A) GENERAL COMMENTS

1. Course Objectives

This course is designed to give you a variety of educational opportunities by which you may gain a solid foundation in Anatomy. An understanding of the structure (anatomy) of an organ or gland is essential in order to understand the function (physiology). Regardless of your area of interest, be it veterinary medicine, equine, livestock, dairy, poultry, or human medicine; management, business, nutrition, genetics, or pathology, you need a background in anatomy. The better your background in this area, the better will be your subsequent progress in other areas.

2. Course Format

There will be three lectures and one laboratory session each week. Attendance at lectures is highly desirable since information in addition to that covered in the text will be presented. Most of the exam and quiz questions will be extracted from the lectures rather than the book. I do not take attendance, nor do I give credit for attending lectures. As mature, responsible adults I believe attendance in lecture is the bare minimum requirement in this course. In laboratory attendance is also considered to be essential and attendance records are maintained as grades for each laboratory completed. If you find it impossible to attend a scheduled lab session, it is your responsibility to make arrangements to attend an alternative session or in some way make up the work.

Instructional Personnel

a. Faculty Member: Dr. Robert M. Dyer

   E-mail: Rdyer@udel.edu
   Voice mail: 831-4160

   Office hours by appointment only

b. Graduate and Undergraduate Teaching Assistants: Each laboratory section has several TA assigned to the lab. These students were selected based upon previous performance in the class. They are there to assist only. They cannot and will not do the dissections for your groups. Remember they are also learning and cannot be expected to be experts in anatomy. Therefore you are expected to do your own work and rely on the TA for direction when
needed. They also have completed a pro-section. You may be able to use these dissections as an aid in your dissection but never, never, never use them as a method to learn this anatomy. Often other students have moved labels around and by the time of the lab practical you will be learning erroneous information. Also, we shall confiscate any cameras used by anyone to take pictures of the pro-section. In the past students who studied from digital pictures failed the laboratory because this is no way to learn anatomy. Please put the TA cats back in the bags, wrap them up and place them in the cooler if you need them for your dissection after hours. These dissections must be taken care of or they will dry out and become useless.

3. **Texts:** *Anatomy and Physiology of Farm Animals*

   6th Edition by R.D. Frandson and T.L. Spurgeon, 2003 is required. Reading assignments as noted on the lecture outline should be read prior to lecture. Special emphasis of assignments will not be made in lecture but it is obviously your responsibility to keep up with the reading. The lecture topics follow the textbook, but information in addition to that included in the text will be covered as well. You will have the opportunity to ask questions for clarification during lecture periods. Some opportunity for comments and discussion will be made during lecture.

*Histology: A text and Atlas*

6th Edition by MH Ross and Pawlina 2011 is also required. Reading assignments as noted on the lecture outline will be helpful in lecture. This text will better correlate some of the gross anatomy and function with tissue structure emphasized in class. This text is an extraordinarily valuable aid to the lecture material.

*Mammalian Anatomy, The Cat*

Sebastiani and Fishbeck, second edition, 2005 is required for the laboratory. This text should be brought to each lab and used as a guide in dissection. The diagrams should be very helpful in locating anatomic structures and reduce confusion in the lab.

*ANFS 140: Functional Anatomy of Domestic Animals Laboratory Notebook 2nd ed.*

D. Lantz , Meghan Fitzpatrick, Second Edition. 2012 is required for the laboratory. This notebook is a compilation of lectures and dissection instructions by Dan Lantz and Meghan Fitzpatrick. Dan was in veterinary school at the University of Pennsylvania and Meghan is currently in her sophomore year at Tufts School of Veterinary Medicine. Together they have assembled a laboratory guide from this particular course that will be invaluable to you the student. It is a well documented dissection manual that has many helpful hints to enable your mastery of anatomy.
Reference material:

Several additional texts on Anatomy & Physiology will be on reserve in the Morris Library. They should be used to augment your text. To help clarify and elucidate subject matter areas in which you may encounter difficulty or wish more details to satisfy your curiosity. As it becomes appropriate, special material may be put on reserve for specific periods to meet specific needs.

B) GRADING SYSTEM: (Plus-Minus grading will be used.) The grading system covers all aspects of the course (lecture and lab).

1. Grade Components

<table>
<thead>
<tr>
<th>Item</th>
<th>Points</th>
</tr>
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<tbody>
<tr>
<td>Laboratory grade</td>
<td>695</td>
</tr>
<tr>
<td>6 out of 7 quizzes @ 25 points</td>
<td>150</td>
</tr>
<tr>
<td>2 hour exams @ 100 points</td>
<td>200</td>
</tr>
<tr>
<td>Final exam</td>
<td>200</td>
</tr>
<tr>
<td>Total possible score</td>
<td>1245</td>
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</tbody>
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Exams and quizzes are not graded on a curve. Your point total at the end of the semester is merely the sum of points accumulated on individual items. Letter grades will be assigned only at the end of the semester for your final grade. Cut-off for the following letter grade will not be higher than the point levels indicated, although they may be lowered, based on the actual numerical distribution of semester point totals.

Grade: A   A-   B+   B   B-   C+   C   C-   D+   D   D-   F
Minimum 1133 1102 1070 1021 977 884 840 797 747 685 ≥684

You will note that there are four major components that contribute to your semester point total. Be aware the laboratory is an important portion of the grade. BE VERY AWARE: YOU EARN THE GRADE ASSIGNED AT THE END OF THE COURSE. I DO NOT GIVE OUT GRADES. IF YOU EARN AN A, YOU SHALL RECEIVE AN A BUT IF YOU EARN AN F, YOU SHALL LIKewise RECEIVE AN F. I DO NOT SUBSCRIBE TO GRADE INFLATION.

Quizzes and Hour Exams

Although scheduled during lecture time, these tests will cover material from both laboratory as well as lecture. Each of the quizzes will include material covered during the previous 2 weeks in lecture and laboratory. The first Hour Exam will include material covered since the beginning of the semester while the second Hour Exam will only include material covered since the previous Hour Exam. The Final Exam will be comprehensive, integrating material covered throughout the entire course.
Quizzes and exams will be multiple choice. The multiple choice section will require use of optical scan answer sheets utilizing a soft lead pencil (No. 2). You are responsible for bringing your own pencil! The dates of quizzes and exams are indicated on the lecture schedule.

A total of 7 quizzes will be given, but only the highest 6 scores will be considered in your semester point total. They will be given during the last 20 minutes of the period. Missed quizzes receive a zero. If you miss one quiz, that shall be the quiz I drop. However, if you miss more than one quiz, then you shall receive 0 for that quiz. This year there shall not be makeup quizzes. This policy was abused in the past requiring that it be cancelled. Quizzes not turned in when requested will not be considered for grading purposes. The quizzes will be constructed so that sufficient time is available if you know the material. Your ability to read and understand what you read is important in this regard.

NOTE: The quizzes and Hour Exams are intended to be meaningful learning experiences as well as an indicator of your knowledge and mastery of the subject matter. The subject matter in this course is cumulative; that is, it keeps building upon facts, factors, and principles that have gone before. If you keep up, lecture by lecture, and week by week, you should enjoy the course and the material will stay with you as long as you need it. If you try to cram, you will have a difficult time and I will not guarantee that you will have much recall when you need to apply the information in more advanced courses as well as under practical conditions.

**Laboratory Packets**

Laboratories will consist of both worksheets and dissections. Once you have entered into your feline dissections your worksheets will be pre- and post-lab questions only. Pre-lab questions are to be turned in at the BEGINNING of lab and therefore need to be completed before entering the lab. They are designed to point you in the correct direction for the lab. Each person turns in their own pre-lab questions. Post-lab questions are to be turned in at the beginning of the following lab, you are not to do these questions during lab unless you have finished and been graded on your dissection. Should someone be seen completing the post-lab questions before completing the dissection, then the sheets will be removed by the TA until the end of the lab. Each person should complete their own post lab questions. Laboratory time will be for dissections only, and you will find you need all of this time.
C) SPECIFIC COMMENTS CONCERNING LECTURE

1. Lecture Outline: A lecture outline for each instructional unit will be provided. This is done so that you may reduce the amount of time spent taking notes and increase the time spent listening to what is being said. You can fill in details from lecture information as well as from the text and reference material. Be aware however, that lecture attendance is the key to success in this course. Diagrams are drawn on the board for the simple reason that students can place the same diagram in notebooks in a reasonably accurate reproduction of the lecture. These diagrams are not available on the web CT note presentation. Missed lectures generally result in poor course performance. DO not rely on web CT to get you through this course.

2. Audio Taping of Lectures: The lectures can be recorded on audio cassettes if you desire. I have no objections. PLEASE TAKE NOTE!! EVERY YEAR SOME PEOPLE THINK THEY CAN SKIP LECTURES, LISTEN TO TAPES AND FOLLOW THE WEB SAKAI NOTES AND STILL DO WELL. AFTER MANY YEARS, I KNOW THIS IS NOT THE CASE. IF YOU WANT TO DO WELL IN THIS COURSE, ATTEND LECTURE. ALL THE EXAM AND QUIZ QUESTIONS COME DIRECTLY FROM THE LECTURE!

D) LABORATORY POLICY STATEMENT REGARDING ANIMAL DISSECTION

Both preserved specimens and freshly euthanized animals will be used to enable you to gain the dissection experience that is required to give you the opportunity to study gross anatomy first hand. Preserved rats and pig embryos will be used in one lab, while preserved cats will be used in a series of seven different labs throughout the semester. In addition, freshly euthanized chickens will be used in four different labs in which body systems with important anatomical differences between mammalian and avian species are being considered. The preserved cat specimens are obtained from licensed laboratory supply houses that utilize specimens that would have been euthanized by animal shelters. The freshly euthanized chickens that are used are cull animals from the University farm flocks.

In most instances, teams of two persons will be responsible for dissecting a single specimen. Occasionally, teams of three persons will be formed. All members of the team are expected to participate fully in all dissection procedures. Dissecting instruments, gloves, and protective aprons will be provided. The laboratory portion of this course is where you will learn most about anatomy and the dissection experience is a required component of the laboratory experience. If you anticipate having trouble meeting this requirement, please consult with Dr. Dyer immediately.

See the separate document concerning details of the lab schedule, location, and procedures.