



The mission of Concord University is to provide quality, liberal arts based education, to foster scholarly and creative activities and to serve the regional community (<http://www.concord.edu/academics/>).

Course Title: BIOL 336: Human Anatomy and Physiology I

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|--|-----------|-------|----|---|
| Course CRN # and Section, Credit Hours: | BIOL 335 | 20021 | 01 | 4 |
| | BIOL 335 | 20022 | 02 | 4 |
| | BIOL 335L | 20023 | 1A | 0 |
| | | 20024 | 1B | 0 |
| | | 20025 | 1C | 0 |

Instructor: Dr. David Chambers, Professor of Biology
Office: Science Hall Rm. 201D
Office Hrs.: T 8:30-9:30 & 1-3 R 1-2, & F 9-10
Phone #: 304-384-5239 or x5239 (on campus)
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Email: chambersd@concord.edu
Dept. Web: <http://www.concord.edu/biology/>

Semester Taught: Spring 2019

Room Number: Lecture S300
Lab S207

Course Time: Lecture TR 9:30 or 11
Lab R 2
F 10 or 1

Inclement Weather: Lecture TR 11:05 or 12:10
Lab R 2:20
F 11:30 or 1:45

Course Description/Rationale: Chemistry of biomolecules. Structure and function of cells and tissues. Anatomy and physiology of the human integumentary, skeletal, muscular, nervous, and endocrine systems. Relationship of homeostasis to health. Laboratory includes detailed study of macroscopic and microscopic anatomy as well as applicable physiology.

Course Management System: Moodle
Moodle Privacy Notice: <https://moodle.org/admin/tool/policy/view.php?policyid=1>
Moodle Accessibility Statement: <https://docs.moodle.org/34/en/Accessibility>

Prerequisites: BIOL 101 or 103.
This class is a prerequisite for BIOL 336.

Corequisites: BIOL 335L

Text requirements:Required

Lab and Study Materials Packet – Sold by bookstore (profits go to the Biology Research and Outreach Fund)

iClicker or REEF Polling by iclicker App

Suggested (any relatively recent A&P book will do though)

E. Marieb. Human Anatomy & Physiology. 10th Ed. Pearson. **ISBN-13: 9780321927040**

S. Jones. Pocket Anatomy & Physiology. 2nd E. F.A. Davis Company. Philadelphia. **ISBN-13: 9780803632813**

Concord University Educational Goal(s):

Skills: Proficiency in interpreting data, integrating information, formulating ideas, thinking critically, and communicating with others, as demonstrated by the following competencies:

1. Effective inter-communication skills and literacy adapted as needed for the demands of various kinds of discourse:
 - listening and speaking
 - reading and writing
 - non-verbal communication
 - media and technological literacy
2. An ability to employ appropriate observational, logical, analytical, computational, creative, and critical thinking skills in problem solving.
3. An ability to analyze, synthesize, and integrate elements, information and ideas.
4. An ability to evaluate elements, information, and ideas on the basis of appropriate criteria.

Knowledge: Familiarity with principles underlying academic discourse in various fields, as demonstrated by the following capabilities:

1. A recognition of the complex interactions between organisms, including human beings, and their environments.
2. Self-knowledge, including awareness of one's own competencies, deficiencies, and optimal individual learning-style(s).

Attitudes: Tendencies conducive to self-knowledge, personal growth and development, and responsible citizenship as demonstrated by the following:

1. Cultivation of and support for attitudes and practices that foster physical, mental, emotional, and social well-being.

National Standards: Class will be assessed with national standardized HAPS exam following completion of the second semester (BIOL 336).

Learning Outcomes:

1. Define and utilize anatomical terminology and physiological concepts in the analysis of anatomical structure, physiological function, normal conditions, and pathological conditions of the human body.
2. Describe the anatomy and physiology of the systems covered in this course: endocrine, integumentary, muscular, nervous, and skeletal.
3. Understand and identify how structure dictates function.
4. Use understanding of homeostasis within the body to predict consequences of challenges and the body's response.
5. Name, draw, and describe the major tissue types and relate their characteristics to their function.
6. Describe how physiological systems integrate to maintain homeostasis in the body.
7. Understand the chemistry and biochemistry foundations of each body system.
8. Examine the physiological function of enzymes, muscles and the nervous system by performing experiments and collecting and interpreting data.

Course Requirements:

Grades

Your grade will consist of all of the following assignments.

Laboratory Practicals: There will be three lab practicals during the semester. The practicals will require students to name and correctly spell various anatomical structures (complete list found in your lab manual). These tests are difficult due to the volume of information so I strongly suggest you begin studying for them during the first week of lab rather than waiting until the week of the practical.

Lecture and Final Exams: There will be four lecture exams and a comprehensive final exam. Lecture and final exams will be multiple choice with both application and rote memorization questions. Essay and short answer questions will also appear on these exams. All information on these exams will be from lecture, the text, videos available on moodle, or assigned outside readings. The grade on the lowest lecture exam may be replaced by the final grade if advantageous. Unlike the lecture exams, the final will be comprehensive.

Prelabs: There are six prelabs this semester. Three of them are vocabulary lists that you must define and answer questions about in a Moodle quiz prior to the date on the schedule below. The other three prelabs are worksheets to be turned in the day of the lab prior to performing the lab.

Laboratory Worksheets: There will be three lab worksheets (post labs). These are the last page of the three labs we will be performing this semester. All you need do is thoroughly answer the questions on that page and turn them in during the next lab.

Presentation: The presentation will be an informative powerpoint presentation in groups of two on any disease, syndrome, or injury within the subjects we will see in class this year (both semesters). You are expected to use and properly cite at least three respectable sources. Presentations should be 5-7 minutes long and should contain any background material necessary for the class to understand (e.g. if you are doing ACL tear and the corrective surgery you should describe and show the ligaments of the knee).

Pretest: BIOL 335 and 336 are now linked. To take 336 you must first complete this class successfully. This prerequisite was instituted to allow for assessment of the full A&P series using a pretest and a comparable nationally standardized posttest. This test will be a one hundred question scantron test and you will have one hour and fifteen minutes to complete it. You will receive 1% in the class for completing this test and you will be dropped from the class if you fail to take it.

Seminars: The Division of Natural Sciences will host at least three seminars during the semester. If you attend at least two seminars and submit a half to single page summary of the seminar you will receive one percent credit in the course for each seminar summarized (a maximum of two may be submitted).

Study Groups: It is well documented that people learn better by participating in the learning process. To this end, I am continuing a group study aspect in this course. Another sheet will be provided which describes the particulars of this assignment. Basically, it enforces at least an hour of group study per week prior to the weeks of each exam. There is minimal paperwork involved, but the performance of this assignment will undoubtedly, if taken seriously, help your understanding of the material.

Prelecture Video Quizzes: Six video lectures have been posted to the moodle site. You will have a clicker quiz on the due date of those videos that will verify that you watched the material. The quiz will be at the beginning of the class period.

Clicker Participation: I will be asking questions throughout each class. You will be expected to answer the questions using your clicker and only your clicker. People who are caught with more than one clicker or another student's clicker will be considered cheating (see below the punishment for cheating). Correct answers are not the only consideration, but effort is expected.

Moodle Vocabulary Quizzes: In your lab manual you will find a list of vocabulary words for each chapter. Chapters will be grouped by material and 10 Moodle quizzes will be given. The due date of each quiz and the current chapter is indicated on the schedule below. Each quiz will be comprehensive containing possible questions from all the chapters prior to the current chapters. You will be responsible for finishing these quizzes without being reminded.

Breakdown of Grade

| | | |
|--------------------------|-------------|---------------|
| Lab Practicals | 3@9% each | 27% |
| Lecture Exams | 4@9% each | 36% |
| Prelabs | 6@0.5 each | 3% |
| Lab Worksheets | 3@1% each | 3% |
| Presentation | | 5% |
| Pretest | | 1% |
| Seminars | 2@0.5% each | 1% |
| Study Groups | 4@0.5% each | 2% |
| Prelecture Video Quizzes | 6@0.5% each | 3% |
| Moodle Vocab Quizzes | 8@0.5% each | 4% |
| Clicker Participation | | 5% |
| Final Exam | | 10% |
| | | Total of 100% |

Grading Scale: F = <60, D = 60-70, C = 70-80, B = 80-90, and A = >90 (I will use normal rounding rules)

Extra Credit: Two different extra credit sources are available. A quiz will be given during lecture that will contain 10 terms (prefixes, suffixes or roots) from the suggested book (found on inside back cover). This quiz will be good for up to 2pts on your final grade weighted by performance on the quiz compared to the mean. Also, all exams will be prepared with ~105 possible points and the score will be calculated on a 100 point scale giving each exam ~5 bonus points. **If an opportunity arises I will give extra credit at my discretion.**

Grading Policy: Points on tests may be adjusted due to difficult and/or ambiguous questions, but only at the professor's discretion. Students are welcome to present grievances; however, the professor is the sole and final judge on corrections. Any grievances will require the whole assignment to be regraded and may improve or lower the assignment's score.

Attendance and Make-up Policy

Your success in this class is directly proportional with the effort you put forth. Attendance will not be recorded in lecture; however, absences will be detrimental to your final grade both in clicker participation score and other assessments. Students are required to attend lab (especially physiology labs), but no credit will be given for attending. However, I will monitor attendance in lab and will drop any student who misses more than one physiology lab over the span of the semester regardless of their current grade in the course.

Only documented university or medical excuses will be accepted for exams. Make-up exams will be available in the above circumstances up to 2 days after the exam **assuming I am notified of your absence prior to the end of the assignment by email or phone** (put my phone number or email address into your phone now so you give no feeble excuses later). It is the student's responsibility to arrange and take excused make-up exams within the two day time period. Late work will not be accepted without a university or medical excuse.

Class and Lab Schedule

The following is a schedule of topics that will be discussed and labs that will be performed. This is only an estimation of the time each area will take and is subject to change for a multitude of reasons. Please make every attempt to familiarize yourselves with the material prior to class for an optimum learning environment. Holidays, exams dates and due dates are in bold while lab exercises are in italics.

Course Timeline (Schedule of Assignments/Assessments/Presentations)

| Date | Wk | Day | Topic | Vocab Quiz |
|---|----|---------------------------------------|--|--------------------------|
| 15-Jan 17-Jan <i>17 or 18-Jan</i> | 1 | T R <i>R or F</i> | Introduction Assessment Test <i>Histology & Skeleton</i> | |
| 22-Jan 24-Jan <i>24 or 25-Jan</i> | 2 | T R <i>R or F</i> | Biochemistry 101 (organ system video quiz) Biochemistry 101 (chemistry video quiz) <i>Enzyme function lab & Histology & Skeleton</i> | Ch. 1 & 2 |
| 27-Jan | | Su | Quiz done by 10pm | Hist. & Bones |
| 29-Jan 31-Jan <i>31-Jan or 1-Feb</i> | 3 | T R <i>R or F</i> | Biochemistry 102 Cell Structure 101 <i>Histology & Skeleton</i> | Ch. 3 & 4 |
| 5-Feb 5-Feb 7-Feb <i>7 or 8-Feb</i> | 4 | T T R <i>R or F</i> | Cell Structure 102 & Cell Cycle <i>Review Session 8:30pm room 300</i> Exam I (through cell cycle) <i>Histology & Skeleton</i> | Ch. 5 |
| 12-Feb 14-Feb 14 or 15-Feb | 5 | T R R or F | Tissues Integumentary (integ video quiz) Practical I (Histology & Skeleton) | Ch. 6 |
| 19-Feb 21-Feb <i>21 or 22-Feb</i> | 6 | T R <i>R or F</i> | Skeletal (skeleton video quiz) Skeletal <i>Human Muscles</i> | Ch. 7 |
| 24-Feb | | Su | Quiz done by 10pm | Muscles |
| 26-Feb 28-Feb <i>28-Feb or 1-Mar</i> | 7 | T R <i>R or F</i> | Skeletal & Articulations Articulations <i>Muscle Lab & Human Muscles</i> | Ch. 9 |
| 5-Mar 5-Mar 7-Mar <i>7 or 8-Mar</i> | 8 | T T R <i>R or F</i> | Muscles (muscle video quiz) <i>Review Session 8:30pm room 300</i> Exam II (through articulations) <i>Human Muscles</i> | |
| <u>12-Mar</u> <u>14-Mar</u> <i>14 or 15-Mar</i> | 9 | <u>T</u> <u>R</u> <i>R or F</i> | <u>Spring Break</u> <u>Spring Break</u> <i>Spring Break</i> | |
| 19-Mar 21-Mar 21 or 22-Mar | 10 | T R R or F | Muscles Muscles Practical II (Human Muscles) | Ch. 10 & 11 |

| | | | | |
|---|----|------------------------------|---|-------------------------|
| 26-Mar 28-Mar 28 or 29-Mar | 11 | T R R or F | Nervous Nervous Nervous & Endo | Ch. 12 & 13 |
| 31-Mar | | Su | Quiz done by 10pm | Nerv. & End. |
| 2-Apr 4-Apr 4 or 5-Apr | 12 | T R R or F | Nervous Nervous Nervous & Endo | |
| 9-Apr 9-Apr 11-Apr 11 or 12-Apr | 13 | T T R R or F | Nervous Review Session 8:30pm room 300 Exam III Nervous System & Reflex and Sensory Lab | Ch. 14 & 15 |
| 16-Apr 18-Apr 18 or 19-Apr | 14 | T R R or F | Nervous (nervous video quiz) Nervous Nervous & Endo | |
| 23-Apr 25-Apr 25 or 26-Apr | 15 | T R R or F | Nervous Nervous Practical III (Nervous & Endocrine) | Ch. 16 |
| 30-Apr 30-Apr 2-May 2 or 3-May | 16 | T T R R or F | Nervous Review Session 8:30pm room 300 Exam IV No Lab | |
| 7-May 9-May | | T R | Final Exam 11:30-1:45pm (11am Lecture) Final Exam 9-11:15 (9:30am Lecture) | |

Accessibility/Accommodations:

Concord University is committed to responding to the needs of students with disabilities as defined by the Americans with Disabilities Act. Please inform your instructor at the beginning of the class semester if you have a disability and are requesting accommodations. It is your responsibility to self-disclose that you are requesting accommodations. The University and instructor will provide you with a reasonable accommodation. You should register with CU's Disability Services Office, located in the Athens campus Jerry and Jean Beasley Student Center, bottom floor, across from the Campus Post Office. The Disability Services Office phone is 304-384-6086 or you can email the Director, Nancy Ellison, at nellison@concord.edu for assistance.

Academic Dishonesty

Academic dishonesty is morally unacceptable as well as destructive to the learning and teaching atmosphere. Academic dishonesty includes the giving or receiving of improper help on examinations or assignments, falsifying documents, and plagiarism (the act of stealing and using, as one's own, the ideas or the expression of the ideas of another). Such dishonesty can lead to a variety of penalties — including but not limited to failure of assignment, failure of course, loss of institutional privileges, or dismissal from the University. (See University Catalog Academic Policies and Procedures.)

Concord University Honor Code

A Concord University Honor Code was approved by students, staff, faculty, administration, and the CU Board of Governors. The Code states:

"As a member of the Concord University Community I will act with honesty and integrity in accordance with our fundamental principles and I will respect myself and others while challenging them to do the same."

The Honor Code is intended to unite the Concord community behind a culture of honesty, integrity, and civility.

Withdrawal and Audit Policies

Faculty in the Division of Natural Sciences will not sign academic exceptions for withdrawal after the drop deadline for students earning a grade of D or F. Academic exceptions for withdrawal after the deadline will be considered for students earning grades of A, B, or C, only under highly unusual circumstances. It is also the policy of the Division that students may not change to audit status in a course after the 10-week withdrawal deadline under any circumstances. In addition, changing to audit status will only be allowed if the student has regularly attended classes and continues to attend class following the conversion to audit.

Class/Online Attendance Policy

Regular class attendance is part of a student's academic obligation at Concord. Irregular attendance may affect academic performance adversely and is detrimental to the atmosphere of a class. (See University Catalog Academic Policies and Procedures.)

Emergency Alert System

In an effort to increase safety and security on our campus, Concord University encourages everyone to register for instant text message alerts. Alerts will only be used for security and safety notices. All students, faculty, and staff are eligible to receive text message alerts on their cell phones or email alerts. Please contact the IT Help Desk for further assistance (304-384-5291).

Emergency Information

Emergency/courtesy telephones are located at the main entrance of each residence hall and at various other locations on campus. Emergency telephones can be identified by the flashing blue light and will provide the user with a direct link to Public Safety at the press of a button. To report an on-campus emergency, call 304-384-5357 or 911. The Office of Public Safety is located on the bottom floor of the Rahall Technology Center. For further emergency information go to:

<http://www.concord.edu/administration/office-public-safety>.

Inclement Weather Policy

As a general policy, the University will remain in normal operations during adverse weather conditions. In the event of severe weather conditions, the following may occur:

University Closure

No students or employees are to report.

Classes Cancelled

Students do NOT report BUT employees are expected to report to work at their normal time.

Operating on an Inclement Weather Delay

Under this schedule, all 8 a.m. classes will start at 10 a.m. Students and faculty will follow the Inclement Weather Schedule. (See <http://www.concord.edu/emergency-alerts> for Athens/Beckley Inclement Weather Schedules.) On Inclement schedule the 9:30 lecture will meet at 11:05-12:05

while the 11 lecture will meet at 12:10-1:10. The Thursday lab will meet at 2:20-4:10 while the Friday labs will meet at 11:30-12:55 and 1:45-3:55.

**Announcements invoking the late schedule or other options referenced above are aired on area radio and television stations and are sent as text and email messages to those enrolled for this service.*

Student Conduct

In classrooms, online, laboratories, and during any activities that are part of course requirements, students are expected to observe reasonable rules of conduct.

Sexual Harassment & Assault

Federal law, Title IX, and Concord University policy prohibits discrimination, harassment, and violence based on sex and gender (Including sexual harassment, sexual assault, domestic/dating violence, stalking, sexual exploitation, and retaliation). If you or someone you know has been harassed or assaulted, you can receive confidential counseling support through the Concord University Counseling Center (304-384-5290). Alleged Violations can be reported non-confidentially to the Concord University Title IX Coordinator at 304-384-6327 or titleix@concord.edu. Reports to Campus Security can be made at (304-384-5357). As an employee at Concord University, I am a mandatory reporter which means I must report any sexual misconduct I am made aware of. This includes verbal or written (such as in an assignment) disclosures of sexual harassment or sexual assault.

Technology Services

Contact the CU Help Desk at extension 5291 from campus or 304-384-5291 off campus. You may also e-mail cuhelpdesk@concord.edu.

Syllabus Disclaimer

"This syllabus is subject to change based on the needs of the class. Please check it regularly."