BIOL 252: Physiological Pathology

Course Description and Prerequisites:
BIOL 252 - 3 credits - Physiological Pathology covers the principles regarding the alteration of the structure and function of tissues in disease and the development and abnormal effects of disease in the various organ systems. It acquaints students with the anatomical changes that have occurred because of disease and relates the work of the mortician to that of the pathologist, coroner, and medical examiner. This course is required for students in the Mortuary Science Program.

Prerequisite: Students must apply and be accepted into the Mortuary Science Program via School of Health Professions Admissions Office, and BIOL 130 or other college-level anatomy approved by the Mortuary Science Program Director with a minimum grade of “C” (for Human Anatomy for Mortuary Science common course outline visit http://www.ccbcmd.edu/media/cco/biol/biol130.pdf)

I. Basic Course Information
A. Instructor: Ewa Gorski, Ph.D.
B. Office: C. MASH 214
   Contact Information: Phone #443-840-4314, Email egorski@ccbcmd.edu
C. Office Hours: Tuesday and Thursday: 8:30-9:00am; 9:00-9:30am (open lab room MASH 132); 2:10-2:40pm; 5:10-5:40pm; Monday 8:00-8:30pm (Blackboard Chat – Office Hours). I will respond to students’ messages within 24 hours Monday through Thursday until 5pm.
D. Department/School Phone Number: Biology Department phone#: 443-840-4212; fax#: 443-840-5547
E. Class Times, Days, and Locations: This is a web-based course: CRN# 90512
   Go to www.ccbcmd.edu; click Online Learning for the course requirements.

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 3-credit course taught in a 14-week semester, and so you are expected to complete at least 6 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 (available at CCBC Catonsville bookstore)
   Required:
   Optional:
   • Taber’s Cyclopedic Medical Dictionary (22nd ed.).F.A. Davis Company. ISBN:080362977X

II. Course Goals Overall
A. Course Objectives:
   Upon completion of this course, the student will be able to:
   1. define and differentiate among the major divisions of pathology;
   2. compare and contrast the roles of the medical examiner and the coroner, and explain the importance of autopsy;
   3. define the terms related to nature of disease, causes of disease, and describe the process of disease;
   4. apply the functions of cellular components to explain cellular reaction to injury and common causes and complications of structural abnormalities;
   5. describe the processes of inflammation and repair, and identify possible complications associated with each process;
6. identify and describe common conditions related to disturbances of the circulatory system;
7. compare and contrast the characteristics of normal cells with transformed cells, and benign and malignant neoplasms, and describe the causes and complications of common types of neoplasms;
8. list and describe common types of cysts and non-neoplastic changes, and recognize the complications associated with each;
9. apply a system’s structure and functions to identify predisposing factors and discuss common changes (complications) associated with diseases of:
a. the blood, the heart and blood vessels;
b. the lymphatic system;
c. the digestive system;
d. the respiratory system;
e. the urinary system;
f. the reproductive system;
g. the nervous system;
h. the skeletal system;
i. the integumentary system; and
j. the endocrine system.

B. Major Topics:
I. Pathology, its divisions and plan of study
II. The nature and cause (etiology) of diseases
III. Cellular reactions to injury
IV. Developmental abnormalities
V. Inflammation and repair
VI. Disturbances in circulation
VII. Neoplasms (tumors) and cysts
VIII. Diseases of:
a. the blood, the heart and blood vessels
b. the lymphatic system
c. the digestive system
d. the respiratory system
e. the urinary system
f. the reproductive system
g. the nervous system
h. the skeletal system
i. the integumentary system
j. the endocrine system

C. Rationale:
The course focuses on the alteration of the structure and function of the human body, and relates the work of the mortician to that of the pathologist, coroner, and medical examiner.

III. Evaluation
A. Requirements:
Course assessments include:
- Four UNIT Exams (100 points each) 400 points
- Cumulative Final Exam 150 points
TOTAL POINTS 550 points
Notes:
1. Exams will consist of multiple choice, matching, true/false, fill-in-a blank and short answer questions;
2. A minimum of 429 points must be earned to pass the course with a grade “C”;
3. Overall Course Grade Calculation: the overall grade is calculated 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 (total number of points) 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. Students should refer to “What is my course average?” in Blackboard to update your current course average;
4. Late Assignment Policy: if homework assignments are given, they must be turned in on time to receive full credit. See details in Blackboard

***If extra credit activities are offered the grades including the final grade will not be rounded or curved.

B. Instructor’s grading policy:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points out of 550</th>
<th>Percentage out of 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>506.0 – 550 points</td>
<td>92 – 100%</td>
</tr>
<tr>
<td>B</td>
<td>467.5 – 505.9 points</td>
<td>85 – 91.99%</td>
</tr>
<tr>
<td>C</td>
<td>429.0 – 467.4 points</td>
<td>78 – 84.99%</td>
</tr>
<tr>
<td>D</td>
<td>385 – 428.9 points</td>
<td>70 – 77.99%</td>
</tr>
<tr>
<td>F</td>
<td>0 – 384.9 points</td>
<td>0 – 69.99%</td>
</tr>
</tbody>
</table>

C. Instructor’s attendance: all exams must be taken at CCBC Catonsville at the location and during the time indicated by the instructor; information will be posted in the course Syllabus;

Attendance for Final Exam: the final exam is held at the end of the semester in accordance with the official schedule (http://www.ccbcmd.edu/newsroom/events.html). Students who miss the final exam and do not contact the instructor within 24 hours will receive 0 points for the exam. Before a student is permitted to make up a final examination, he/she must obtain permission from the Dean of Instruction or his designee.

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

IV. Course Procedures

A. Course-related policies and procedures (including course-specific links): The learning objectives and expectations are posted in Blackboard. The student interaction with the course instructor and classmates via Blackboard Messages and Discussions is encouraged and expected.

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

1. Exam administration: exams will be collected on schedule regardless of your arrival time, and so if you arrive late you will have less time to write the exam or miss it entirely. (See the policy for missed exams.) 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 the 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.)

2. Make-Up Policy
   • NO re-tests will be given under any circumstances. Once you begin an examination, you must finish it and
accept the grade you earn.

- A make-up exam may consist entirely of essay questions. **Students are allowed to take one make-up exam (in place of a missed exam) per semester that will be administered during the last week of classes (the week before finals) or at the discretion of the instructor.** The make-up exam will be allowed only if a valid excuse is presented and approved by the instructor and the Director of the Mortuary Science Program within 24 hours of the missed exam. The exam must be requested and acknowledged in writing (by Blackboard email); **students will lose 5 points if the instructor is not notified within 24 hours of 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. Depending on your goals, this could delay registration or graduation during the following semester.

- You may take an exam 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; some may be subjective.

**Previous exams will be available for review for two weeks after the graded exam is returned,** 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 e-mail, 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.ccbcmd.edu/newsroom/events.html](http://www.ccbcmd.edu/newsroom/events.html)

3. **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. Many of the questions used in class are sequestered (they are not released to students since they may be used in future semesters or by other instructors), and so quizzes and tests will not be returned in class, but they are available for review during office hours. (To be certain that you will have time and opportunity when you wish, however, an appointment is suggested.) Students who are failing at midterm will be notified of their grade by the Records Office.

**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 for Academic Integrity**
- **Grades – AU** The last day to change to an “audit” this semester is: September 18th, 2015
- **Grades -W** The last day to withdraw this semester is: November 6th, 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 endnote for contact information.

D. **Course calendar/schedule:** See the printed schedule appended to this document.

This syllabus may be changed with notification to the class.

---

1 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**

**College-wide Important Dates:** [http://www.ccbcmd.edu/registration/spring_collegecal.html](http://www.ccbcmd.edu/registration/spring_collegecal.html)

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester classes begin</td>
<td>August 31, Monday</td>
</tr>
<tr>
<td>Labor Day (College closed) No credit or continuing education (non-credit) classes scheduled</td>
<td>September 7, Monday</td>
</tr>
<tr>
<td>Saturday classes begin</td>
<td>September 12, Saturday</td>
</tr>
<tr>
<td>Last day to change to audit with &quot;AU&quot; on transcript*</td>
<td>September 18, Friday</td>
</tr>
<tr>
<td>Last day to withdraw with &quot;W&quot; on transcript*</td>
<td>November 6, Friday</td>
</tr>
<tr>
<td>Thanksgiving Holiday (College closed) No credit or continuing education (non-credit) classes scheduled</td>
<td>November 25-29, Wednesday-Sunday</td>
</tr>
<tr>
<td>Last day of classes</td>
<td>December 11, Friday</td>
</tr>
<tr>
<td>Final examinations</td>
<td>December 12-18, Saturday -Friday</td>
</tr>
<tr>
<td>Winter recess (College closed) No credit or continuing education (non-credit) classes scheduled</td>
<td>December 24, 2015 - January 3, 2016</td>
</tr>
<tr>
<td>Last day to complete an “I” (incomplete) grade</td>
<td>March 4, 2016, Friday</td>
</tr>
<tr>
<td>Due</td>
<td>TOPICS</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| **Aug 31**       | **Online Orientation Session 7-8pm** Blackboard → Chat → Orientation  
| **Monday**       | Explore the course and read the Syllabus before the orientation.                                                                                                                                         |
| **Sep 2**        | Explore the course, read the Syllabus, and submit the **Course Agreement (1 bonus pt)** (Blackboard)                                                                                                      |
| **Sep 4**        | **Unit 1**: Introduction to Pathology; Nature of Disease  
|                  | **Unit 2**: Cellular Reaction to Injury                                                                                                                                                                   |
| **Sep 8 Tuesday**| **Take the Human Anatomy Review Exam** (10 bonus pts)  
| **4:00-4:30pm**  | The exam will be completed within 30 minutes.                                                                                                                                                             |
|                  | **Unit 3**: Structural Abnormalities and Birth Defects                                                                                                                                                     |
| **Sep 12**       | **Unit 4**: Nutritional Deficiency Diseases  
|                  | **Unit 5**: Inflammation  
|                  | **Deadline to take Quizzes: Unit 1, 2, 3, and 4** (Blackboard)                                                                                                                                          |
| **Sep 19**       | **Unit 6**: Disturbances in Circulation                                                                                                                                                                   |
| **Sep 22 Tuesday**| **Exam #1**: covers **Units 1, 2, 3 and 4**  
| **4:00-5:00pm**  | The exam will be completed within one hour.                                                                                                                                                              |
| **Sep 26**       | **Unit 5**: Inflammation  
|                  | **Unit 6**: Disturbances in Circulation                                                                                                                                                                   |
| **Oct 3**        | **Unit 7**: Neoplasms and Cysts  
|                  | **Unit 8**: Diseases of Blood, the Heart and Blood Vessels                                                                                                                                               |
| **Oct 10**       | **Unit 8**: Diseases of Blood, the Heart and Blood Vessels (continue)  
|                  | **Deadline to take Quizzes Unit 5, 6, and 7** (Blackboard)                                                                                                                                              |
|                  | **Complete and Submit BLOOD TRACING assignment** (Blackboard)                                                                                                                                           |
| **Oct 13 Tuesday**| **Exam #2** covers **Units 5, 6, 7 and 8**  
| **4:00-5:00pm**  | The exam will be completed within one hour.                                                                                                                                                              |
| **Oct 17**       | **Unit 9**: Diseases of the Lymphatic System  
|                  | **Unit 10**: Diseases of the Digestive System                                                                                                                                                             |
| **Oct 24**       | **Unit 10**: Diseases of the Digestive System (continue)                                                                                                                                                 |
| **Oct 31**       | **Unit 11**: Diseases of the Respiratory System  
|                  | **Deadline to take Quizzes: Unit 9, 10, and 11** (Blackboard)                                                                                                                                         |
| **Nov 3 Tuesday**| **Exam #3** covers **Units 9, 10 and 11**  
| **4:00-5:00pm**  | The exam will be completed within one hour.                                                                                                                                                              |
| **Nov 7**        | **Unit 12**: Diseases of the Nervous System                                                                                                                                                                |
| **Nov 14**       | **Unit 13**: Diseases of the Urinary System                                                                                                                                                                |
| **Nov 21**       | **Unit 14**: Diseases of the Female and Male Reproductive Systems  
|                  | **Deadline to take Quizzes: Unit 12, 13, and 14** (Blackboard)                                                                                                                                          |
| **Nov 24 Tuesday**| **Exam #4** covers **Units 12, 13, and 14**  
| **4:00-5:00pm**  | The exam will be completed within one hour.                                                                                                                                                              |
| **Nov 24**       | **Unit 15**: Disease of the Bones and Joints                                                                                                                                                               |
| **Dec 5**        | **Unit 16**: Diseases of the Integument                                                                                                                                                                   |
| **Dec 8 Tuesday**| **A MAKE-UP EXAM** This exam can be taken to make up for one of the missed UNIT exams; it will be completed within 1.5 hours.                                                                            |
| **4:00-5:30pm**  |                                                                                                                                                                                                        |
| **Dec 11**       | **Unit 17**: Diseases of the Endocrine Glands  
|                  | **Deadline to take Quizzes: Unit 15, 16 and 17** (Blackboard)                                                                                                                                         |
| **Dec 15 Tuesday**| **Cumulative/Comprehensive FINAL EXAM** covers the entire course (Units 1-17)                                                                                                                              |
| **4:00-6:00pm**  | The exam will be completed within two hours.                                                                                                                                                              |

*All exams will be given @ CCBC CATONSVILLE campus, room CLLB 101 at the time indicated in the schedule.*