Course Description
This is a course about something we all possess – a body. Biology 111X, together with its companion course, Biology 112X (spring semester), will provide you with a basic understanding of how our bodies are structured (anatomy) and how they function (physiology). You can build on this foundation by taking additional undergraduate courses, by pursuing graduate or professional studies, and by reading popular, scientific and technical literature. Even if you do no further study
in the area of anatomy and physiology, this course will help you understand your own body so that you can better care for it. This course is required for students entering the AAS nursing program at UAF, the BS nursing program at UAA, the dental hygiene program at UAA, and the radiologic technology programs at UAA and UAF. There are many other allied health programs that will require a 2-semester human A&P course, such as physical therapy and physician assistant. This course is not required by medical schools. The course meets the core curriculum requirement at UAF.

**Prerequisites**
There are no formal prerequisites for this course. However, because of the complexity and depth of the material, it is suggested that you have successfully completed high school biology, chemistry, and algebra, and that you have been placed in English 111X. If you meet these criteria, and are willing to study regularly, you should succeed in the course.

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**Required texts and supplies**
Anatomy and Physiology, 2nd edition, by Elaine Marieb  
Human Anatomy and Physiology lab manual, cat version, 7th edition, by Elaine Marieb

If you own, or have access to, another text and lab manual by Elaine Marieb, feel free to use it. The only one that may not serve your needs is the “Essentials” version.

**Course Objectives**
It seems pretty obvious that the objective of the course if for you to learn some physiology and anatomy. However, along the way I also have a few other agendas. I want you to understand how scientific knowledge comes about. I want you to be comfortable reading about science, discussing science, and evaluating science. Above all, I hope that you will come to appreciate the relevance of science to every aspect of our existence. Frederic Martini, an A and P text author, probably summed it up best: “The concept that anatomical and physiological processes are understandable, relevant, and logical should remain long after the origins of the latissimus dorsi have been forgotten.”

*By the end of the semester you will:*  
1. Understand that anatomy and physiology are complementary.  
2. Understand that homeostasis is a driving principle in all physiological processes.  
3. Understand that chemistry and biochemistry underlie all physiological processes.  
4. Understand that cells are the functional units of living systems. They are the building blocks of tissues, organs, and the whole organisms.  
5. Understand the structure and function of the integumentary system.  
6. Understand the structure and function of the skeletal system.  
7. Understand the structure and function of the muscular system.  
8. Understand the structure and function of the nervous system.

**Grading Policy**
You will receive a letter grade in this course based on the number of points you have accumulated during the semester on exams, homework, lab tests, lab assignments, and other assignments. In lecture, there will be 4 midterm exams and a comprehensive final. Each midterm exam is worth 100 points. The final is worth 200 points. There will be 4 lab exams and each one will be worth 50 points. In addition there will be several homework assignments, each
worth 20 points. These homework assignments will be administered on the blackboard computer system, and can be completed with the help of classmates, your book and your notes. There are no makeups for missed homework assignments, but I will drop your lowest (or missing) score. There will also be two assignments related to the process of science and the development of science policy.

I will use a traditional grading scale: 90-100=A, 80-89=B, 70-79=C, 60-69=D, <60=F. Grades will not be curved, but I will round up any mark that is 0.5 or better. For instance, an 89.5 will be an A. An 89.49 will be a B.
I do not offer extra credit assignments.

**Homework Assignments**
Your homework assignments will be completed on Blackboard. I will notify you in class when there is an assignment posted, and there will be an announcement on the Bb system. These assignments will cover material from previous lectures and labs. Other information, such as scientific literature, will be provided as appropriate.

**Lab Assignments**
There will be some required assignment due at the end of each lab period. These will vary depending on the topic covered that day. You may not make up any missed lab assignments for a grade, but I will drop the lowest (or missing) lab assignment grade.

**Lecture Test Format**
Lecture exams will contain a variety of types of questions including multiple choice, short answer, true/false, identification of drawings, and fill in the blank. Lab exams will include both written and "practical" questions. You must spell words correctly on lab practicals in order to get full credit.

**Lab Test Format**
You will have a lab test in association with each lecture test. Lab tests may contain written questions, and "practical" stations at which you are to observe and identify a specimen, slide, or whatever.

**Please take all exams at the time they are scheduled.** I realize that there may be legitimate conflicts occasionally, and I am certainly willing to work with you on those conflicts. If you know ahead of time that you are going to miss an exam, please see me before the exam to schedule a make-up. If you otherwise miss an exam, you have 24 hours to contact me with your reason, and schedule a make-up. After 24 hours, I will start taking off 5 points for every day you delay in scheduling a make-up. You may leave a message on my phone or send me an email. All lecture make-up exams are essay exams, at my discretion.

**Attendance**
I will not take attendance in either lab or lecture; however it is to your advantage to be at all scheduled class meetings. You are responsible for all material covered in lab and lecture. If you must be absent from lecture, be sure to get the notes from someone in class. Outlines of the chapter material is posted on Bb, but I will not provide detailed notes of each lecture. In addition, a video of the lecture is available at the reserve desk in the library. There are no make-ups for lab, however they will be open lab times when you can come in and catch up or do extra study on your own.

**Academic Honesty**
Learning is a collaborative effort. We all learn from each other: studying, talking, questioning, listening. **Testing is NOT a collaborative effort.** I expect the work on your exams to be yours alone and to be done without aids. In adherence with the University's Academic Honor Code, if you cheat on an exam, or represent someone else's work as your own, you will receive a grade of 0 for that assignment. If you violate the honor code a second time, you will receive a failing grade.
for the course and may be referred to the University Disciplinary and Honor Code Committee for further action. Please review the honor code on pages 71-72 of the 2004-2005 UAF Catalog.

**Blackboard Site**
There is a blackboard site for this course. On this site you will find announcements and reminders, copies of all handouts, contact information, syllabus, schedule, and topic outlines. Your homework will be completed on Bb. I will post practice exams before each test so that you may have an idea of the types of questions to expect. Do not study from the practice test, since you will not see identical questions on the exam. Use it to determine whether you are ready for the exam or need additional study time. You may also check your grades on Blackboard.

I will enroll you in Bb when you register for this course. Your access ID will be the same as your user name in the aurora system. However, your password is NOT the same as your email password, unless you intentionally set it to the same password. To access Blackboard, go to [http://classes.uaf.edu](http://classes.uaf.edu) and log in. You may also go to the UAF homepage, click on the blackboard link.

**Some comments about etiquette**
Please use common sense and common courtesy in class. In order to get the most out of our time, plan the following:
- Be on time and ready to take notes at 10:00 AM.
- Stay for the entire class
- Take your bathroom breaks during our class breaks, not during class (your movement distracts me and your fellow classmates)
- Do not bring your children to class. You may think they are the most awesome and well-behaved kids on the planet, but your classmates are likely to think they are distracting.
- Do not bring friends and relatives to class unless you have checked with me ahead of time.
- No cell phones and pagers in class (EMT, Fire Dept on duty excepted)
- No sleeping in class. I will ask you to leave if you cannot stay awake.

**Suggestions for studying**
There is no "one best way" for all people to study. But there are a few things we all have in common. The two main ways that we transfer information into our long-term memories are by repetition, and by association with something already in long-term memory. Keeping that in mind, here are my suggestions for learning A and P.

1. Before class, skim through the material we plan to cover. Don't bother to read it in detail. Just get familiar with the topic and the words.
2. Take notes in class, but don't try to write in great detail. Leave time to think during class time, too.
3. As soon after class as possible, go through your notes. Make sure you understand and can read what you wrote down. Fill in any missing details. Note especially important points. Now is the time to read your text for detail. You may want to write page numbers on your class notes referring to related figures in the textbook.
4. Go over your class notes frequently for short periods of time rather than spending several hours just once a week. Cramming may get you through the exam, but it won't contribute much to building a framework of knowledge.
5. When you are studying A and P, try to relate it to the real world as much as possible. Does it help explain some illness you had? Does it clarify an article you read? Does it relate to a test the physician ordered? A sports injury? An exercise program? A diet? Think of anything you can that will help you make an association with something already in your long-term memory.
6. Find someone to study with. You can always benefit from talking about the material with someone else. That person may have a different way of thinking about the material or a trick for learning the new words.
7. Keep up with what we are studying. There is a tremendous amount of material to cover. Do not let yourself fall behind.
8. If you don't understand something, whether major or minor, please ask for help as soon as possible. I am always available as are the teaching assistants.

Good luck! I will try to make this class as clear, relevant, understandable and fun as possible. Your participation and good attitude can help make this a rewarding experience for all of us.

The End
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<th>Date</th>
<th>Day</th>
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<tr>
<td>May 24</td>
<td>Mon</td>
<td>Introduction, Basic Concepts</td>
<td>Chapter 1</td>
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<td>May 25</td>
<td>Tues</td>
<td>Inorganic Chemistry</td>
<td>Chapter 2</td>
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<td>May 26</td>
<td>Wed</td>
<td>More Chemistry</td>
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<td>May 27</td>
<td>Thurs</td>
<td>Biochemistry</td>
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<td>Mon</td>
<td>Memorial Day Holiday, No Classes</td>
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<td>Tues</td>
<td>Cells</td>
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<td>Chapter 4</td>
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<td>Tissues</td>
<td>Chapter 5</td>
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<td>Tues</td>
<td>Integumentary System</td>
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<td>June 9</td>
<td>Wed</td>
<td>Skeletal System</td>
<td>Chapter 6 &amp; 8</td>
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<td>Skeletal System, Articulations</td>
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<td>Muscular System</td>
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<td>Jun 30</td>
<td>Wed</td>
<td>Final Exam, comprehensive</td>
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**Lab**

Intro to microscope, scientific method

Chemistry

*Exam over intro, basic concepts, chemistry*, Lab on Cells

Tissues

*Exam over cells and tissues*, Lab on skin

Skeletal system

*Exam over Integument, Skeletal and Muscular systems*, Lab on muscles

Nervous tissue

*Exam on Nervous System*, lab on Nervous system

Nervous system

Special Senses