

BOROUGH OF MANHATTAN COMMUNITY COLLEGE

City University of New York

Department of Science

Title of Course ANATOMY & PHYSIOLOGY II

BIO 426 Section _____

FALL 2008

Credits 4

Class hours 3

Lab hours 3

Instructor Information

Name:

Office:

Room:

Email:

Course Description

This is the second semester of a two-semester course that explores the human body as an integrated, functional complex of systems. Terminology structure and function of each organ system, and the interrelationships between systems are emphasized.

Prerequisites/Co-requisites

BIO 425 & CHE 118 or CHE 121, or departmental approval

NOTE: BIO 426 does not meet the science requirement in the liberal arts curriculum.

Student Learning Outcomes

Students will be able to develop an understanding of human anatomy and physiology by studying the relationships between the anatomical features and the functions of each organ system, as well as the interactions between different organ systems.

Students will be able to understand concepts related to normal anatomy and physiology that can be applied to the understanding of disease processes.

Students will be able to experience a hands-on laboratory experience that includes the use of microscopy, models, charts, preserved materials and a variety of analytical techniques.

Taken together, course objectives are designed to provide relevant information concerning human anatomy and physiology that helps prepare students for careers in health-related fields.

Required Text & Readings

Anatomy and Physiology, (4th Edition)

Saladin, K.S.

McGraw-Hill, 2007

Human Anatomy and Physiology Laboratory Manual, 3rd Edition)

Martin, T.

McGraw-Hill, 2007

Other Resources

Use of Technology (if applicable)

Evaluation & Requirements of Students

At the beginning of the semester, the instructor will inform students about all factors upon which their final grades will be based.

Outline of Topics

LECTURE

<u>WEEKS</u>	<u>TOPICS</u>	<u>PAGES</u>
1	Blood	679-713
2	Blood/ Heart	679-713, 715-752
3	Heart	715-752
4	Circulation: Blood Vessels	753-806
5	Circulation: Blood Pressure	753-806
6	Lymphatics/ Immune System	807-852
7	Respiratory System	853-894
8	Respiratory/ Digestive System	853-894, 953-1000
9	Digestive System	953-1000
10	Nutrition and Metabolism	1001-1034
11	Urinary System	895-930
12	Water, Electrolyte and Acid-Base Balance	931-952
13	Reproductive System	1035-1064, 1065-1104
14	Development, Growth and Aging	1105-1139
15	Review and Final Examination	

LABORATORY

<u>WEEKS</u>	<u>TOPICS</u>	<u>PAGES</u>
1	Blood I: Differential Count	285-293
2	Blood II: Cytometer/ Hematocrit	(295-302)
3	Heart	309-317
4	Blood Vessel Microscopy/ Blood Vessels	327-332* 337-350 (Human)
5	Cardiovascular Physiology	333-336
6	Immunity/ Blood Typing	303-308
7	Respiratory System I: Microscopy/ Anatomy	391-398* 399-404
8	Respiratory II: Physiology	405-412
9	Digestive System: Microscopy/ Anatomy	365-385*
10	Enzyme Function	Handout (387-390)
11	Nutrition	Handout
12	Urinary System: Microscopy/ Anatomy	419-426* 433-435
13	Reproductive System: Microscopy/ Anatomy	437-456*
14	Development	Handout (457-463)
15	Final Examination**	

*Parts of at least two labs should include fetal pig dissection.

**Practical examinations are at the discretion of the instructor.

LABORATORY PROCEDURES

1. No food or drinks in the laboratory.
2. All dissection “cuttings and rinsings” must be discarded in appropriate garbage cans.

****No such materials may be left in sinks or sink drains! ****
3. All dissecting tools must be washed and returned to their proper trays.
4. Prepared slides must be removed from microscopes, cleaned and **returned to their proper trays.**
5. Microscopes must have their cords properly wound and tied, and scopes should be **on their correct shelves** with their **numbers facing outwards.**
6. Models must be left with **all parts attached properly** for incoming classes.
7. **Instructors:** Any models, charts and/or lab materials removed for use in a lecture room must be **returned to the laboratory** after that lecture class. **Erase all boards before leaving.**
8. All tables, sinks, counters and floors should be left spotless.

College Attendance Policy

At BMCC, the maximum number of absences is limited to one more hour than the number of hours a class meets in one week. For example, you may be enrolled in a three-hour class. In that class, you would be allowed 4 hours of absence (not 4 days). In the case of excessive absences, the instructor has the option to lower the grade or assign an F or WU grade.

Academic Adjustments for Students with Disabilities

Students with disabilities who require reasonable accommodations or academic adjustments for this course must contact the Office of Services for Students with Disabilities. BMCC is committed to providing equal access to all programs and curricula to all students.

BMCC Policy on Plagiarism and Academic Integrity Statement

Plagiarism is the presentation of someone else’s ideas, words or artistic, scientific, or technical work as one’s own creation. Using the idea or work of another is permissible only when the original author is identified. Paraphrasing and summarizing, as well as direct quotations, require citations to the original source. Plagiarism may be intentional or unintentional. Lack of dishonest intent does not necessarily absolve a student of responsibility for plagiarism.

Students who are unsure how and when to provide documentation are advised to consult with their instructors. The library has guides designed to help students to appropriately identify a cited work. The full policy can be found on BMCC’s web side, www.bmcc.cuny.edu. For further information on integrity and behavior, please consult the college bulletin (also available online).