Course Description and Prerequisites:

Human Anatomy and Physiology I emphasizes structure and function of the human body, integrates related facts, principles, and concepts of the cell, chemistry, biochemistry and homeostasis, and includes study of cells and tissues and the integumentary, skeletal, nervous, endocrine, and muscular systems. This course may be required for Allied Health programs.

4 credits; 3 lecture hours and 3 laboratory hours per week.
Prerequisites: BIOL 110 or a college equivalent with a minimum grade of “C” and exemption from or successful completion of ENGL 052, RDNG 052 and MATH 083.

I. Basic Course Information
A. Instructor: Ewa Gorski, Ph.D.
B. Office: CLLB SUITE 104

Contact Information:
C. Office Hours: Tuesday and Thursday: 8:30-9:00am; 9:00-9:30am (open lab CLLB 103);
   2:10-3:10pm; Monday 7:30-8:00pm (Blackboard Chat room Office Hours)
D. Department/School Phone Number: Catonsville Biology Department phone#: 443-840-4212 &
   fax#: 443-840-5547

E. Class Times, Days, and Locations:

<table>
<thead>
<tr>
<th>CRN#</th>
<th>Section</th>
<th>Days</th>
<th>Time</th>
<th>Room</th>
<th>Instructor</th>
<th>LECTURE Final Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>20795/</td>
<td>CM1/CM2</td>
<td>TR</td>
<td>11:10am - 12:35pm</td>
<td>CLLB 003</td>
<td>Ewa Gorski</td>
<td>May 19 (Tuesday)</td>
</tr>
<tr>
<td>20796</td>
<td>lecture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11:00am-1:00pm</td>
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</tbody>
</table>

20795 CM1 lab TR 9:35 - 11:00am CLLB 103 Ewa Gorski
20796 CM2 lab TR 12:45 - 2:10pm CLLB 103 Ewa Gorski

F. Statement of Student Out-of-Class Work Expectations. These expectations are the minimal requirements based on national standards and may not be decreased: in a standard 16 week semester, students are expected to spend 2 hours per week, per credit hour on work outside of class. This is a 4 credit course taught in a 14-week semester, and so you are expected to complete at least 8 hours of work per week outside of the class including reading, class preparation, homework, studying, etc. If this is an online section, an additional 4 hours are required per week. Students: please note that these are minimal requirements for any course, and that many students require more time than this for science courses.

G. Materials:

Required: For laboratory courses, appropriate clothing (including shoes which cover the tops of the feet and have good traction) is required. See “Course Procedures” for more information.

  - Optional exercises may be assigned via the Connect Plus Website. If you have an older edition of the book, you may need to purchase an access code for the site. These can be purchased online or at the bookstore, but check with your instructor before making this purchase.


- PhysioEX 9.1 for A&P Zao/Stabler/Peterson/Smith, Benjamin Cummings Publishers.

- BIOL 220 Human Anatomy & Physiology Laboratory Guide (available in Blackboard)

OPTIONAL Texts and resources (can be purchased at the Catonsville bookstore):

- Photographic Atlas Of Histology, 2nd edition, Leboffe
- Coloring Guide To Anatomy & Physiology, Stone,
- Anatomy & Physiology Coloring Workbook, 11th edition, Marieb,
- Seeley’s Anatomy & Physiology Study Guide, 10th edition, Van Putte,
- Anatomy & Physiology Revealed Wkbk Vers 3.0, Medical Univ,
II. Course Goals Overall
   A. Course Objectives:
      Upon completion of this course students will be able to:
      1. apply the principles of chemistry and cell structure and function to the study of anatomy and physiology;
      2. define anatomy and physiology and apply descriptive anatomical and directional terminology;
      3. explain the concept of homeostasis and describe how feedback loops operate to maintain homeostasis within the body systems;
      4. distinguish among the tissues of the body in terms of structure, function, and location;
      5. identify and describe the structural features of the integumentary system and describe the functional roles in temperature regulation, sensation and protection;
      6. identify and describe the structural features of the skeletal system and explain their functional roles in osteogenesis and body movement;
      7. identify and describe the structural features of the nervous system and explain their functional roles in receiving, integrating, and conducting information;
      8. identify and describe the structural features of the special senses and explain their functional roles in vision, hearing, equilibrium, taste and smell;
      9. identify and describe the structural features of the endocrine system and explain the functional roles of hormones on their effectors;
     10. identify and describe the structural features of the muscular system and explain their functional roles in body movement, maintenance of posture, and heat production;
     11. calculate physiological parameters and interpret data;
     12. recognize and explain the anatomical and physiological interrelationships within and between systems of the human body;
     13. apply knowledge of the systems to practical, problem-solving situations; and
     14. predict the consequences of physiological and anatomical changes on the body.
   B. Major Topics:
      I. Body Plan and Organization
      II. Homeostasis
      III. Histology
      IV. Integumentary System
      V. Skeletal System
      VI. Muscular System
      VII. Nervous System
         A. Central Nervous System
         B. Peripheral Nervous System including the Autonomic Nervous System
         C. Special Senses
      VIII. Endocrine System
   C. Rationale: This course is designed to meet the needs of students who are interested in the human body and its function; may choose an allied health field; may wish to pursue a physical education, biology, zoology or pre-medical major; or are actively engaged in an allied health field and wish to reinforce or update their knowledge.

III. Evaluation
   A. Requirements: From the CCO: “Grading procedures will be determined by the individual faculty member but will include at least 2 interim exams and a comprehensive final examination in the lecture portion of the course. 50-70% of the grade will be derived from lecture component of course. A minimum of 2 laboratory practical exams will be given. No more than 30% of a student’s total grade may come from homework, non-proctored work or open book tests. Students must pass both the lab and lecture components with a 60% or better; failure to earn a minimum of 60% in either lab or lecture will result in failure of the entire course.”
B. Instructor's grading policy: General Policy on Assignments and Assessments: Lecture and lab instructors will provide detailed information in class and on Blackboard

**Lecture - 70%** of course grade based on assignments, 4 unit exams, and a comprehensive final exam

| Assignments | 100 points |
| Exam 1      | 100 points |
| Exam 2      | 100 points |
| Exam 3      | 100 points |
| Exam 4      | 100 points |
| Final Exam  | 200 points |
| **Total**   | **700 points** |

**Laboratory - 30%** of course grade is based on 3 laboratory practical exams (3x100 points). Each lab exam will include 90 points of practical questions given during lab. An additional 10 points will be earned according to information provided by the lab instructor and will be posted in Blackboard.

**NOTES:**

(1) Both lecture and lab must be passed with > 60%. Earning less than 60% in either lecture (fewer than 420 out of 700) or lab (fewer than 180 out of 300) will result in failure of the entire course (grade = F) regardless of the total points earned. *Don’t confuse points with percentage!*

(2) Overall Course Grade Calculation; the overall grade is calculated simply by dividing the number of points earned by the number offered, and multiplying by 100%. Extra credit points (if any) will be added to your total course score after your final exam has been graded. Extra credit will not exceed 5% of your overall grade, will be knowledge or skill based, and will be offered to the entire class or not at all.

(3) **Late Homework Assignment Policy:** if homework assignments are given, they must be turned in on time to receive full credit. See details in Blackboard

C. Instructor's attendance policy:

Students that come to CCBC Catonsville from work or from another school or campus must attend classes based on the Catonsville campus schedule. Schedule conflicts should be resolved prior to registration.

Note that students who stop attending class but do not formally withdraw receive an “F” for the course. See the schedule, attached, for the exact deadline for the current semester.

Students are responsible for material covered in lecture and laboratory.

Please be on time: students entering class late distract those who arrived on time. It is also students’ responsibility to determine whether you have missed announcements and what they might have been.

Please do not leave early unless it is an emergency: when students walk out during an instruction session it distracts both the teacher and the class.

Laboratory: quizzes are given and objectives are explained at the START of lab. ALSO: you would do well if prepared for the laboratory activities.

D. Instructor's audit policy: Important notes: (1) you can no longer wait until mid-semester to decide that auditing a course is appropriate: the final date to change to an audit now coincides with the final date for withdrawing with a 50% refund, and (2) failure to participate in the class as follows will result in a grade of “W” instead of “AU The last day to audit this course is February 23rd, 2015.

Students who audit are not required to complete the course assessments and assignments.

IV. Course Procedures

A. Course-related policies and procedures:

*Students needing special accommodations for testing must submit a letter from Disability Services BEFORE the first exam.*
Exam administration

- Exams and quizzes will be collected on schedule regardless of your arrival time, and so if you arrive late you will have less time to complete the exam, or – for a quiz – may miss it entirely (see the policy for missed exams, below). **Students arriving more than 20 minutes late on the day of an exam may be denied the opportunity to take the exam.**
  - Phones, computers, tablets, calculators, notes, etc. are not allowed during an exam. All backpacks, purses, etc. must be stored either in the front of the room or underneath your chair. If you have one of these out, your exam will be taken, you will receive a zero for the exam/quiz and a report will be filed with Judicial Affairs.
  - Once the exam is distributed, **you must finish it** before leaving the room (NO “bathroom breaks” are allowed. A note from the DDS is needed if you have a medical reason making this impossible.)

- **Lecture Exams** may be taken a day or two earlier without penalty. Exams are designed to prepare students to respond to critical thinking and application questions like those found in various board exams. Exams may include multiple choice, true/false, matching, fill-in, short answer and paragraph questions based on cognitive material and practical situations, which may require one-step responses or multi-step thinking. At least 80 percent of the questions are from the material covered during class and in supplements.

- **Lab exams** may include figures, histology slides, models, dissected specimens, and other materials introduced by the lab instructor. **Students arriving even a few minutes late to a lab exam may miss questions and not be permitted to make up those questions.** Each lab exam will include practical questions worth 90 points. These 10 points per exam may include in-class presentations, quizzes, assignments, lab reports on physiological “experiments” (e.g., PhysioEx), or other assignments given by the lab instructor.

Make-Up Policy

- **Quizzes:** must be taken with the class. No early or late quizzes will be allowed, regardless of circumstances.
- **NO re-tests** will be given under any circumstances. Once you begin an examination, you must finish it and accept the grade you earn.

Make-up lecture exams may consist entirely of essay questions. **Students are permitted to take ONE lecture make-up exam per semester in place of a missed exam; the exam will be administered during the last week of classes (the week before finals) or at the discretion of the instructor. A make-up lecture exam must be requested and acknowledged in writing (e.g. by Blackboard email); students will lose 5 points if the instructor is not notified before the originally-scheduled exam is given.** Students that fail to take the make-up exam will have a “0” for the exam.

**If the final exam** cannot be taken during its scheduled time, an "incomplete" grade will be assigned and the final exam will be offered as a make-up exam on a date negotiated in writing, usually during the first week of the following term (spring or fall semester). Depending on your goals, this could delay registration or graduation during the following semester.

Make-up laboratory exams** because of logistical limitations are generally not possible and when offered under extenuating circumstances may be given orally; **ONE make-up lab exam per semester is allowed and offered at the end of the semester, or at the discretion of the instructor.** A lab exam taken with another lab section or another lab instructor will be considered a make-up exam. In order to allow a make-up lab exam the instructor must be notified in writing by the end of the week in which the exam was first given. The exact content and format may differ from the original exam.

Previous lecture and laboratory exams** will be available for review and students are advised to discuss the exams with their instructor during office hours. **Questions regarding exam grading must be resolved before the next exam** (or in the case of the final exam, before the final grades are submitted to the Office of Records and Registration). Scores will be posted in Blackboard and will not be given on the phone, via email, or snail mail. Final grades are submitted to the Registrar and are made available to students in SIMON according to the schedule given on the CCBC website on the semester calendar page (http://www.ccbcm.edu/newsroom/events.html). If special circumstances exist when a student needs the final grade to be sent to another institution directly by the instructor this should be individually arranged.

**Grade Availability and Progress-Grade Reporting:** updated scores and grades will be posted in Blackboard. Students should expect to get their graded exams back not less than one week after the exam’s deadline. (Please contact the HelpDesk if you have difficulties using Blackboard.)
Many of the questions used in class are sequestered (they are not released to students because they may be used in future semesters or by other instructors), and so quizzes and exams will not be returned in class, but they are available for review during office hours. Students who are failing at midterm will be notified of their grade by the Records Office.

*Reading Assignments & Quiz/Exam Content:* because many of this course learning objectives are explained in the assigned reading or are covered in lab, some topics may not be covered in lecture even though they will be included on assessments. You will find this course much simpler if you prepare for classes and read the material prior to the session.

*Assignments and assessments that were not picked up by a student will only be held onto until the second week into the next semester after which they will be disposed of.*

**B. College wide syllabus policies:** For college wide syllabus policies such as the Code of Conduct related to Academic Integrity and Classroom Behavior or the Audit/Withdrawal policy, please go to the ‘MySyllabiPolicies’ Tab on the MyCCBC page. Please pay particular attention to the following sections of MySyllabiPolicies:

- **Attendance Policy**
- **Code of Conduct** (As presented in the college catalog; be sure to read the sections dealing with academic integrity, including the definition of cheating.)
- **Grades – AU** *(The last day to change to an “audit” this semester is: February 23rd 2015)*
- **Grades -W** *(The last day to withdraw this semester is April 2nd 2015)*

*College Closing and Class Start and End Times:* “In the event that the college (or a specific campus) opens late or closes early due to weather-related or other emergency conditions, classes and labs which would meet for less than 30 minutes will be cancelled. Classes and labs that would meet for 30 minutes or more will be held.”

- While events (snow days, power outage, etc.) may force schedule changes, all learning objectives must be met, even if this requires accelerated coverage of the topics.

**C. Contact information for course-related concerns:** See endnote².

**D. Additional Procedures:** *No food or drink is allowed in any science lab at any time. Feet should be covered with closed-toed shoes to provide protection from broken glass, spilled chemicals, and other laboratory hazards. Eye, hand, skin and clothing protection may be required when chemical or biological hazards are present. Failure to abide by laboratory safety policies will result in removal of students from the class.*

**E. Course calendar/schedule:** *See the printed schedule appended to this document; also posted in Blackboard*

This syllabus may be changed with notification to the class.

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² Note that the content in these sections is dictated by the Common Course Outline for this course, as approved at the college-wide level: [http://www.ccbcmd.edu/cco/home.html](http://www.ccbcmd.edu/cco/home.html)

² Students should first attempt to take concerns to the faculty member. If students are unable to resolve course-related concerns with the instructor, they should contact Ms. Karen Dalton, Catonsville BIOL Coordinator at kdalton@ccbcmd.edu or 443-840-5944.

Semester Schedule [http://www.ccbcmd.edu/registration/spring_collegecal.html](http://www.ccbcmd.edu/registration/spring_collegecal.html)

| Last day to drop classes with 50% refund OR change to audit with "AU" on Transcript | February 23, 2015 |
Tentative Course Schedule (if necessary it may be revised)

<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture Topics</th>
<th>Ch.</th>
<th>Laboratory Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/2-7</td>
<td>Introduction to A&amp;P; Homeostasis Histology</td>
<td>1</td>
<td>Anatomical terms; Cytology review; Histology</td>
</tr>
<tr>
<td>2/9-14</td>
<td>Histology, Integumentary System</td>
<td>4</td>
<td>Histology; Integumentary System</td>
</tr>
<tr>
<td>2/16-21</td>
<td>Nervous System Histology; Electrophysiology</td>
<td>11</td>
<td>Nervous Tissue; General Senses</td>
</tr>
<tr>
<td>2/23-28</td>
<td>LECTURE EXAM 1 Electrophysiology</td>
<td>11</td>
<td>Neurophysiology of Nerve Impulses; Central and Peripheral Nervous Systems</td>
</tr>
<tr>
<td>3/2-7</td>
<td>Spinal Cord &amp; Tracts Brain</td>
<td>12</td>
<td>LABORATORY PRACTICAL EXAM #1 Central Nervous System</td>
</tr>
<tr>
<td>3/9-14</td>
<td>Brain</td>
<td>13</td>
<td>Central and Peripheral Nervous System</td>
</tr>
<tr>
<td>3/16-21</td>
<td>LECTURE EXAM 2 Peripheral Nervous System, Integration</td>
<td>12,13,14</td>
<td>Special Senses</td>
</tr>
<tr>
<td>3/23-28</td>
<td>Integration Special Senses</td>
<td>14</td>
<td>Endocrine System; Endocrine System Physiology; Skeletal System</td>
</tr>
<tr>
<td>3/30-4/2</td>
<td>Autonomic Nervous System</td>
<td>16</td>
<td>LABORATORY PRACTICAL EXAM #2 (4/18 Sat lab) Skeletal System</td>
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<tr>
<td>4/13-18</td>
<td>Autonomic Nervous System</td>
<td>16</td>
<td>Skeletal System; Articulations and Movement</td>
</tr>
<tr>
<td>4/20-25</td>
<td>LECTURE EXAM 3 Endocrine System</td>
<td>17</td>
<td>Skeletal System; Articulations and Movement</td>
</tr>
<tr>
<td>4/27-5/2</td>
<td>Endocrine System Skeletal System</td>
<td>18</td>
<td>Muscular System</td>
</tr>
<tr>
<td>5/4-9</td>
<td>LECTURE EXAM 4 Muscular System</td>
<td>9</td>
<td>Review: Skeletal and Muscular Systems</td>
</tr>
<tr>
<td>5/11-16</td>
<td>Muscular System</td>
<td>9,10</td>
<td>LABORATORY PRACTICAL EXAM #3</td>
</tr>
<tr>
<td>5/18-23</td>
<td>COMPREHENSIVE LECTURE FINAL EXAM (covers the entire course). Students must take the final exam with their course section. If the student has more than two exams scheduled on any given day, he/she has the right to have one exam rescheduled for a day during the exam week when he/she does not have two exams scheduled.</td>
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</table>

**For detailed lab schedule check Tentative Laboratory Schedule (posted in Blackboard)**