

**PHYSIOLOGY (BIOLOGY 315)**  
**Spring 2002**

<b>Days/Time of Meeting:</b>	Lecture : MWF 9.30-10.20 AM Lab : H 8:30-11:20 AM (Sec 51) 11.30-02:20 PM (Sec 52)
<b>Place of Meeting:</b>	Magruder Hall MG112 Lecture MG102 Lab
<b>Credit Hours:</b>	4
<b>Instructor:</b>	Dr Laura J. Fielden Magruder Hall 216 (office) 785 4624 (phone) <a href="mailto:lfielden@truman.edu">lfielden@truman.edu</a>
<b>Office Hours:</b>	M,W,F 10.30-12.00 or by appointment

**Prescribed Texts:**

1. Vander, A.J, Sherman, J. and Luciano, D.S. (2001). Human Physiology (eighth edition). WCB McGraw-Hill, Boston.
2. Biology 315 Laboratory manual (2002):In house.

**Course Description:**

Analysis of vertebrate body function. Emphasis is placed on control systems which maintain homeostasis. Prerequisite Biol 200 and Chem 121. This course is intended for biology majors.

**Purpose of the course:**

- \$ Provide you with an understanding of basic principles and facts of physiology
- \$ To lay the foundation for more advanced and/or topical physiology courses
- \$ To teach laboratory skills useful in physiological investigations
- \$ To provide hands-on experience for concepts discussed in class
- \$ To introduce some of the physiological malfunctions underlying disease.

**Attendance Policy**

**Attendance in lecture** is strongly encouraged. Students who are absent from class are entirely responsible for any announcements, information or hand-outs they may have missed. **DO NOT ASK ME FOR THEM AFTERWARDS!** Zero points will be given for an unexcused absence from an exam or quiz. Valid excuses include reasons relating to sickness or injury in which case a **doctor's note or one from the student health center is required**. Point deductions worth 5% of the total/day are the penalty for late assignments

**Lab attendance is required.** Unexcused absences in lab will result in the deduction of 30 points from your final grade plus 0 points for any associated report or assignment. If a conflict arises concerning lab attendance, please come and see me **BEFORE LABORATORY**. Early departure from lab before satisfactory completion of your lab will also result in point deductions

**Evaluation Components and Grading scale (tentative).**

**Class exams:** There will be three exams given in class (100 points each). These exams will be a combination of short answer, multiple choice and essay questions. Questions can come from any material covered in class, assigned readings or in lab.

**Final exam:** The final exam will be comprehensive and follow a similar format to the class exams. The final will be for

100 points.

**Lab assignments:** There are 10 labs for each of which a short report or assignment is required, worth 10-15 points. You will also write one major report for the rat castration lab (40 points). Requirements for individual lab reports will be discussed during lab periods.

**Miscellaneous assignments (problems, quizzes, assigned readings)** will also be given. These assignments will total 50 points.

Lecture exams 3 @ 100 pts	300-	A = 90 - 100%
Final exam 1 @ 100 pts	100	B = 80 - 89
Class assignments/Pop quizzes	50	C = 70 - 79
Lab reports	150	D = 60 - 69
Total	<hr/> 600	F # 59

The lowest point grade for the three lecture exams (as long as it is 60% or above) will be dropped to give a total of 500 points

**Use the AU@drive.**

I will be posting assignments, course grades, practice exams, test keys and other material on the AU@drive. To get to these course documents go to the U drive, select SC student file areas and then choose Fielden's folder. This syllabus is on the U drive. I WILL NOT BE POSTING LECTURE NOTES!!

**TENTATIVE SCHEDULE OF CLASS SESSIONS, BIOLOGY 315 (Spring 2002)**

Date	Topic	Text book
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Jan	14 16 18 <b>Lab</b>	Introduction Homeostasis Homeostasis <b>Homeostasis and negative feedback</b>	7 7
Jan	21 23 25 <b>Lab</b>	No classes: Martin Luther King Day Homeostasis Neural function <b>Cell membrane permeability</b>	7 8
Jan Feb	28 30 01 <b>Lab</b>	Neural function Neural function Neural function <b>Open</b>	8 8 8
Feb	04 06 08 <b>Lab</b>	Neural function Sensory control Sensory control <b>Nerve action potential</b>	8 9 9
Feb	11 13 15 <b>Lab</b>	Catch up Muscle Muscle <b>Human sensory physiology</b>	11 11
Feb	18 20 22 <b>Lab</b>	EXAM 1 Muscle Muscle <b>Skeletal muscle contraction</b>	11 11
Feb March	25 27 01 <b>Lab</b>	motor control motor control Hormone control <b>Properties of smooth muscle</b>	12 12 10
March	04 06 08 <b>Lab</b>	Hormone control Hormone control Catchup <b>Castration lab</b>	10 10
March	11 13 15	Midterm- no classes @ @	
March	18 20 22 <b>Lab</b>	Circulation Circulation Circulation <b>Castration lab II</b>	14 14 14
March	25 27 29 <b>Lab</b>	Circulation Circulation Respiration <b>Cardiovascular lab I</b>	14 14 15
April	01 03	EXAM II Respiration	15

	05 <b>Lab</b>	Respiration <b>Cardiovascular lab II</b>	15
April	08 10 12 <b>Lab</b>	Water and salt balance Water and salt balance Water and salt balance <b>open</b>	16 16 16
April	15 17 19 <b>Lab</b>	Water and salt balance Catchup Digestion <b>Kidney</b>	16 17
April	22 24 26 <b>Lab</b>	Digestion Metabolism Metabolism <b>Thyroid effects on metabolism</b>	17 18 18
April	29 01 03 <b>Lab</b>	Metabolism Metabolism EXAM III <b>Open</b>	18 18
May	06 08 10	Catch up Reading Day FINAL EXAM (9.30-11.20)	