GENERAL POLICIES

BIO 142
Human Anatomy and Physiology II
4 Credits

INSTRUCTOR INFORMATION

Instructor: C. Knights
Office Location: Bisdorf Bld., Room 352
Office Phone: 703.845.6225
E-mail: cknights@nvcc.edu
Office Hours: Monday and Friday: 11:00 pm – 2:00 pm
Thursday: 3:30 pm – 6:30 pm

I would encourage you to make appointments even during office hours. I can also be available up to 3:00 pm on Monday by appointment only.

COURSE DESCRIPTION

Human Anatomy & Physiology II (BIO142) is designed to develop an understanding of the interrelationships between anatomy and physiology as observed at the cellular, tissue, organ, system level of the human organism. The topics studied in BIO142 include the lymphatic system and immune responses, the endocrine system, the nervous system, the digestive system and the male and female reproductive systems combined with sections on inheritance and genetics. The laboratory includes animal and organ dissections as well as work with skeletons, models and slides. Lecture 3 hours. Recitation and laboratory 3 hours. Total 6 hours per week.

(Some of the information above was obtained from the NVCC College-Wide Course Content Summary.)

GENERAL COURSE OBJECTIVES

Upon successful completion of this course, the student should be able to:

A. discuss the anatomy and physiology of the nervous system of man and related clinical disorders
B. explain neuronal and synaptic transmission
C. describe the anatomy and physiology of the special senses of man
D. discuss the organs of the endocrine system, their secretions, the functions of these secretions, the control of these secretions, and their target organs. Explain common related clinical disorders
E. describe the anatomy and physiology of the male and female reproductive systems
F. discuss the phases of the menstrual cycle and the hormones associated with each phase
G. explain the sequence of events in protein synthesis
H. solve genetic problems involving monohybrid and dihybrid crosses, blood types, sex-linked traits and sex influenced traits
I. describe the anatomy and physiology of the digestive system of man
J. list the enzymes and hormones involved in digestion and state their functions
K. describe the anatomy and physiology of the urinary system of man and related clinical disorders
L. explain fluid and electrolyte balance in the human body and related clinical disorders
M. explain the anatomy and physiology of the immune system

(Some of the above information was acquired from the NVCC College-Wide Course Content Summary.)

ATTENDANCE AND PARTICIPATION

Regular attendance to all classes is expected. Please try to be on time as not to disturb other students. If you are late, it is your responsibility to see that your name is on the attendance roster and to pick up any handouts that may have been distributed. Attendance will be recorded each lecture period. Those students who consistently come in late may not be given credit for attending class. A student is responsible for knowing any material covered in the class whether he/she was in attendance or not. In addition, attendance and participation will account for at least 1% of your final grade.

Class is not dismissed if I am late to class. If I am more than 15 minutes late, the SAT office (Rm. 352; 703-845-6341) should be contacted for further instructions.
CLASSROOM CONDUCT

The classroom is a place for learning. It is expected that you come to class prepared to be there for the full class period. During each class a 10 minute break will be given at the discretion of the professor. Unless there is a medical emergency, please do not leave the class while in progress because it can be disruptive to both me and your fellow classmates. If you leave the room during a quiz or exam, your work may not be accepted. Unless specifically a part of class activities, in-class talking to other students around you is unacceptable behavior. If the activity persists, students will be asked to leave the classroom. No eating/food will be permitted during class but drinks will be allowed. Please turn off your cell phones and other electronic devices during lecture and laboratory periods.

MATERIALS

Required:


Recommended:
An Introduction to Chemistry for Biology by Sackheim, Eighth Edition

You will be required to furnish yourself with all materials necessary for the completion of the course. These items include but are not limited to the following: course text book, laboratory manual, reference material, pens, #2 pencils with erasers for all exams and scantron sheets for all exams.

BLACKBOARD, E-MAIL AND READING ASSIGNMENTS

Lecture notes containing the images and some of the text presented in class will be made available on blackboard. You will be responsible for printing off your own handouts from our Blackboard course page. During week 1 I will be providing instruction on how to access Blackboard and all of the course documents.

E-mail is an extremely important form of communication that I use often to update students about class information. To this end, I will only use student NVCC e-mail accounts. Therefore, I highly recommend that you check you NVCC e-mail account daily or have the mail from this account forwarded to your primary e-mail account. On the first day of class I will instruct students on how to forward mail out of an NVCC account.

The chapter and daily readings for Human Anatomy & Physiology II are listed on the lecture schedule provided.

COURSE EVALUATION

The lecture grade is 70% of the course grade and is based on exams, quizzes, activities and extra credit points earned in lecture. The laboratory grade is 30% of the course grade and is based on activities completed in laboratory.

<table>
<thead>
<tr>
<th>Grading (Lecture):</th>
<th>Lecture grading scale:</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXAM 1 = 100 points</td>
<td>A = 90% and above</td>
</tr>
<tr>
<td>EXAM 2 = 100 points</td>
<td>B = 80% to 89.9%</td>
</tr>
<tr>
<td>EXAM 3 = 100 points</td>
<td>C = 70% to 79.9%</td>
</tr>
<tr>
<td>EXAM 4 = 100 points</td>
<td>D = 60% to 69.9%</td>
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<tr>
<td></td>
<td>F = 59.9% and below</td>
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</tbody>
</table>

400 points (70% of course grade)

EXAMS

Four lecture exams will be given throughout the semester totaling 400 points. Each exam will be worth 100 points. The examinations are generally 65-80% multiple-choice/matching/short-answer essay with the remaining percentage of points drawn from essay questions. I reserve the right to alter the points offered on each exam and the total points available in the class. However, I will do my best to follow this point schedule. I also reserve the right to give announced and unannounced class activities (quizzes, group work, homework, etc.) and apply the grades earned toward your final grade.
**No unexcused makeup exams will be offered.** Documented emergencies and extenuating circumstances will be considered. If the instructor is informed of the absence prior to the scheduled exam, arrangements may be made to take the exam ahead of the scheduled time. A message (telephone or email) should be left with phone numbers (work and home) to make such arrangements. Permission to take the exam will only be granted for legitimate reasons. **No Exceptions.** All students will be required to show picture identification when taking tests in the Testing Center, room 332.

*If school is closed on the day an exam is scheduled, the evaluation will be given during the next lecture period.*

**FINAL EXAM**

Our final exam (Exam 4) will be given during exam week on **Tuesday May 5, 2009.** The class will begin promptly in our regularly scheduled classroom at **11:00 a.m.** and conclude at **1:45 p.m.** Please make the necessary arrangements to attend this class. If you are unable to attend this class you must give me at least one week of advance notice to make other arrangements.

**ASSIGNMENTS**

*All outside assignments (i.e., take-home quizzes and extra-credit activities) in lecture must be typed and neatly prepared for submission.* You may use computers in the Writing Lab in the Learning Resource Center (room 334, telephone number 703.845.6269) if you do not have a typewriter or personal computer. If you are not familiar with Microsoft Word, you must sign up for a 30-minute demonstration before you will be allowed to use the computer (training schedules are available in the Writing Center). You must follow the Writing Center guidelines when using any of their computers.

*All assignments must conform to the written instructions, be typed, neatly stapled, and turned in at the beginning of class on the due date to receive full credit. Late assignments will be accepted but will be penalized by 10%. I will not accept work that is more than one week late and extra credit assignments will not be accepted late.*

**WITHDRAW OR AUDIT**

A student may withdraw from a course, without a grade penalty, by **March 26, 2009** (Note: last day for schedule adjustments with tuition refund is **January 28, 2009**). It is the student’s responsibility to withdraw using NovaConnect or to submit the standard NVCC Withdrawal Form 125-47 to the instructor by the deadline date (check NVCC catalogue and class schedule). **There will be no withdrawals after this date except for emergencies beyond the student’s control if a written petition is submitted to and approved by the instructor.** In order for the withdrawal to be approved the student must have verifiable proof of extenuating circumstances justifying the withdrawal. If the petition is not made or approved, the student will receive a grade of “F”.

*If you plan to audit this course, the decision must be established at the beginning of the semester. I will not grant an audit after the third week of class.*

**ACADEMIC HONESTY**

Each student is expected to maintain the highest standards of honesty and integrity in academic matters. Cheating is a violation of professional ethics and college policy. Any student found cheating will result in an automatic failure of that assignment with possible expulsion from the course, after which NVCC reserves the right to take further disciplinary action. Cheating involves BOTH giving and receiving information that is to be carried out individually. Plagiarism is also considered cheating and includes (but is not limited to) copying your classmates’ work or published works without providing proper citations.

**SPECIAL NEEDS**

If you have special needs, problems and/or require special accommodations, please address these with me at the beginning of the semester. Reasonable accommodations will only be made for students who have a verifiable need. If you are seeking accommodations based on a disability, you must provide a disability sheet, which can be obtained from the counselor for Disability Services. On the Alexandria campus the Disability Services Counselor is Sharon Murphy, who may be reached at telephone number 703.845.6067.
WRITING ASSISTANCE

This course requires writing in both lecture and laboratory. If you feel that you are having problems with any aspect of your writing skills, please call or go to the Writing Assistance Center in room 185 of the Bisdorf building, telephone number 703.845.6054.

TUTORING SERVICE

Student tutorial services are available in room 185 of the Bisdorf Building, telephone number 703.845.6363.

SCHOOL CLOSING AND EMERGENCY AND EVACUATION PLAN

In the event of inclement weather please check the NVCC homepage for school closing information. If the college is scheduled to re-open at a time when at least 45 minutes of class would remain you will be required to attend class.

A framed emergency evacuation plan is located on the back wall in our classroom. This plan describes the evacuation procedures and route that must be followed in case of emergency. If an event occurs that requires evacuation, do not use the elevators, and once outside move at least 300 feet away from the building. Before leaving you should take all personal belongings, as time permits, because there is no assurance that you will be allowed to return. I will assist any individual with mobility disabilities in exiting the building.

LABORATORY

All lab sections will begin the week of January 25, 2010.

Instructor reserves the right to alter this document at his discretion during the semester.
# LECTURE SCHEDULE

**BIO 142**  
Human Anatomy and Physiology II  
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If weather conditions cause the cancellation of a class that involves an exam or activity, the evaluation will take place during the next class period.

<table>
<thead>
<tr>
<th>DATE / DAY</th>
<th>TOPIC / EVALUATION</th>
<th>READING ASSIGNMENT*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.14</td>
<td>Nervous System – Overview and Nervous Tissue</td>
<td>TX: Chapter 12; 12.1 – 12.6</td>
</tr>
<tr>
<td>1.28</td>
<td>Nervous System – Brain and Cranial Nerves</td>
<td>TX: Chapter 14; 14.1 – 14.6</td>
</tr>
</tbody>
</table>
| 2.4        | **EXAM 1 (chapters 12 – 14)**  
Nervous System – Autonomic | TX: Chapter 15; 15.1 – 15.4 |
| 2.11       | Nervous System – Special Senses | TX: Chapter 16; 16.1 – 16.5 |
| 2.18       | Endocrine system  
Study tool - Hormones and their function | TX: Chapter 17; 17.1 – 17.7  
Blackboard handout |
| 2.25       | Digestive System | TX: Chapter 25; 25.1 – 25.7 |
| 3.4        | **EXAM 2 (chapters 15 – 17)**  
Digestive System (cont.) | TX: Chapter 25; 25.1 – 25.7 |
| 3.11       | No class – *Spring break holiday* | |
| 3.18       | Nutrition and Metabolism | TX: Chapter 23; 23.1 – 23.5  
and 23.7 (23.6 – lab) |
| 3.25       | Urinary System | TX: Chapter 21; 21.1 – 21.6 |
| 4.1        | Water, Electrolyte and Acid Balance  
DNA structure and gene function  
Heredity, genomics and genetics (lab on 4/6) | TX: Chapter 24; 24.1 – 24.3  
TX: Chapter 4; 4.1 and 4.2  
TX: Chapter 4; 4.4 |
| 4.8        | **EXAM 3 (chapters 23 – 26)**  
DNA structure and gene function (cont.) | TX: Chapter 4; 4.1 and 4.2 |
| 4.15       | Male Reproductive System (lab on 4/13)  
Female Reproductive System | TX: Chapter 27  
TX: Chapter 28; 28.1 – 28.6 |
| 4.22       | Human Development | TX: Chapter 29; 29.1 – 29.4 |
| 4.29       | Lymphatic System and Immunity | TX: Chapter 21; 21.1 – 21.6 |
| 5.4        | **EXAM 4 (chapters 4, 21, 28 and 29)** | |

*Anatomy & Physiology: The Unity of Form and Function* by Kenneth Saladin, 5th Edition
BIO 142 GRADE SHEET
Please use the following charts to record your scores and monitor your progress.

Examinations – (100 points each)

______ EXAM 1
______ EXAM 2
______ EXAM 3
______ EXAM 4
TOTAL ______ (max of 400 points)

Extra Credit:
Throughout the semester a number of extra credit opportunities may be made available. If made available, these assignments will require you to review and research published work to find your answers. The summary of your research and work must adhere to the following policies or it will not be scored. The summary must be typed using standard page formatting (top/bottom margin = 1 inch, right/left margin = 1.25 inch, 11 or 12 point font, with 1.5 line spacing). The summary must also include a formal work cited page (either MLA or APA format) listing all reference material used to answer the question (including but not limited to print material, textbooks and websites).

Specific instructions will be given with each assignment.

Course Grade Calculations:

Lecture: Total Points _____ / _____ points = _____ x .7 (70%) = _____

Laboratory: Total Points _____ / _____ points = _____ x .3 (30%) = _____

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