ARIZONA STATE UNIVERSITY

GENERAL STUDIES PROGRAM COURSE PROPOSAL COVER FORM

Courses submitted to the GSC between 2/1 and 4/30 if approved, will be effective the following Spring.

Courses submitted between 5/1 and 1/31 if approved, will be effective the following Fall.

(SUBMISSION VIA ADOBE.PDF FILES IS PREFERRED)

DATE 3/30/2009

1. ACADEMIC UNIT: School of Life Sciences

2. COURSE PROPOSED: BIO 202 Human Anatomy & Physiology II 4 (prefix) (number) (title) (semester hours)

3. CONTACT PERSON: Name: Delon Washo-Krupps Phone: 480-965-4501
   Mail Code: 4501 E-Mail: Delon.Washo@asu.edu

4. ELIGIBILITY: New courses must be approved by the Tempe Campus Curriculum Subcommittee and must have a regular course number. For the rules governing approval of omnibus courses, contact the General Studies Program Office at 965-0739.

5. AREA(S) PROPOSED COURSE WILL SERVE. A single course may be proposed for more than one core or awareness area. A course may satisfy a core area requirement and more than one awareness area requirements concurrently, but may not satisfy requirements in two core areas simultaneously, even if approved for those areas. With departmental consent, an approved General Studies course may be counted toward both the General Studies requirement and the major program of study. (Please submit one designation per proposal)

   Core Areas
   Literacy and Critical Inquiry–L
   Mathematical Studies–MA
   Humanities, Fine Arts and Design–HU
   Social and Behavioral Sciences–SB
   Natural Sciences–SQ

   Awareness Areas
   Global Awareness–G
   Historical Awareness–H
   Cultural Diversity in the United States–C

6. DOCUMENTATION REQUIRED.
   (1) Course Description
   (2) Course Syllabus
   (3) Criteria Checklist for the area
   (4) Table of Contents from the textbook used, if available

7. In the space provided below (or on a separate sheet), please also provide a description of how the course meets the specific criteria in the area for which the course is being proposed.

   CROSS-LISTED COURSES: ☒ No ☐ Yes; Please identify courses: ________________________________

   Is this a multisection course?: ☐ No ☒ Yes; Is it governed by a common syllabus? __________

Chair/Director (Print or Type)  Chair/Director (Signature)

Date: __________________________

Rev. 1/94, 4/95, 7/98, 4/00, 1/02, 10/08
Rationale and Objectives

In a relatively short time in the history of civilized societies, humankind moved from what was essentially an agrarian population into an industrial age, which in recent years has been profoundly shaped by such scientific and technological advances as genetic engineering, the computer, and space exploration. Our history of irrepressible ingenuity makes a compelling case for a future that will be even more profoundly influenced by science and technology. It is imperative that we react expeditiously and effectively to the problems and the promise that these advances create. We must ensure that technological change is directed to the benefit of society and that it will promote human dignity and values. Success in achieving this goal will depend upon the insight and knowledge of political and public opinion leaders, and the scientific enlightenment of educated citizens. To a significant degree, the ability of these individuals to understand the nature of the issues and the alternative courses of action will be determined by the quality of science presented at the nation's institutions of higher learning.

The recommendation of at least one laboratory course that includes a substantial introduction to the fundamental behavior of matter and energy in physical or biological systems derives from a number of considerations. First, all physical and biological phenomena have at their roots the fundamental principles governing the behavior of matter and energy. These principles have been shown over a period of time to be a value in reliably predicting and rationalizing a broad range of phenomena. Unless the lines to these roots are established, our understanding of the broader range of the sciences, and other fields upon which these sciences impinge, will be impaired. Second, because these fundamental principles have been experimentally established beyond reasonable doubt, the essentials of the scientific method can be clearly and coherently revealed by their study. Third, the study of the behavior of matter and energy illustrates the usefulness of mathematics in precisely describing and rationalizing certain physical phenomena, and the expressiveness of mathematical equation.
Proposer: Please complete the following sections and attach appropriate documentation.

### ASU--[SQ] CRITERIA

I. FOR ALL QUANTITATIVE [SQ] NATURAL SCIENCES CORE AREA COURSES, THE FOLLOWING ARE CRITICAL CRITERIA AND MUST BE MET:

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>Identify Documentation Submitted</th>
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<tbody>
<tr>
<td>☒</td>
<td>☐</td>
<td>A. Course emphasizes the mastery of basic scientific principles and concepts. syllabus, lab syllabus, text TOC</td>
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<tr>
<td>☒</td>
<td>☐</td>
<td>B. Addresses knowledge of scientific method. syllabus, lab syllabus, text TOC</td>
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<tr>
<td>☒</td>
<td>☐</td>
<td>C. Includes coverage of the methods of scientific inquiry that characterize the particular discipline. syllabus, lab syllabus, text TOC</td>
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<tr>
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<td>D. Addresses potential for uncertainty in scientific inquiry. syllabus, lab syllabus, text TOC</td>
</tr>
<tr>
<td>☒</td>
<td>☐</td>
<td>E. Illustrates the usefulness of mathematics in scientific description and reasoning. syllabus, lab syllabus, text TOC</td>
</tr>
<tr>
<td>☒</td>
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<td>F. Includes weekly laboratory and/or field sessions that provide hands-on exposure to scientific phenomena and methodology in the discipline, and enhance the learning of course material. syllabus, lab syllabus, text TOC</td>
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<tr>
<td>☒</td>
<td>☐</td>
<td>G. Students submit written reports of laboratory experiments for constructive evaluation by the instructor. syllabus, lab syllabus, text TOC</td>
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</table>
H. Course is general or introductory in nature, ordinarily at lower-division level; not a course with great depth or specificity.

**II. - AT LEAST ONE OF THE FOLLOWING ADDITIONAL CRITERIA MUST BE MET WITHIN THE CONTEXT OF THE COURSE:**

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<tbody>
<tr>
<td></td>
<td>A. Stresses understanding of the nature of basic scientific issues.</td>
<td>syllabus, lab syllabus, text TOC</td>
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<tr>
<td></td>
<td>B. Develops appreciation of the scope and reality of limitations in scientific capabilities.</td>
<td>syllabus, lab syllabus, text TOC</td>
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<tr>
<td></td>
<td>C. Discusses costs (time, human, financial) and risks of scientific inquiry.</td>
<td>syllabus, lab syllabus, text TOC</td>
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### III. - [SQ] COURSES MUST ALSO MEET THESE ADDITIONAL CRITERIA:

<table>
<thead>
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#### A. Provides a substantial, quantitative introduction to fundamental principles governing behavior of matter and energy, in physical or biological systems.  
- syllabus, lab  
- syllabus, text  
- TOC

#### B. Includes a college-level treatment of some of the following topics *(check all that apply below)*:

- a. Atomic and molecular structure  
  - syllabus, lab  
  - syllabus, text  
  - TOC

- b. Electrical processes  
  - syllabus, lab  
  - syllabus, text  
  - TOC

- c. Chemical processes  
  - syllabus, lab  
  - syllabus, text  
  - TOC

- d. Elementary thermodynamics  
  - syllabus, lab  
  - syllabus, text  
  - TOC

- e. Electromagnetics  
  - syllabus, lab  
  - syllabus, text  
  - TOC

- f. Dynamics and mechanics  
  - syllabus, lab  
  - syllabus, text  
  - TOC

#### [SQ] REQUIREMENTS CANNOT BE MET BY COURSES:

- Presenting a qualitative survey of a discipline.
- Focusing on the impact of science on social, economic, or environmental issues.
- Focusing on a specific or limiting but in-depth theme suitable for upper-division majors.
Proposer: Please complete the following section and attach appropriate documentation.

<table>
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**I. - FOR ALL GENERAL [SG] NATURAL SCIENCES CORE AREA COURSES, THE FOLLOWING ARE CRITICAL CRITERIA AND MUST BE MET:**

1. Course emphasizes the mastery of basic scientific principles and concepts.
2. Addresses knowledge of scientific method.
3. Includes coverage of the methods of scientific inquiry that characterize the particular discipline.
4. Addresses potential for uncertainty in scientific inquiry.
5. Illustrates the usefulness of mathematics in scientific description and reasoning.
6. Includes weekly laboratory and/or field sessions that provide hands-on exposure to scientific phenomena and methodology in the discipline, and enhance the learning of course material.
7. Students submit written reports of laboratory experiments for constructive evaluation by the instructor.
8. Course is general or introductory in nature, ordinarily at lower-division level; not a course with great depth or specificity.

**II. - AT LEAST ONE OF THE ADDITIONAL CRITERIA THAT MUST BE MET WITHIN THE CONTEXT OF THE COURSE:**

A. Stresses understanding of the nature of basic scientific issues.
B. Develops appreciation of the scope and reality of limitations in scientific capabilities.
C. Discusses costs (time, human, financial) and risks of scientific inquiry.

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<tr>
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<tr>
<td>- Focusing on a specific or limiting but in-depth theme suitable for upper-division majors.</td>
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</table>
Explain in detail which student activities correspond to the specific designation criteria. Please use the following organizer to explain how the criteria are being met.

<table>
<thead>
<tr>
<th>Criteria (from checksheet)</th>
<th>How course meets spirit (contextualize specific examples in next column)</th>
<th>Please provide detailed evidence of how course meets criteria (i.e., where in syllabus)</th>
</tr>
</thead>
</table>
3 August 2009

MEMORANDUM

TO: Sergio Quiros
FROM: Andrew Smith
Associate Director, Undergraduate Programs
School of Life Sciences

SUBJECT: SQ General Studies Program Course Proposal BIO 202

Currently in the year-long sequence of Anatomy and Physiology, taught as non-majors courses in the School of Life Sciences, BIO 201 Human Anatomy and Physiology I has a SQ General Studies designation. With this proposal, we desire to delete the SQ designation for BIO 201 (but I could not find a form to do this). We desire to “transfer” the SQ designation to the second semester course BIO 202 Human Anatomy and Physiology II (BIO 201 is a pre-requisite). We do this because the nature of instruction and the course material in BIO 202 fall much more in line with the philosophy and practice of a SQ designation course. BIO 202 meets all of the specified criteria. It serves as an excellent introduction to the natural sciences – in this case the functioning of the human body. It serves to meet all the Quantitative Objectives, and all (not just one) of the Additional Criteria.

Attached with this memo are:
- The General Studies Program Course Proposal Cover Form
- Summary Lecture Schedule
- Laboratory Schedule
- BIO 202 Course Syllabus
- BIO 202 Laboratory Syllabus
- Natural Sciences SQ Criteria Checksheet
Instructor: Dr. Delon Washo-Krupps
Lecture: Tuesday & Thursday, 10:30-11:45am
Telephone Number: 480-965-4501 or 602-295-4518 (This is my cell phone for emergencies)
Office: LSA 1-18 (basement of Life Sciences A-Wing)
Office Hours: TuTh 2:00am-3:00pm; Or by appointment
E-mail Address: Delon.Washo@asu.edu - THIS IS THE BEST WAY TO REACH ME

Text Companion Software: Anatomy & Physiology REVEALED: An Interactive Cadaver Experience

Additional Materials: A variety of other materials are available in the bookstore as study aids for this course. You should by no means purchase all of these materials. Because individual students learn in different ways, I have made these materials available for those who may find them useful.

COURSE DESCRIPTION Biology 202 is the study of structure and function of the human body. Topics include: Cardiovascular, Respiratory, Endocrine, Urinary, Digestive & Reproductive Systems.

EXAMS AND GRADES

<table>
<thead>
<tr>
<th>Exam/Assignment</th>
<th>Points</th>
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<tbody>
<tr>
<td>Exam 1</td>
<td>100</td>
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<tr>
<td>Exam 2</td>
<td>100</td>
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<tr>
<td>Exam 3</td>
<td>100</td>
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<tr>
<td>Exam 4</td>
<td>100</td>
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<tr>
<td>Optional cumulative final</td>
<td>100</td>
</tr>
<tr>
<td>Participation</td>
<td>50</td>
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<tr>
<td>Laboratory Component</td>
<td>* 250</td>
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<tr>
<td>Total 700 points</td>
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</table>

Grade Points Required
A+ = 97% 679-700 points
A = 90% - 97% 630-678 points
B+ = 87% - 90% 609-629 points
B = 80% - 87% 560-608 points
C+ = 77% - 80% 539-559 points
C = 70% - 77% 490-538 points
D = 60% - 70% 420-489 points
E = below 60% less than 420 points

*Your four best exams, in addition to your quizzes, participation and lab score, will comprise your final grade. The lowest score of 5 exams is dropped. If you are satisfied with your cumulative point total after Exam 4, you need not take the final.

Rev. 1/94, 4/95, 7/98, 4/00, 1/02, 10/08
EXAMS - 70-100 multiple-choice and true/false questions covering material from lecture, textbook and assignments.

BLACKBOARD - Information pertaining to this class will be listed on Blackboard. To access blackboard, log in to myASU located on the ASU homepage. You will want to check blackboard daily for announcements pertaining to the class. You will also access information here, including syllabus, lecture/lab schedules, lecture notes, lab terms lists, study materials, etc. It is the student’s responsibility to download notes from Blackboard and bring them to lecture. If you miss a class, it is your responsibility to get the notes from another student. I suggest you get another student’s email and phone number during the first week of school. DO NOT ASK ME FOR FULL VERSION NOTES!

SENSITIVE CONTENT - Please be aware that some BIO 202 course content may be considered sensitive. Including but not limited to graphic images of the human body.

CADAVERS - BIO 202 Lab utilizes human cadavers. The use of actual human bodies for learning anatomy is an invaluable tool that provides an important learning experience. The cadavers will be pre-dissected, so you will be responsible for identifying structures, not dissecting the cadavers. Students are invited to touch and explore the cadavers, however if you feel uncomfortable you may view the cadaver without any physical contact. There will be questions pertaining to the anatomical structures of the cadaver on your lab practicals, therefore you will need to get close enough to identify those structures. In the past, I have had many students who were very anxious about the cadavers in the beginning, then become quite comfortable as the weeks go on. If you are extremely anxious, then at first just try viewing from a distance for a short period of time. Move closer as you feel more comfortable. If your religion requires that you have special ceremonies performed before you can be in the same room with the cadaver, you will need to have it done prior to February 9th, which is the first lab that will utilize cadavers. If you have any questions or issues pertaining to the cadavers, you must talk to me by the end of the second week of the semester.

MAKE-UP Exams - There will be no make-up exams! If you miss an exam, you will receive a grade of zero for that exam, and it will count as your lowest exam, thus committing you to the optional final. Illness, death in the family, weddings, interviews, appointments, intramural sports, sports clubs, etc WILL NOT be given consideration for make-up exams! You are welcome to miss an exam for any reason, just be aware that you will receive a score of zero for that exam.

STUDENTS WITH DISABILITIES - ASU fully complies with the American Disabilities Act. If you have a disability and need assistance, please see me during the first week of classes.

WITHDRAWAL DEADLINES - Friday, April 3rd In-Person Withdrawal Deadline; Sunday, April 5th Online Withdrawal Deadline. It is the student’s responsibility to officially withdraw from the course. If you merely stop coming to class, you will receive a “E” as a final grade deadline. If you decide to withdraw online, do not wait until the last moment, as computer problems may occur preventing you from withdrawing before the deadline.

GRADING POLICY - Your grade will be determined entirely by the number of points you earn. There will be NO scale/curve to lecture grades. Borderline grades will not be bumped up to the higher grade. Lab grades will be curved to account for difference in individual TA grading styles. Students must be present for all exams & labs, or receive a zero. Extended time is not provided.

Rev. 1/94, 4/95, 7/98, 4/00, 1/02, 10/08
QUIZZES - 2 on-line quizzes worth 10 points each: “Syllabus Quiz” and “Blackboard Treasure Hunt” are available until 5:00pm one week from the start date of class.

CPS PARTICIPATION - Unfortunately it is very hard to interact in a lecture hall with 400+ students. 30 participation points will come from CPS questions during lecture. You will earn one point for each question asked during lecture whether or not you answer the question correctly. This means that to earn these points, you must be in lecture and participating! The number of CPS questions will vary during each lecture. Approximately 50 questions will be asked this semester. You can choose not to answer about 20 questions to still receive the full 30 points. CPS points CANNOT be made-up! If you forget your pad, your pad malfunctions, you miss class, etc, you will miss the points, but remember that you can miss approximately 20 points before you are penalized. It is not possible to get more than 30 points. You MUST NEVER give your CPS pad to another student to answer for you in the case that you miss a class. This falls under Academic Dishonesty and can result in you failing the class. Believe me, the few points that you may miss is NOT worth failing the class!

ACADEMIC DISHONESTY - Cheating, including but not limited to copying another student’s work and plagiarism of published literature, will not be tolerated. Any offense will result in Failing THE ENTIRE COURSE and will be reported to the School of Life Sciences, the student’s major department, and Office of the Dean of the College of Liberal Arts and Sciences. Any student who reports an offense to the instructor or lab TA will receive 5 points extra credit if the offense can be confirmed.

TESTING POLICY
- No Material of any kind is permitted out at your desk during testing. All book bags and purses must be stored at the front or back of the lecture hall. Do not bring valuable items to exams!
- NO CELL PHONES are permitted for any reason during testing!
- No student will be permitted to start an exam late, after the first student finished has left the room. Therefore, it is imperative that you be on time for exams, lest you end up with a zero.
- No student will be allowed to leave the room and then return during an exam!
- Bring a picture ID to all exams

INSTRUCTIONS FOR EXAM SCANTRONS
I will provide you with scantrons for the lecture exams. The following sections of the scantrons will need to be filled out completely (written and bubbled in) when you receive your scantron on testing day.

Last Name
First Name  Enter the First 3 letters of your first name, then leave one space & enter your lab TA's initials
Identification Number  - 9 or 10-digit student ID listed on your Sun Card
Special Codes - this will be the version of the exam you receive on testing day (listed in the upper right corner of each exam page)
Failure to provide this information, or listing wrong information will result in the loss of 2 points per violation on the exam. If you put the wrong version number on your exam, you will receive a zero for that exam.

LABORATORY ATTENDANCE POLICY You must attend all labs. Don’t be late for lab, and plan on remaining in the lab for the entire lab period. If you are late for lab on a regular basis, the TA will deduct 10 points from your final lab grade. If you leave early without your TA’s permission, you will lose 10 points from your lab grade. If you missed three labs, you will automatically FAIL the entire course!

If you cannot attend your scheduled lab one week, make prior arrangements with both TAs and the Lab Coordinator to attend another lab section that week. If you miss the lab altogether and do not have a documented emergency, 10 points will be deducted from your final lab grade, and you will also miss points for any quizzes/assignments given in the lab. If you miss lab due to a documented emergency, yet do not attend an alternate lab section during the week, you will miss points for any quizzes and/or assignments given in the lab. Documents for emergencies include doctor’s note, police report, death certificate, etc. If you have a documented emergency, you must contact the TA or Lab coordinator within 24 hours of the absence, and documentation must be submitted to the within one week of missing the lab. If you have an emergency that causes you to miss a lab practical, you must contact your TA or Lab Coordinator within 24 hours. In cases of documented emergencies, you may be allowed to make-up a lab practical in an alternate lab section that week. If you cannot attend an alternate lab section that week, you will need to contact Dr. Washo-Krupps within 24 hours.

ASU requires that you spend a certain number of hours in lab to receive credit for a lab-based science course. If you miss 3 labs, you automatically fail the course!

CPS PARTICIPATION - Unfortunately it is very hard to interact in a lecture hall with 300+ students. 30 participation points will come from CPS questions during lecture. You will earn one point for each question asked during lecture whether or not you answer the question correctly. This means that to earn these points, you must be in lecture and participating! The number of CPS questions will vary during each lecture. Approximately 50 questions will be asked this semester. You can choose to not answer about 20 questions to still receive the full 30 points. CPS points CANNOT be made-up! I do not accept written answers to CPS questions - the only way to obtain these points is to use your CPS pad in class. If you forget your pad, your pad malfunctions, you miss class, etc, you will miss the points, but remember that you can miss approximately 20 points before you are penalized. It is not possible to get more than 30 points. You MUST NEVER give your CPS pad to another student to answer for you in the case that you miss a class. This falls under Academic Dishonesty and can result in you failing the class. Believe me, the few points that you may miss is NOT worth failing the class!

Register your pad by going to the CPS Connection located under “Tools” on Blackboard

For all CPS questions/problems, please see http://clickers.asu.edu or email clickers@asu.edu

1.

LETTERS OF RECOMMENDATION
Rev. 1/94, 4/95, 7/98, 4/00, 1/02, 10/08
Some of you will undoubtedly be applying to dental school, medical school, graduate school, etc., sometime in the future. I get many requests each semester from BIO 202 students for letters of recommendation. Unfortunately, considering the volume of students in this class, I do not get the opportunity to get to know students as individuals. When asking for letters of rec for programs, it is extremely important that a student choose a recommender that does not just know how he/she performed on exams, but who knows something about his/her personality, quality of work, interests, interactions with others, etc., which I do not have the chance to observe in lecture. Believe me, you want a recommender who can write something like “I have personally observed in this student the strength of will, dedication and perseverance required for the profession”, rather than “The student demonstrated excellent knowledge of the subject, with a grade of “A” in my class.” Therefore, I will not write letters of recommendation for students in this class, unless you participate in the Honors program (Footnote 18). I will also write letters of recommendation for students who after this class go on to serve as Assistant TAs or Interns for B
BIO 202: Human Anatomy and Physiology Laboratories

**Check for lab updates on Blackboard every day**

**Goals of the Laboratories:** In the anatomy labs, your goals are to learn the location and general function of anatomical structures using computer visualizations (APR software), human models and cadavers, animal specimens and to learn the microscopic structure (histology) of selected tissue. The focus is on functional anatomy, but there is no substitute for learning the terminology.

The physiology labs are designed to provide you with: 1) a deeper understanding of physiological concepts, 2) an appreciation for how science is don using the scientific method, 3) experience in collecting data using state-of-the-art equipment and 4) a sense of the excitement of discovery that drives scientists. The lab write-ups will help you develop your technical writing skills.

The labs will also help you develop problem-solving skills through collaboration with your lab partners. In the spirit of fostering cooperative problem solving, please sit in the same seats through out the semester and get to know your neighbors because you will be working together extensively.

**What to bring to lab:** Bring the “Terms List” or protocol for each lab, and any worksheets that your TA assigns. These can be found on blackboard under “Lab Information”. For the anatomy labs, bring your textbook and a notebook for making your own anatomical drawings. It is always a good idea to wear old clothes or a lab coat to lab. **Most importantly, come to lab prepared!** Read the corresponding chapter in the text before lab and remember to do any pre-lab exercises before lab. The TAs has been instructed to spend a maximum of 15 minutes introducing the labs because it is your responsibility to know what you are doing!

Check the BIO 202 web site on Blackboard for lab updates before coming to lab.

**Attendance policy:** You must attend all labs. Don't be late for lab, and plan on remaining in the lab for the entire lab period. If you are late for lab on a regular basis, the TA will deduct 10 points from your final lab grade. If you leave early without your TA’s permission, you will lose 10 points from your lab grade. **If you miss three labs, you will automatically FAIL the course!**

If you cannot attend your scheduled lab one week, make prior arrangements with both TAs and the Lab Coordinator to attend another lab section that week. If you miss the lab altogether and do not have a documented emergency, 10 points will be deducted from your final lab grade, and you will also miss points for any quizzes/assignments given in the lab. If you miss lab due to a documented emergency, yet do not attend an alternate lab section during the week, you will miss points for any quizzes and/or assignments given in the lab. Documents for emergencies include doctor’s note, police report, death certificate, etc. If you have a documented emergency, you must contact the TA or Lab coordinator within 24 hours of the absence, and documentation must be submitted within one week of missing the lab. If you have an emergency that causes you to miss a lab practical, you must contact your TA or Lab Coordinator within 24 hours. In cases of documented emergencies, you may be allowed to make-up a lab practical in an alternate lab section that week. If you cannot attend an alternate lab section that week, you will need to contact Dr. Washo-Krupps within 24 hours.

Why so strict?
1) You will work in teams, so your lab partners depend upon your being on time.
2) Many of the skills you will learn are cumulative; if you miss one week, you will have trouble the next week and you will slow down your partners.

3) The lab is an essential component of a university-level human A & P course; your program and future employers expect you to know this material.

4) You cannot leave early without the TA's OK because the TA must account for all equipment and ensure that the lab is clean.

**Learning and testing procedures for anatomy labs:** In most allied health fields, one needs a working knowledge of the function, location and spelling of many anatomical terms. For each anatomy lab, you will have a Master Term List; you’ll be expected to know the spelling, definition, function of these structures, and be able to identify them on APR, ADAM, text image and models. You also need to know the histology of many structures. The best way to study the anatomy is to draw structures in lab, quiz each other (i.e., Hey, what’s that muscle running down your arm?). After lab, draw structures from memory (i.e. bones of the head). And yes, spelling counts on the lab practicals!

**Learning and assessment procedures for physiology labs:** Physiology labs differ from anatomy labs because you are not required to learn a fixed body of knowledge and, in many cases, there are no "right" or "wrong" answers. Instead, you may do some or all of the following: make observations about physiological phenomena, offer reasonable and testable hypotheses (explanations) to account for observations, design experiments to test hypotheses, collect, tabulate and analyze data, discuss data in the context of your hypotheses. Teams are encouraged to work together to collate and tabulate the data.

**Academic Dishonesty:** *WILL NOT BE TOLERATED!!*. When individuals cheat to elevate their scores relative to others, this can lower the grade of honest students. Violations of the Student Code of Conduct are subject to university discipline. Action may include but not limited to just one are: Zero for the assignment, a grade of “E” in the course, referral to the collage of Liberal Arts for more severe action such as suspension, a letter of Academic Dishonesty may be place in your permanent student record. If you’re not sure about the policy, ask your TA.

**Animal Use and Ethics:** Several of the Labs will be using animals or animal parts. The use of this material provides a learning experience, which cannot be accomplished by any other means. No student is forced to handle any animal material in the lab. If you may have any ethical or emotional concerns about the use of animals in the labs, please fell free to talk with your TA or Lab Coordinator. In some rare instances, it may be possible to work out other arrangements.

**Lab Grading** (250 points total)

- Lab Practical Exams: 2 @ 50 points each = 100 points
- Assignments = 100 points
- Quizzes = 50 points

Total = 250 points
### Lecture Schedule (may be changed to meet the needs of this group)

<table>
<thead>
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<td>Spring Break 😊</td>
<td>No Class! 😊</td>
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This schedule is subject to change!
Any changes will be announced in a timely manner!
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<tr>
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</tr>
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1. Practical Exams are worth 50 points each for a total of 100 points
2. Quizzes are worth 50 points
3. Assignments are worth 100 points
4. Lab is worth a total of 250 points
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