 4 – MAY DETONATE
- 3 – SHOCK AND HEAT MAY DETONATE
- 2 – VIOLENT CHEMICAL CHANGE
- 1 – UNSTABLE IF HEATED
- 0 – STABLE

RED SQUARE – FLAMMABILITY

- 4 – FLASH POINT BELOW 73°F
- 3 – FLASH POINT BELOW 100°F
- 2 – FLASH POINT ABOVE 100°F (NOT EXCEEDING 200°F)
- 1 – FLASH POINT ABOVE 200°F
- 0 – WILL NOT BURN

WHITE SQUARE – SPECIAL HAZARDS

- OX – OXIDIZER
- "W" WITH A SLASH THROUGH IT-USE NO WATER
- ACID – ACID
- P – POLYMERIZATION
- CORR – CORROSIVE
- ALK - ALKALI
• ACADEMIC HONESTY: Academic honesty is expected, and integrity is valued in the Dallas County Community Colleges. Scholastic dishonesty is a violation of the Code of Student Conduct. Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism, and collusion.

   As a college student, you are considered a responsible adult. Your enrollment indicates acceptance of the DCCCD Code of Student Conduct published in the DCCCD Catalog. More information is available at https://www1.dcccd.edu/cat0406/ss/code.cfm.

• ATTENDANCE POLICY STATEMENT: Students must begin attendance in all classes of enrollment. No exceptions. Financial Aid will not be granted to students who have been certified as not attending, by the certification date. For this lecture course, your physical participation in class, on or before the certification date will allow you to receive credit for FA purposes. For certification dates, check with the division or FAO for further information. Students, who are not certified as beginning class, are responsible for any payments due as a result of non-certification, to include the dropping of courses.

• FINANCIAL AID: If you are receiving Financial Aid grants or loans, you must have documented attendance in all classes. Do not drop or stop attending any class without consulting the Financial Aid Office. Changes in your enrollment level and failing grades may require that you repay financial aid funds.

  • REPEATING THIS COURSE: Effective for Fall Semester 2005, the Dallas County Community Colleges will charge additional tuition to students registering the third or subsequent time for a course. This class may/may not be repeated for the third or subsequent time without paying the additional tuition. Third attempts include courses taken at any of the Dallas County Community Colleges since the Fall 2002 semester. More information is available at: https://www1.dcccd.edu/cat0506/ss/oep/third_attempt.cfm.

• THE TEXAS SUCCESS INITIATIVE (TSI): The Texas Success Initiative (TSI) is a statewide program designed to ensure that students enrolled in Texas public colleges and universities have the basic academic skills needed to be successful in college-level course work. The TSI requires assessment, remediation (if necessary), and advising of students who attend a public college or university in the state of Texas. The program assesses a student's basic academic skills in reading, writing, and math. Passing the assessment is a prerequisite for enrollment in many college level classes. Students who do not meet assessment standards may complete prerequisite requirements by taking developmental courses in the deficient area and passing them with a grade of C or higher. Additional information is available at https://www1.dcccd.edu/cat0506/admiss/tsi_requirements.cfm.

• ADA STATEMENT: If you are a student with a disability and/or special needs who requires accommodations, please contact the college Disability Services Office at 214-860-8691.

• RELIGIOUS HOLIDAYS: Absences for observance of a religious holy day are excused. A student whose absence is excused to observe a religious holy day is allowed to take a make-up examination or complete an assignment within a reasonable time after the absence.

• DISCLAIMER RESERVING RIGHT TO CHANGE SYLLABUS: The instructor reserves the right to amend this syllabus as necessary.

• INCLEMENT WEATHER STATEMENT: In the event there is inclement weather that affects regular scheduled classes and events on the Mountain View campus, the Dallas County Community College District and Mountain View College offer several means of notification:

  1) The DCCCD (http://www.dcccd.edu) and Mountain View College (http://www.mountainviewcollege.edu) will display a notification of any closings or delays on their web pages.

  2) You may call the Inclement Weather Hotline at 214-860-2001 after 6:00 a.m.to hear a recorded message informing you of closings or delays.


   Alerts will be sent by text message, email, and voice message. You are encouraged to take advantage of this free service.

  4) You also may refer to announcements on major television and radio stations in the event that the DCCCD or Mountain View College Internet sites cannot be accessed.

   If there is no notice of changes or delays, then classes are in session as usual.

• ENROLLMENT: If you are not registered in a class, you will not be allowed to attend that class/lab.

• FINAL COURSE GRADE: Final grades are available only on eConnect and touchtone telephone at 972-613-1818. You will need your student ID number and use your birth date as your password.

http://econnect.dcccd.edu/econnect/st/stmenu.html

• N OR F: If a faculty member determines that a student has failed the course, the faculty member assigns either a grade of “N” or “F” based upon the student’s performance AFTER the official drop date. If the student “participates” in the class AFTER the official drop date, the faculty member assigns a grade of “F”. Participation for this purpose only is defined as

  1. Submits or completes an assignment after the official drop date, or

  2. Attends at least one class after the official drop date.

   If a student has not demonstrated one of the above and the instructor determines that the student has failed the course, the student will be assigned a grade of “N” by the faculty member. In such a case, the student’s transcript will record the “N” grade as an “F”.

STOP BEFORE YOU DROP
For students who enrolled in college level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop. You may drop no more than 6 courses during your entire undergraduate career unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions. Remember that once you have accumulated 6 non-exempt drops, you cannot drop any other courses with a “W”. Therefore, please exercise caution when dropping courses in any Texas public institution of higher learning, including all seven of the Dallas County Community Colleges. For more information, you may access: https://www1.dcccd.edu/coursedrops

Important Health Alert Information:

• Stay home if you have any signs of illness.

• Contact your instructor by email or phone.

• Wash your hands frequently and thoroughly. Carry hand sanitizer. (http://www.cdc.gov/cleanhands/?s_cid=ecard_2009SwineFlu_Child)

• Cover your mouth when coughing or sneezing. To avoid contaminating your hands, cough into your clothing.

What to do if the campus is closed for health reasons:

• Check the website (www.mvc.dcccd.edu) and/or local media to verify whether campus is open.

• Please check eCampus daily for updates in event that the campus is closed.

• Messages will also be placed on faculty voicemail.

• Lecture materials and assignments will be posted on eCampus.

• Lab: Complete all lab materials that can be done at home.

• Labs requiring materials/equipment will be made up upon your return to campus. The make-up schedule will be posted.

   o Final Exams: Should final exams be interrupted by a health alert, they will be administered on eCampus. Directions for completing an online test will be posted.
# Anatomy and Physiology I Calendar—Summer I—2012

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<th>MONDAY</th>
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<td>Lab: Mock Test p. 379 HW: Complete all Nervous System Power Point Lectures</td>
<td><strong>UNIT IV LAB EXAM – H -121 (ONE HOUR TIME LIMIT)</strong></td>
<td>Happy 4th of July</td>
<td>MOCK UNIT IV LAB EXAM</td>
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