SYLLABUS

BIO 106: SPRING 2013

Basic Anatomy & Physiology, with Dr G Cornwall

I. Course and Instructor:

Format: Online Web course

Course Information:

Course Title: Basic Anatomy & Physiology
Course Code: BIO 106 DS21
Semester: Spring 2013
Start Date: 1/14/13
Refund Date: 1/30/13
Synonym Number: 71275
Credits: 4.0
Prerequisite: NA
End Date: 5/3/13
Withdraw Date: 4/7/13

Orientation Note: You will need to login to this course using CANVAS (Blackboard is no longer) For instructions on How to Access your Canvas Account, Canvas How To's, and who to contact for all your Canvas questions and support needs, please visit: **www.coloradomtn.edu/Canvas/** and click on the Student FAQ.

Once you are logged into CANVAS go to the "Orientation Module" from the Modules link in the left sidebar to view a vodcast orientation to this course.

Computer Access:
Online courses require frequent computer use and access to the internet. You will NEED to have a personal computer, consistent High-speed Internet access, and a scanner (or scanner app on your mobile device) for use in this course.

Instructor Information:
Instructor Name: George Cornwall, Ph.D.
Phone: (Cell) 303-653-3251
E-Mail: gcornwall@coloradomtn.edu
Office Hours: Online

II. Course Description:

Focuses on basic knowledge of body structures and function, and provides a foundation for understanding deviations from normal and disease conditions. This course is designed for individuals interested in health care and is directly applicable to the Practical Nursing Program, Paramedic Program and the Medical Office Technology program.

PROPOSED SCHEDULE:

WEEK	DATE	LECTURE TOPICS & ASSIGNMENTS	READING
1	January 14th	– INTRODUCTION TO HUMAN ANATOMY & PHYSIOLOGY – CHEMICAL BASIS OF LIFE	Chapter 1 Chapter 2
2	January 21st	– CELLS – CELLULAR METABOLISM	Chapter 3 Chapter 4
3	January 28th	– TISSUES – **TEST #1**	Chapter 5
4	February 4th	– INTEGUMENTARY SYSTEM – SKELETAL SYSTEM	Chapter 6 Chapter 7
5	February 11th	– MUSCULAR SYSTEM – **TEST #2**	Chapter 8
6	February 18th	– NERVOUS SYSTEM	Chapter 9
7	February 25th	– THE SENSES	Chapter 10
8	March 4th	– ENDOCRINE SYSTEM – **TEST #3**	Chapter 11
	March 11th	– SPRING BREAK	
9	March 18th	– BLOOD – CARDIOVASCULAR SYSTEM	Chapter 12 Chapter 13
10	March 25th	– LYMPHATIC SYSTEM & BODY DEFENSE – **TEST #4**	Chapter 14
11	April 1st	– DIGESTIVE SYSTEM – RESPIRATORY SYSTEM	Chapter 15 Chapter 16
12	April 8th	– URINARY SYSTEM	Chapter 17
13	April 15th	– WATER ELECTROLYTE & ACID BASE BALANCE – **TEST #5**	Chapter 18
14	April 22nd	– REPRODUCTIVE SYSTEM – PREGNANCY, GROWTH, DEVELOPMENT & GENETICS	Chapter 19 Chapter 20
15	April 29th	– **Test #6 (**due by Wednesday May 1st)	

IV. **No-show reporting and financial aid:** If you have not completed the First weeks assignment(s) in Canvas by Tuesday, January 22nd you will be reported as a no-show and dropped from the course. The resultant loss in credit hours may cause a reduction and/or cancellation of your financial aid award. Neither financial aid awards nor class reinstatement can occur after this point without significant documented extenuating circumstances. If you have questions or concerns about this please contact your campus financial aid specialist. (**www.coloradomtn.edu/web/departments/financial_aid**)

V. **Student Learning Outcomes, Competencies, and Skills:**

1. Demonstrate knowledge and describe the function of the Periodic Table of the Elements, organic compounds and electrolytes
2. Discuss the structure and function of cellular organelles, cells, tissues and membranes in the body.
3. Demonstrate the ability to use the correct terminology for the anatomical regions, cavities, and planes of the human body.
4. Discuss the three layers of the skin with respect to tissue type, function, and substructures.
5. Classify burns based on the amount of skin damage they produce.
6. List and describe the components of the skeletal system
7. List and describe the various types of joints and describe the major types of joint movement.
8. Be able to name major muscles, locate them in the body, and tell the function of each.
9. List the divisions and structures of the nervous system and describe the characteristics of each.
10. Define and discuss the structure general function of the special senses.
11. List the major types of general senses and briefly describe each.
12. Compare the means by which the nervous and endocrine systems regulate body functions.
13. Describe the location and function of the endocrine glands in the human body.
14. Diagram and discuss homeostasis and negative feedback.
15. Describe the development, structure and function of blood and it components
16. Describe some diagnostic blood tests and the normal values for the tests, and give examples of disorders that produce abnormal test values.
17. Describe the structure and function of the heart and its conduction system.
18. Describe the structure and function of the arteries, capillaries, and veins.
19. Locate the major veins and arteries of the body.
20. Describe the structures and functions of the lymphatic system, lymph and immune functions.
21. Describe the anatomy and functions of the respiratory passages beginning at the nose and ending with the alveoli.
22. Explain how alterations in blood carbon dioxide levels, blood pH, and blood oxygen levels affect respiration.
23. List the organs of the digestive system and describe the structure of each.
24. Name the major digestive enzymes, the function of each, and where it is secreted.
25. List the structures that make up the urinary system and describe the overall functions it performs.
26. Discuss the major factors influencing fluid and electrolyte balance.
27. Discuss the structure and function of the major organs of the male and female reproductive system
28. List the hormones that influence the male and female reproductive system and describe their functions.
29. Trace the major events of fetal development from the fertilized egg through birth

VI. IDEA Objectives

1. Gaining factual knowledge (terminology, classifications, methods, trends).
2. Learning fundamental principles, generalizations, or theories.
3. Learning to apply course material (to improve thinking, problem solving, and decisions).
4. Developing skill in expressing oneself orally or in writing.
5. Learning how to find and use resources for answering questions or solving problems.
6. Acquiring an interest in learning more by asking questions and seeking answers.

VII. Evaluation Methods and Assessment Plan:

FORMATIVE ASSESSMENTS (aka ASSIGNMENTS):
For each chapter of material presented, you will need to complete the following formative study tools and assessments:

- LearnSmart Study Tool (online in connect)
- Chapter Quiz (online in connect)
- Diagramming Assignment (on paper)
- Lab Quiz (online in connect)

These are "low stakes" tools, which are designed to lead you into success, by helping you learn the material, as well as providing you immediate feedback on your understanding of the material, so that you can adjust your study habits, or seek help before the "higher stakes" Tests (Summative Assessments).

SUMMATIVE ASSESSMENTS (aka TESTS):
There will be a total of six exams, each will be held online in Connect, at the conclusion of the respective module of material (as indicated on proposed schedule).

POINT BREAKDOWN:
This point breakdown is subject to change.

Tests x 6	= 300 points
LearnSmart Modules x 20	= 200 points
Diagramming Assignments x 20	= 200 points
Lab Quizzes x 10	= 200 points
Online Forum Discussions	= 50 points
POINT TOTAL	**= 950 points**

GRADES:
NO letter grades will be assigned to the individual exams, quizzes, assignments, discussions. Your final grade will be based upon a total percentage of 950 possible points. We will guarantee the following scale based on point totals: A to A- = 90-100%; B+ to B- = 80-89%; C+ to C- = 70-79%; D+ to D- = 60-69%; F = less than 60%.

Your lab quiz average is only about 20% of your total grade, but it is considered a vital part of the course. Consequently, **to receive a passing grade in the course, you MUST earn a passing grade on the lab component as well.** In other words, if you have a failing lab average, you cannot pass the course.

NOTICE:
A student judged to have engaged in academic misconduct as defined in the "Academic Policies and Requirements" section of the Colorado Mountain College Student Handbook will, at a minimum, receive a "zero" for the work in question. The student may also be removed from the class, resulting in a failing grade. All student course material may be submitted to turnitin.com (or another anti-plagiarism program) at the instructor's discretion. "Academic Expectations," the "Student Code of Conduct and Judicial Process" and more information about academic misconduct can be found in the Student Handbook. **www.coloradomtn.edu/File/student_handbook.pdf.**

Students are responsible for course materials from assigned text(s) and reading, lectures, labs, and other assignments as required.

The instructor may alter any, or all, of this syllabus during the semester as the learning environment requires. Students will be notified in writing of changes.

If you have a disability protected by the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act and feel you may need classroom accommodations based on the impact of your disability, please contact the Disability Services Coordinator on your campus.

- Edwards and Steamboat Springs: Deb Farmer at 970-870-4450
- Aspen, Carbondale, Glenwood Springs (including Spring Valley), and Rifle: Dr. Anne Moll at 970-947-8256
- Breckenridge, Dillon, Leadville, and Chaffee County: Sandi Conner at 719-486-4200

Students wishing to withdraw from this course must INITIATE the course withdrawal/drop process at the site Registration Office.

This class could be cancelled one week prior to the census date if a sufficient number of students are not enrolled by that date.

VIII. Grading System & Options

Information about grading is available in the Colorado Mountain College catalog. You will receive a grade report for current semester courses at the end of each term. This grade report is mailed to your permanent mailing address. Reports are mailed approximately two weeks after the end of the academic term. Additional information is available at:
http://catalog.coloradomtn.edu/content.php?catoid=3&navoid=620#Grading_System_and_Options_

IX. Required Course Materials

Text:
Hole's Essentials of Human Anatomy & Physiology; 11th Edition; Shier; McGraw Hill (with ConnectPlus, and APR access)
ISBN: 9780077471897

- You may choose to use the digital version of the text instead. It is included with Connect Plus access (~$80), and you can access it from within Canvas as soon as the course is launched.
- Also, if you have an older, or used version of the text, which did not come with Connect access, you may purchase access (~$40) from within Canvas as soon as the course is launched.

Other Essentials:

You will need consistent High-speed internet access, a scanner, and an up-to-date computer with the most recent version of quicktime (or iTunes), adobe reader, flash, and shockwave. You can download these FREE products here: http://www.adobe.com/downloads/

You will be submitting drawn assignments online, so unless you have a mind-mapping/concept-mapping software (like MyThoughts, iMindmap, SimpleDiagrams or Conceptdraw) then **a scanner** is imperative to this course (you can get an inexpensive scanner at Walmart (<$40) that will suit you well for these purposes).

Ordering Books

Colorado Mountain College has chosen to partner with Follett Virtual Bookstores to operate textbook services. You will find the official textbook list at **www.coloradomtn.bkstr.com**. If you ever have any online bookstore questions, you can email coloradomtn@fvb.follett.com or call 800-621-4088.

Students can sell back books anytime online or in-person at Follett's CMC buyback events. Sign up for the online store's email list at **www.coloradomtn.bkstr.com/email** for more information on future buyback dates/times and to receive other important messages from Follett.

Ordering Textbooks with Financial Aid:
Students wishing to use their Financial Aid to purchase their textbooks from the Colorado Mountain College Online Bookstore (Follett) may be set up with a
CMC Flex Pay account. Contact your local CMC Accounts Manager for instructions and your specific username and password information. If you are not close to a CMC site contact CMC Online Learning at 970-947-8341 or virtual@coloradomtn.edu.

A Few Words About Microsoft Word

Microsoft Word is the standard word processing program for the majority of CMC instructors. Students without Microsoft Word may use Google Docs, or the free software from **www.OpenOffice.org** to create Word-compatible documents. The program also includes spreadsheet, presentation, drawing, and database applications. The program is available for Windows, Macintosh, or Linux operating systems. Microsoft Word is installed on computers available in computer labs at CMC locations.

X. Other Information:

The Official means of communication for this course will be through the CANVAS communications center, or CMC email). If a class is cancelled, changed, or moved, you will be notified by email, so check your mail before class, in case of any last minute changes!

You will need to check in regularly to the CANVAS website for this course. This is where you will find lecture notes, vodcast lectures for the class, and any other printed material or assignments you may need to pick up.

CANVAS

Canvas is the online course management system (CMS) used by Colorado Mountain College. You access CANVAS via your web browser, i.e.: Chrome, Safari, Mozilla/Firefox, Internet Explorer etc. Students, faculty and staff members use the CANVAS site to access course announcements, documents, research links and library resources, to receive and deliver completed assignments, take tests, and to communicate with each other via email, discussion boards and chat.

For instructions on How to Access your Canvas Account, Canvas How To's, and who to contact for all your Canvas questions and support needs, please visit: www.coloradomtn.edu/web/departments/faq-for-students and click on the Student FAQ.

Student Email

All CMC students enrolled in a credit-based class (0.5 hour credit class or more) will be assigned a CMC student email address through Google mail (Gmail). Please allow at least 48 hours after you register for this account to be activated. For more information on your CMC student email account, please visit the Student page of the MyCMC Portal: **mycmc.coloradomtn.edu**.

IX. Virtual Library Information

http://library.coloradomtn.edu/content.php?pid=349163&sid=2891178

The Virtual Library has its doors open 24/7, providing access to thousands of online journals and newspapers, books and art images, downloadable videos and audio books, career resources and practice tests.

Virtual Library Help Desk

If you need help with the Virtual Library, email reference@coloradomtn.edu or call us at 800-621-8559, extension 2926.

Colorado Mountain College Online Learning

Information is available at: **http://www.coloradomtn.edu/online_learning/**.