

Jerry M. Wallace School of Osteopathic Medicine

CLINICAL APPLICATION of BIOMEDICAL SCIENCES I (CABS I)

OMED 611

Block 5, Semester 1, Fall 2025

COURSE SYLLABUS

Course Directors:

Name: Michael P. Mahalik, PhD Office: 138 Levine Hall Phone: (910) 893-1785 Email: <u>mahalikm@campbell.edu</u>

Name: Amy Hinkelman, PhD Office: 160 Levine Hall Phone: (910) 814-5209 Email: <u>hinkelman@campbell.edu</u>

Name: James E. Powers, DO

Office: 117 Levine Hall Phone: (910) 893-7209 Email: jpowers@campbell.edu

Name:Godwin Dogbey, PhDOffice:425 Smith HallPhone:(910) 814-5208Email:dogbey@campbell.edu

Credits: 2.0

Course Overview:

The shift from the lecture, discussion, and lab-based structure of the first two years of school to the hands-on, clinical practice focus of the third and fourth years can be challenging. The Clinical Application of Biomedical Sciences I course is the first of a two-part course series to assist students in this transition and help them integrate key concepts from the curriculum, review core material necessary for clinical practice, and prepare for national board exams.

Course Description:

During this course, students will integrate the comprehensive assessment of patients with a variety of potential disease processes, both common and uncommon, with the differential diagnosis, pathogenesis, and treatment of those processes.

This course will be delivered through self-directed learning and assessments to highlight key biomedical and clinical concepts from year one and preview of Block 5. The course is also designed to integrate and consolidate the content from the first year with the requisite knowledge and skills required for entry into third year clinical rotations. Completion of this course will help prepare students to successfully apply their clinical and biomedical knowledge and to pass COMLEX-USA Level 1.

Course Objectives:

- 1. Describe and relate how disruption of normal physiologic and homeostatic processes underlying normal health and nutrition may result in a variety of disease states.
- 2. Describe and identify key anatomical and pathophysiologic features associated with selected disease processes.
- 3. Correlate anatomical and pathophysiologic features of a variety of major disease processes with corresponding etiologies and appropriate treatment.
- 4. Describe, identify, and classify a variety of pharmacologic agents used in the treatment and/or diagnosis of major disease processes.

A Syllabus Appendix is available on Blackboard providing breakdowns of specific reading assignments, page numbers, and topics for each week.

Required Materials:

- 1. First Aid for the USMLE Step 1 Paperback.
 - Recommend either the 34th Edition (2024) or 35th Edition (2025)
- 2. Lange Pharmacology Flashcards, Fifth Edition by Suzanne Baron (Author), Christoph Lee (Author)
 - Available in the CUSOM Electronic Library under AccessMedicine

The focus for the pharmacology self-directed learning should be on the following (you may find the mnemonic CAMMII useful):

С	-	Classification of the drug
Α	-	Administration route
MM	-	Mechanics of action, and Metabolism/Excretion
Π	-	Interactions and Indications/Contraindications

Faculty Advisor Contact:

It is recommended that students contact their academic advisor during the course of the summer to give updates on their progress in the course or discuss any challenges encountered with studying. Also, periodically check your Campbell Email for any updates from your advisor or course-related announcements.

Examinations:

Comprehensive Block 4 Exam

This will be a half-length, board-style, 176-questions TrueLearn/COMBANK assessment, testing disciplines and topics related to material on the Level 1 board examination, which have been covered during the first year of the CUSOM curriculum. It will be taken at the end of Block 4.

CABS I Exam

This CUSOM-based examination will be composed of 200 questions covering content reviewed over the summer and taken at the beginning of Block 5.

Students are required to take these exams, which are administered on campus, on the scheduled dates and at the appointed times.

To avoid disruption, students are not permitted to ask questions during an examination or quiz. If there is a problem with a question, the student should make a note on his/her exam (scratch paper) about the problem and the course directors will address it after the exam.

Grading:

The CABS I course grade is reported as Pass/Fail with **passing defined as achieving a score** of 70% or higher. In order to achieve a passing score of 70%, a student **must earn a** minimum of 560 points out of the 800 total possible points.

The components of the course and corresponding point distributions are indicated in the table below:

Course Component	Timing	Point Value
Comprehensive Exam	End of Block 4	200 points
COMBANK Questions	Over the summer	300 points
CABS I Exam	Beginning of Block 5	300 points
		800 points total

The total number of points needed to pass the course is $560 (800 \times 70\% = 560)$.

<u>COURSE COMPONENT 1</u>: **COMPREHENSIVE EXAM (End of Block 4 in Year 1):**

- **200 out of 800 points** will come from the completion of the Comprehensive Exam at the end of Block 4 in year 1.
- Student performance on this assessment can be used to guide their study and focus on areas of relative weakness as they complete the CABS I course over the summer.
- The score achieved on this comprehensive exam **must be at least 30%**, with rounding, **to receive the full 200 points towards CABS I grade.**

<u>COURSE COMPONENT 2</u>: **COMBANK QUESTIONS (Completed over summer break):**

- Students can earn **300 of the 800 available points** for the CABS I course from the completion of at least **800 COMBANK questions** from the <u>COMLEX Level 1</u> <u>Category</u>.
 - Note: For practice and test preparation students may elect to do questions from the USMLE Step 1 Category; however, these questions <u>will NOT</u> be factored in as completion towards the total 800 question requirement.

• <u>Course Component 2</u> consists of <u>3 Parts</u>, each worth 100 points as indicated in the distribution detailed below.

Course Component 2: COMBANK Questions Grading – 300 Total Points				
	Requirement	Point Value		
Part 1	Completion of 10, 40-Question Sets - total of 400 questions (1 set for each discipline)	100		
Part 2	Completion of an additional 400 questions (on your own)	100		
Part 3	Completion of 800 total questions (400 questions from Part I + 400 questions from Part II)	100		
	·	300 points total		

Part 1: <u>Required Question Sets</u>

- The first 100 points for the 300-point COMBANK Question component come from the required question sets within COMBANK. There are 10 question sets available within COMBANK, each set containing 40 questions from a specific discipline.
- Students must fully complete these 10 required 40-question sets (for a total of 400 questions) in order to earn the 100 points available for Part 1.
 - There is not a minimum scoring % for these question sets so just do your best and use these assessments to better understand areas to focus on improving when completing your remaining 400 questions for Part II.

Part 2: Completion of 400 Additional COMBANK Questions

- The **next 100 points** for the 300-point COMBANK Question component come from completing an additional **400 questions within the COMLEX Level 1** question bank within TrueLearn (i.e., those outside the question sets from Part 1).
 - There is not a minimum scoring % for these 400 additional questions so just do your best; however, you should be aiming to earn a 50% or higher. Performance of <50% within a discipline or body system may indicate an area of opportunity to strengthen through additional active review and COMBANK questions.
 - Students may also retake questions; in fact, spaced repetition (e.g., retaking questions several days later) may help further reinforce concepts and consolidate knowledge. This may be especially beneficial in terms of questions which were previously answered incorrectly or those which cover concepts found to be more difficult.

- Note: Completion of **399 or fewer** questions will be awarded <u>zero (0) points</u> for Part 2.
- Students have the **option to take these questions in Timed Mode, Untimed Mode, OR Tutor mode**. A common approach is to use a mix of these modes, starting with primarily "tutor" and "untimed" and progressively utilizing "timed" mode further along into board preparation and content mastery.
 - Tutor mode (immediate feedback after each question)
 - Best for learning new concepts and reinforcing weaker subject areas
 - Untimed mode (answer questions without time pressure)
 - Best for building stamina and developing test-taking skills on a block of questions without time pressure
 - **Timed mode** (answer questions with time pressure)
 - Best for simulating exam conditions by practicing pacing while building stamina and refining test-taking strategies

Part 3: Completion of 800 TrueLearn/COMBANK Questions

- The **final 100 points** in the 300-point COMBANK Question component come from the **completion of the 800 TrueLearn/COMBANK questions** (400 questions from the 10 sets of 40 questions <u>plus</u> 400 additional questions).
- Completion of at least 800 questions is required to earn 100 points.
- Note: Completion of **799 or fewer** questions will be awarded <u>zero (0) points</u> for Part 3.
- Note: The 800 required TrueLearn/COMBANK questions must come from the COMLEX Level 1 Category.
- Remember, the 176 questions from the Comprehensive Block 4 Exam do <u>not</u> count toward this 800 question total; this means to complete the <u>800</u> question requirement, the total questions completed within TrueLearn/COMBANK including the Comprehensive Block 4 Exam is 976 questions.

COURSE COMPONENT 3: CABS I EXAM (Beginning of Block 5 in Year 2):

- The **final 300 points** of the CABS I course comes from a final examination to be administered on the first day of Block 5.
- The CABS I examination consists of **200 questions** covering **content from** the assigned readings in **First Aid for the USMLE Step 1 and the 50 Pharmacology flash cards**. Each exam question will be worth **1.5 points, yielding a total of 300 points** for this portion of the grade. Please refer to the Syllabus Appendix for further details.
- The final grade for the exam will be determined using statistical analysis of question performance with adjustments as necessary based on standard deviation within the cohort

as is done for CUSOM credit-bearing courses.

Final Course Grades

Students who do not achieve a grade of 70% (560 points) or higher may be required to undergo remediation as recommended by the APPS Committee.

Students must receive a minimum grade of 70% on the remediation exam in order to pass the course. Even if a grade higher than passing is achieved on the remediation exam, the student will be assigned a grade of 70% (P*) for the course.

Please refer to the DO Academic Bulletin regarding CUSOM grading policies and procedures. Failure of an exam or course will be handled in accordance with the policies published in the DO Academic Bulletin.

Disability Services:

Students with documented disabilities may request accommodations by contacting the office of Disability Services located in the Wallace Center. A health condition may rise to the level of a disability if it substantially limits one or more major life functions, one of which is learning. A disability may be temporary or ongoing. Services are often similar to IEP or 504 plans students may have had in high school, but can also include support in campus housing, dining halls and other University events and services. Appointments can be scheduled through Disability Services page the Campbell website. the of by emailing disabilityservices@campbell.edu or calling (910)-893-7514.

Students with documented disabilities who desire modifications or accommodations must contact the CUSOM Office of Student Affairs.

No accommodations will be made without approval through the University's process. A medical, psychological and/or other diagnosis may rise to the level of a disability if it substantially limits one or more major life functions, one of which is learning. A disability may be temporary or ongoing. Please review the DO Academic Bulletin for more information.

Dress Code:

Since this course takes place asynchronously and remotely, there is no Dress Code.

Class Attendance:

Since this course takes place asynchronously and remotely, there is no Class Attendance.

Honor Code:

Please refer to the DO Academic Bulletin regarding the CUSOM Honor Code.

Counseling Services:

All Campbell University students are eligible to receive free, confidential counseling via inperson and virtual consultations, groups, and individual sessions. Counseling Services also provides the opportunity to participate in outreach events. To make an appointment, visit the office located on the first floor of Sauls Hall, call 910-814-5709, or request an appointment on the <u>Counseling Services page</u> of the Campbell website. If you are concerned about a fellow student, please complete a <u>Student Care Referral</u>.

CUSOM students can access confidential, free, and unlimited psychotherapy and consultation services, both in-person and via HIPAA-compliant telehealth. Appointments are available Monday through Friday, 9 AM to 6 PM. To schedule, email <u>cusombh@campbell.edu</u> or call 910-893-7203. Behavioral Health offices are located in Levine Hall on the Health Science campus. Additionally, CUSOM students have 24/7/365 access to the MYgroup student support program for crisis, counseling, and referral services. Contact MYgroup at 800-633-3353.

Campus Pantry:

The Campus Pantry is open to students and staff experiencing food insecurity, offering a space for shoppers to choose their food items and personal hygiene items. With the main location at the Wallace Center and smaller satellite locations, there are multiple options to shop. Satellite Pantries are located in Counseling Services, Wiggins Memorial Library, Bob Barker Hall and Pat Barker Hall (for residents). Should you or someone you know need this level of support don't hesitate to visit one of our locations. For more information on location hours and frequently asked questions please check our webpage. For assistance and questions, contact Rev. Morgan Pajak at pajak@campbell.edu or (910)-814-4769.

Title IX:

Campbell University is committed to equality of educational opportunity. Campbell University does not permit discrimination or harassment in our programs and activities on the basis of race, color, sex, sexual orientation, gender identity or expression, age, religion, ethnicity or national origin, disability, genetic information, protected veteran status, military status and any other characteristic protected by law, except where exemption is appropriate and authorized by law. Students who believe they have been subjected to discrimination or harassment in violation of Title IX should report these concerns immediately to the Title IX coordinator. Title IX prohibits retaliation by any student and/or employee against anyone who

reports an alleged Title IX violation. If students, staff, or faculty members believe someone they know has experienced sexual misconduct, they should promptly report incidents to the <u>Title IX coordinator</u> via the Campbell website.

Safety and Security:

The health and safety of our community is of utmost importance. Please familiarize yourself with your classroom and building surroundings, emergency information posters, and make sure you have registered your cell phone number with CU Notify for timely warnings and emergency alerts. For more information visit: <u>Emergency Preparedness</u>.

Disclaimer: In a distance-learning environment, the Family Educational Rights and Privacy Act (FERPA), a federal privacy law, continues to remain in effect and students need to understand their role in supporting the privacy of fellow students. As this course incorporates remote interactions, be cognizant that shared pictures, written assignments, audio, videos, emails, blog posts, discussion boards, etc. remain part of the content of the course, just as they would if they were shared in the face-to-face classroom setting. The expectation is that each member of the class treat those materials with care and does not reshare or post beyond this course.

Accordingly, any student accessing class or other educational materials on Blackboard or any other electronic media:

- 1. Acknowledges the faculty members' intellectual property rights and that distribution of the materials outside the course participants violates the copyright policy; and
- 2 Recognizes the privacy rights of fellow students who speak or appear on video in class; and
- 3. Accepts that recording, distributing, posting, or uploading materials to students or any other third party not authorized to receive them or to those outside the classroom is an Honor Code violation; and
- 4. Agrees that the materials are to be accessed and used only as directed by the faculty member(s) teaching the course.

It should be noted the content of this syllabus may change according to the needs of the course. CUSOM reserves the right to amend the content of this syllabus and students will be notified of such changes.