ANATOMY AND PHYSIOLOGY I
SCIT 1407.6300
MONDAY THROUGH THURSDAY – LECTURE - TBA, LAB – 7:30-10:20AM
SYLLABUS SUMMER 2012

LECTURE: MARGARET SILVA
SCIENCE/NURSING/ARTSHUMANITIES/PE
OFFICE: H-128
DIVISION OFFICE W12
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DIVISION PHONE 214-860-8760, 8649
OFFICE PHONE (214) 860-8839
FAX 214-860-8836
OFFICE HOURS: MW – 2:30-5:00
LAB H-131 - PHONE (214) 860-8737

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.)

COURSE PREREQUISITES: Biology 1406 or SCIT 1407

MATERIALS REQUIRED FOR INSTRUCTION:
REQUIRED:
- Scantrons - Six 882E, Dissecting gloves, Notebook, dividers

SUGGESTED:

INTELLECTUAL COMPETENCIES:
- Reading – the ability to analyze and interpret a variety of printed materials (books, documents, and articles) above the 12th grade level
- Writing – the ability to produce clear, correct and coherent prose adapted to purpose, occasion, and audience above the 12th grade level
- Speaking – the ability to communicate orally in clear, coherent and persuasive language appropriate to purpose, occasion, and audience
- Listening – the ability to analyze and interpret various forms of spoken communication, possess sufficient literacy skills of writing, and reading
- Critical Thinking – the ability to think and analyze at a critical level
- Computer Literacy – ability to understand our technological society, use of computer-based technology in communication, solving problems, and acquiring information

EXEMPLARY EDUCATIONAL OBJECTIVES:
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
3. Communicate findings, analyses, and interpretation both orally and in writing
4. Identify and recognize the differences among competing scientific theories
5. Demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policies
6. Demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to modern culture.

COURSE OBJECTIVES: This course is divided into 4 units. All objectives are decided by the district curriculum committee and are based on The Texas Higher Education Coordinating Board (THECB) criteria. These objectives are measurable and/or observable and will be evaluated. Upon successful completion of this course, the listed lecture topics and laboratory activities will be mastered by the student and the student will be able to (orally or in writing) discuss the following:

LECTURE TOPICS
- General Chemistry
- Organic Chemistry
- Biochemistry
- Cell Replication, Protein Synthesis, Transcription, Translation, Metabolism
- Anatomical Orientation
- Tissues
- Integumentary
- Articulations/Joints
- Skeletal system
- Muscular system
- Nervous system
- Related endocrine functions

LABORATORY ACTIVITIES
- Demonstrated use of a microscope
- Application & conversion of the metric system
- Observe and understand osmosis & diffusion
- Identify the phases of the cell cycle and mitosis
- Anatomical Orientation
- Identification of the integumentary system
- Identification of selected tissues
- Identification of selected bones, bone parts, & joints
- Identification of selected cat and human muscles
- Identification of nervous system
- Dissection of mammalian brain and eye
- Examination of the special senses

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 and written assignment to the class over a global health care issue.
COURSE OUTLINE:

CLASS PROCEDURES – Successful completion of this course should be accomplished if you:
1. attend class, participate in class & lab, take notes, read and study the class notes & textbook daily
2. ecampus - answer quizzes over the unit material & use the support resources available
3. ALL ASSIGNMENTS MUST HAVE YOUR NAME, COURSE & SECTION, STUDENT ID#, DATE, AND INSTRUCTOR’S NAME. You will not receive credit for your assignment if this is information is not on your documents.

EVALUATION PROCEDURES: THE FINAL GRADE IS BASED UPON THE FOLLOWING:
75% LECTURE EXAMS
20% LAB EXAMS
5% ASSIGNMENTS

Instructor Attendance Policy: Students are expected to attend all classes. Students have the responsibility to attend class and to consult with the instructor when an absence occurs. 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.

1. LECTURE EXAMS: 75% LECTURE EXAMS
   • Lecture exams will be given in the testing center (W-117). The Testing Center’s hours are posted on the lab doors (Testing Center Phone Number 214-860-8571). You will need your MVC student I.D., #2 pencils, and proper Scantron forms (available in the Bookstore) to enter the Testing Center. You MUST use the proper Scantron forms to receive your grade (see exam summary).
   • Lecture exams must be taken on or before the exam deadline (see course calendar).
   • MAKE UP EXAM POLICY: 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.
   • Do not mark on the exams! Any marks on the exam will result in the loss of the class curve on your exam.
   • Curves: to receive a curve you must turn in, Unit 1 – your degree plan, Unit 2 – your unofficial transcript using econnect.
   • Absences, habitual lateness, and lack of participation will result in loss of the class curve. LATE WORK IS NOT ACCEPTED.

2. LECTURE & LABORATORY: ATTENDANCE IS MANDATORY.
   • Attendance is taken at the beginning of each class period. For your safety, students who miss instruction will not take part in lab for the day. Instructions are given at the beginning of each lab and WILL NOT be repeated.
   • Print off all lab reviews for each lab. This includes the list of items that will be included on the test.
   • Dissections and labs using chemicals require gloves, lab coat, and goggles. Please purchase before class.
   • Material safety data sheets (MSDS), required by the Occupational, Safety, and Health Administration (OSHA) are available for all students to observe upon request.
   • Cell phones: please do not have your cell phones out in class, please leave them on vibrate, and no texting is allowed in class at anytime.
   • Children are not allowed in the laboratory or unsupervised on campus at any time.
   • Eating and/or drinking or OPEN TOED SHOES are not allowed in the laboratory at any time.

3. LAB EXAMS: Laboratory examinations are given in class. 20% LAB EXAMS
   Lab exams must be taken during the scheduled lab exam time. There is a one-hour time limit for lab exams.

4. STUDY MATERIAL:
   Class notes: each test will strongly reflect the information in your notes, from your lectures and discussions.
   Quizzes: Each unit will have quizzes given throughout the semester.

5. GRADE POSTING: Grades will be posted on eCampus. eCampus: Go to the website: http://ecampus.dcccd.edu. Your login is an “e” and your seven digit student identification number (example: e1234567). Your password will be the same as your login. It is strongly suggested that you change your password. Final grades will be on eConnect.

6. INTERNET/RESEARCH ASSIGNMENT: There is not an internet assignment.
UNIT #1 SUMMARY
READ - Unit I Lecture Notes and Textbook Chapters 2 & 3

LECTURE EXAM - Chemistry, Biochemistry, Cells, Membrane Function, Mitosis, DNA, RNA, Protein Synthesis. Purchase one #882ES scantron

LABORATORY EXAM - safety, microscope, metric problems, osmosis, mitosis, membrane function, cells, protein synthesis.. Exam answer sheet will be provided. Short answer and calculations. You will need a calculator. 28 TOTAL QUESTIONS

UNIT #2 SUMMARY
READ - Unit II Lecture Notes and Textbook Chapters 1, 4, 5, & 6

LECTURE EXAM – Anatomical orientation, Anatomical terminology, Integumentary System, Tissues & Skeletal System, Purchase one #882ES scantron.

LABORATORY EXAM - None

UNIT #3 SUMMARY
READ - Unit III Lecture Notes and Textbook Chapters 8, 1, & 10

Test #3 - Articulations & Muscular System, Articulations. Purchase one #882ES scantron.

LABORATORY EXAM - Anatomical orientation, Anatomical terminology, Integumentary System, Tissues, Skeletal System, & Muscular System. Purchase one #882ES scantron. 80 TOTAL QUESTIONS

UNIT #4 SUMMARY
READ – Unit IV Lecture Notes and Textbook Chapters 12, 13, 14, & 16

LECTURE EXAM – Nervous System. Purchase one #882ES scantron.

LABORATORY EXAM - Neuron, Spinal Cord, Spinal Meninges, Brain, Cranial Nerves, Special Senses (Eye, Ear, Tongue, Nose). Purchase one #882ES scantron. 68 TOTAL QUESTIONS

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<th>LECTURE EXAMS</th>
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<th>III</th>
<th>AVERAGE (TOTAL ÷ 3)</th>
<th>LECTURE EXAM % (AVERAGE × 75%) %</th>
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<tr>
<th>LAB EXAMS</th>
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<th>II</th>
<th>III</th>
<th>AVERAGE (TOTAL ÷ 3)</th>
<th>LAB EXAM % (AVERAGE × 20%) %</th>
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<tr>
<th>INTERNET RESEARCH</th>
<th>BROCHURE</th>
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A = 100-90
B = 89-80
C = 79-70
D = 69-60
F = ≤51
Institutional Policies

Withdrawal Policy (with drop date):
If you are unable to complete this course, it is your responsibility to withdraw formally. The withdrawal request must be received in the Registrar’s Office PLEASE SEE YOUR CALENDAR FOR THE DATE. Failure to do so will result in your receiving a performance grade, usually an "F." Students often drop courses when help is available that would enable them to continue. Please discuss your plans with your instructor if you feel the need to withdraw. If you drop a class or withdraw from the college before the official drop/withdrawal deadline, you will receive a "W" (Withdraw) in each class dropped.

Stop before you drop:
For students who enrolled in college level courses for the first time in the Fall of 2007, Texas Education Code 51.107 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/6drop

Cell phones, electronic devices and pagers:
Students are expected to turn off all cell phones, electronic devices and pagers during class time. NO TEXTING IS ALLOWED.

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 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

Financial Aid:
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 class, 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. Students who are receiving any form of financial aid should check with the Financial Aid Office prior to withdrawing from classes. Withdrawals may affect your eligibility to receive further aid and could cause you to be in a position of repayment for the current semester. Students who fail to attend or participate after the drop date are also subject to this policy.

If you are receiving financial aid grants or loans, you must begin 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.

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/cat0406/ss/code.cfm

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 DCCC Catalog. More information is available at https://www1.dcccd.edu/cat0406/ss/code.cfm

ADA Statement:
Mountain View College and the Office of Special Services are committed to upholding the laws and the spirit of Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) signed in 1110.

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 of severe weather conditions, please listen to local radio or television stations for information concerning official closing of Mountain View College facilities. You can also call the inclement weather hotline at 214-860-8888, or check for updates on this web site. Decisions for evening classes will be made by 4:00 pm.

1) The DCCCD (http://www.dcccd.edu) and MVC (http://www.mountainviewcollege.edu) websites.
2) You may sign up for free emergency alerts at http://www.dcccd.edu/about/dcccd/news_and_events/news/pages/emergalerts02-01-10.aspx Alerts will be sent by text message, email, and voice message. You are encouraged to take advantage of this free service.
3) You also may refer to announcements on major television and radio stations.

Campus Police: The campus police’s phone number is 214-860-8758. Please report any unusual activity to the campus police.
**IMPORTANT HEALTH ALERTS AND INFORMATION:**
- Stay home if you have any signs of illness.
- Contact your instructor by email or phone.
- Cover your mouth when coughing or sneezing. To avoid contaminating your hands, cough into your clothing.

**CONTINGENCY PLAN**
- Check the website [www.mvc.dcccd.edu](http://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: 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.
- Final Exams: Should final exams be interrupted by a health alert, they will be administered on eCampus.

**MATERIAL SAFETY DATA SHEETS (MSDS)**

The Occupational Safety and Health Administration (OSHA) established a Hazard Communication Standard in November 1185. 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)
- 4 – FLAMMABILITY
- 3 – FLASH POINT BELOW 100ºF
- 2 – FLASH POINT ABOVE 100ºF (NOT EXCEEDING 200ºF)
- 1 – FLASH POINT ABOVE 200ºF
- 0 – WILL NOT BURN

### BLUE SQUARE (HEALTH)
- 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

### WHITE SQUARE (SPECIAL HAZARDS)
- OX – OXIDIZER
- "W" WITH A SLASH THROUGH IT-USE NO WATER
- ACID – ACID
- P – POLYMERIZATION
- CORR – CORROSIVE
- ALK – ALKALI

**SYMBOL HAZARD WARNINGS** – Provide basic information in determining what precautionary measures to use in handling hazardous chemical substances and/or dealing with a fire.
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<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
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<td>6/4</td>
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<tr>
<td>HW: Cell Structure p. 32-33, 37, 39</td>
<td>MOCK EXAM Metric Practice Exam</td>
<td>Metric System handout</td>
<td>Lab: Cell Cycle</td>
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<td>Quiz: Unit 1 Quiz #1</td>
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<td>6/11</td>
<td>UNIT I</td>
<td>6/12</td>
<td>6/14</td>
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<td>Lec: Cell Cycle continued</td>
<td>UNIT I LAB EXAM - H - 121 (ONE - HOUR TIME LIMIT)</td>
<td>UNIT I LECTURE EXAM - TESTING CENTER</td>
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<td>Quiz: Unit 1 Quiz #2 &amp; #3</td>
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<td>Lec: Skeletal System II Lab: Skeletal Identification</td>
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<td>Quiz: Unit 2 Quiz #2 &amp; 3</td>
<td>Lec: Muscular System Lab: Muscle Identification</td>
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<td>6/25</td>
<td>UNIT II</td>
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<tr>
<td>LAB EXAM - H -121 BEGIN UNIT IV DIAGRAMS</td>
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<td>UNIT III LECTURE EXAM - TESTING CENTER</td>
<td>Last Day to Withdraw With a &quot;W&quot;</td>
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<td>HW: Begin diagrams</td>
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<tr>
<td>Lec: Special Senses Lab: Sensory Lab Discussion, &amp; Mock Test</td>
<td>UNIT IV LECTURE EXAM (in class)</td>
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<td>Quiz: Unit 3 Quiz #2 &amp; 3</td>
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