Biology 122 – Human Anatomy

Instructor: Rebekah Chapman

Office: 105 Pierce Hall

Office Hours: Wednesday 9:30-10:20AM, Friday 1:45-2:45PM

If you are unable to meet during office hours, please e-mail me to schedule an

appointment.

E-mail: Learnlink (preferred) or rebekah.chapman@emory.edu (or both©)

Lecture Hours: MWF 10:40 – 11:30AM Room 101, Pierce Hall **Laboratory**: Monday 2:00– 5:00PM, Room 123, Pierce Hall

Required Texts:

• Anatomy and Physiology, by F.H. Martini. 2005. 1st Edition. Benjamin/Cummings Publishing Co., Inc.

• *Human Anatomy and Physiology Lab Manual*, Cat version, by Elaine N. Marieb. 2005. 8th Edition. Benjamin/Cummings Publishing Co., Inc.

Required Lab Materials:

Dissection Kit. Available in bookstore.

Recommended Lab Supplement:

• A Guide to Anatomy and Physiology by T.G. Rust. Southwest Educational Ent. This is **HIGHLY** recommended for this semester.

Course Objectives: Biology 122 is a continuation of Biology 121 (the prerequisite for this course). In Biology 122, Anatomy and Physiology II you will:

- Tontinue to learn about the physical characteristics (anatomy) and the chemical mechanisms (physiology) of the human body.
- Tstudy the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems in detail.
 - These systems will be studied at the macroscopic and microscopic levels, paying attention to the body as a whole.
- The Apply this knowledge to real-world scenarios by studying journal articles from Health Science fields as well as case studies relevant to the different organ systems.
- T Learn techniques such as blood pressure monitoring and blood typing.
- Thave hands-on experience in the laboratory to study and dissect specimens and conduct physiological analyses while focusing on the anatomical and physiological terms applicable to each organ system.

Please read this syllabus carefully and clarify any items about which you have questions

– this is your guide for Biology 122! Information in this syllabus is subject to change
during the semester, so please pay attention to any changes made during the semester –
pay close attention to class announcements!

EXPECTATIONS, EVALUATION, GRADING

Honor Code: Students are expected to abide by the *Oxford College Honor Code*. All assignments should include a signed pledge that no unauthorized aid has been given or received. To read the complete statement of the Honor Code, please see http://www.emory.edu/OXFORD/CampusLife/Policies/honor.html.

Attendance: Attached you will find the *Biology Department Absence Policy*. Absences, tardiness or a failure to follow the procedures outlined in the handout may result in a reduction in your grade, so please read the guidelines carefully – they apply to you!

Cell phones: Must be OFF during lecture and are NOT PERMITTED in labs or exams.

Lecture Exams: There will be three lecture exams, each worth 100points, and one final exam (cumulative) worth 150 points. Lecture exams will be held on Tuesdays and **Thursdays** from 8-9:30am (see syllabus for dates) and cover the topics indicated including the textbook readings, lecture notes and relevant laboratory concepts.

Laboratory Practical Exams: The three lab practical exams, each worth 50 points, will be held on the dates specified in the laboratory syllabus. These will cover the material learned in relevant laboratories. Preparing for these requires **time** in the lab and focus during lab.

Written Assignments: Writing assignments for this course include article summaries, case studies and summaries of group work. These will be described in more detail when they are assigned in class. You will work in groups on some of these assignments, but must still be careful that the written assignments are your own and all literature is properly referenced. All written assignments must be **typed** and printed double spaced (front/back printing is accepted).

Class Participation: You will be evaluated on your participation in lecture, lab and group discussions. Participation is expected; failure to do so will result in reduction of your grade (up to 10%). The 15 participation points will be assigned for **preparation** (note card questions, pre lab question, having necessary materials, etc.) and **participation** in class/lab.

Late work: Assignments turned in after the due date will have 10% taken off per day.

Point Summary:

```
300 points
150 points
150 points
150 points
50 points
15 points
15 points
15 points
15 points
15 points
15 points
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665 points Total

Final Grades:

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90 - 100\% A 80 - 89\% B 70 - 79\% C 60 - 69\% D <60\% F (+/- grades are given for all categories: A, B, C, D)
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A minimum grade of C- in this course is required for pre-nursing students.

Biology 122 – Human Anatomy

| Date | Topic | Reading | |
|-------------------------|---------------------------------------------------------------------------|-------------|--|
| W-Jan. 14 | Introduction to the Endocrine System | Ch. 16 | |
| F- Jan. 16 | Pituitary Gland | Ch. 16 | |
| M- Jan. 21 | MLK day – NO CLASS | | |
| W- Jan.21 ¹ | Thyroid and Parathyroid | Ch. 16 | |
| F- Jan. 23 | Adrenal and Pancreas | Ch. 16 | |
| M- Jan. 26 | Endocrine disorders | Ch. 16 | |
| W- Jan. 28 | Blood – Composition and production | Ch. 17 | |
| F- Jan. 30 | Blood types and blood disorders | Ch. 17 | |
| M - Feb. 2 | Heart – Anatomy and conduction | Ch. 18 | |
| W - Feb. 4 | Heart – Physiology and EKG | Ch. 18 | |
| Thursday | EXAM I: 8:00 – 9:30AM | Ch. 16, 17 | |
| Feb. 5 | | &18* | |
| F – Feb. 6 | Heart – Problems | Ch. 18 | |
| M – Feb. 9 | Heart – Eliminating risk factors | Ch. 18 | |
| W – Feb. 11 | Blood vessels – Organization | | |
| F – Feb. 13 | Blood vessels – Filtration and blood pressure | Ch. 19 | |
| M – Feb. 16 | Immune System – Organs | Ch. 19 | |
| W – Feb. 18 | Non-specific and specific immunity | Ch. 20 | |
| F – Feb. 20 | AIDS and other immune disorders | Ch. 20 | |
| M – Feb. 23 | Respiratory System – Introduction | Ch. 20 | |
| W – Feb. 25 | Upper Respiratory System | Ch. 21 | |
| F – Feb. 27 | Lower Respiratory System | Ch. 21 | |
| M – Mar. 2 | Gas exchange | Ch. 21 | |
| W – Mar. 4 | Review and Catch up | Ch. 21 | |
| Thursday Mar. 5 | EXAM II: 8:00 – 9:30AM | Ch. 18 - 21 | |
| F – Mar. 6 ² | Digestive System - Introduction | Ch. 22 | |
| Mar. 9 – 13 | Spring Break! | 011. 22 | |
| M – Mar. 16 | Digestive System – Organization | Ch. 22 | |
| W – Mar. 18 | Pharynx, Esophagus and Stomach | Ch. 22 | |
| F – Mar. 20 | | Ch. 22 | |
| M – Mar. 23 | Small Intestine, Pancreas and Liver Large Intestine, Digestive disorders | Ch. 22 | |
| W – Mar. 25 | Metabolism – General Overview | Ch. 23 | |
| F – Mar. 27 | Review & Catch up | | |
| M – Mar. 30 | Urinary System Overview Ch. 24 | | |
| W – Apr. 1 | Urinary System – Kidneys | Ch. 24 | |
| vv – Apr. i | Unitary System – Nuneys Cn. 24 | | |

 ¹ Last Day to Change Classes (last day of drop/add)
 ² Last Day for Changing Classes w/out Academic Penalty

| F – Apr. 3 | Urinary System – Physiology | Ch. 24 |
|--------------|--------------------------------------|------------|
| M – Apr. 6 | Urinary System – Physiology | Ch. 24 |
| W – Apr. 8 | Urinary System – Disorders | Ch. 24 |
| Thursday | EXAM III: 8:00 – 9:30AM | Ch. 22 & |
| Apr. 9 | | 23 (24*) |
| F – Apr. 10 | Reproductive System – Overview | Ch. 26 |
| M – Apr. 13 | Male and female anatomy | Ch. 26 |
| W – Apr. 15 | Sex hormone cycles | Ch. 26 |
| F – Apr. 17 | Sex and sexual response | Ch. 26 |
| M – Apr. 20 | Disorders of the Reproductive System | Ch. 26 |
| W – Apr. 22 | Conception | Ch. 27 |
| F – Apr. 24 | Pregnancy and Development | Ch. 27 |
| M – Apr. 27 | Development and Birth | Ch. 27 |
| W – Apr. 29 | Reading Day – No Classes | |
| Thur – April | Final Exam: 2:00PM - 5:00PM | Cumulative |
| 30th | | |

Biology 122 – Human Anatomy

| Date | Topic | Supplies | Lab Exercise/Reading | | |
|---------|------------------------------------------------------|--------------------------|--------------------------------------|--|--|
| Jan. 26 | Endocrine System (bring Rust!) | Lab Manual Rust Guide | Exercises 27 & 28A | | |
| Feb. 2 | Blood | Lab Manual Rust Guide | Ex. 29A | | |
| Feb. 9 | Heart | DK, etc. | Exercises 30, 31, 33A | | |
| Feb. 16 | LAB PRACTICAL EXAM #1 (covers labs 1-3) | | | | |
| Feb. 23 | Blood Vessels | DK, etc. | Ex. 32; Dissection Ex. #4 | | |
| Mar. 2 | Blood Vessels part 2 | DK, etc. | Dissection Ex. #4 | | |
| Mar. 9 | Spring Break! | | No lab! | | |
| Mar. 16 | Respiratory System (review for practical this week!) | DK, etc. | Ex. 36 & 37A Dissection Ex. # 6 | | |
| Mar. 23 | TBA (review for practical this week!) | DK, etc. | | | |
| Mar. 30 | LAB PRACTICAL EXAM #2 (covers labs 4-7) | | | | |
| April 6 | Digestive System | DK, etc. | Ex. 38, 39A Dissection Ex. # 7 | | |
| Apr. 13 | Urinary System | DK, etc. | Ex. 40, 41A | | |
| Apr. 20 | Reproduction and Development | DK, etc. | Ex. 42, 43, 44 Dissection Ex. # 9 | | |
| Apr. 27 | LAB PRACTICAL EXAM #3 (covers labs 7-9) | | | | |

DK = Dissection Kit Required, **Etc.** = reminder to bring other materials

You should always bring your lab manual, lecture text, and Rust guide to lab.

Appropriate dress is required. Cell phones and cameras are not permitted in lab.

Lab meets from 2:00 – 5:00PM in Pierce Room 123

I expect you to have read ALL appropriate lab exercises and associated text before coming to lab. This is critical for us to proceed through lab properly and is part of your participation grade.