



Acupuncture and Massage College
BLI 302
Biochemistry/ Lab work/ Imaging
SYLLABUS

Instructor: Dr. Aigars Rezevskis, L.M.T

Instructor will be available 15 minutes before class and 15 minutes after class to address student questions. In addition, students who need clarification on material covered in class or in assigned reading materials may request an appointment.

Hours / Credits: 30 / 2

Method of Instruction: Lecture and discussion

Required Text: Mosby's Diagnostic and Laboratory Test Reference 14th ED, Pagana and Pagana.

[NCCAOM- 2022-Candidate Preparation Handbook for Oriental Medicine \(OM\) Certification](#)

Prerequisites: Standard entrance requirements

Course Description: This course provides a general study of the blood work and its biochemical analysis. Emphasis is placed on the most commonly used laboratory data and their interpretation.

Course Objectives:

Upon successful completion of this course students will be able to:

- Identify the types of most commonly used blood test
- Recall possible interpretations of data
- And recall most common biochemical processes.
- Understand the names and uses of various imaging tests

Class Policies: You are expected to attend all classes and be on time. Please see AMC [Student Handbook](#) for details on attendance, tardiness, missed exams, and early departure policies. Eating, drinking, and gum-chewing are not permitted. Cell phones and pagers must be turned off or put-on silent mode.

Recording in Class: Students will not be allowed to audio record lectures in this course unless approved by their instructor.

Homework: Homework is an important part of learning at AMC. On a daily basis in each course as reflected in the course syllabus, reading assignments must be completed outside of class. The readings supplement the class lectures, and it is your responsibility to complete all reading assignments before coming to class. Instructors use oral and written quizzes to check that students have completed the reading assignments. Written homework assignments are turned in to the instructor in each class and count toward your course grade. Homework must be done prior to the class in which it is due.

You are responsible on quizzes and the Final Exam for all material in the reading assignments *whether covered in the class lectures or not.*

Honor Code: Acupuncture and Massage College does not tolerate academic dishonesty. If you are caught cheating in any way, including but not limited to copying from another person's paper during an exam or quiz, or plagiarizing material in a paper, you will be dismissed, with no probationary period. All instances of cheating must be reported to a faculty member and to the Academic Dean. To know about cheating and not report it is the same as cheating.

Appropriate Classroom Laptop Use

Acceptable in-class uses of laptops and other web-enabled devices include: taking notes, following along with the instructor on PowerPoints, working on assigned in-class activities, projects, and discussion. Unacceptable in-class uses of laptops and other web-enabled devices include: texting or e-mailing, surfing the Internet, playing games, writing papers or doing homework. AMC Faculty consider inappropriate in-class uses of laptops and web-enabled devices equivalent to non-participation in class and reserve the right to lower student grades accordingly.

OM Attendance

Students are expected to attend all class sessions with no exceptions, due to the compressed course content and academic rigor of the program. For each class missed, there will be a **6.6-point reduction** from the class participation grade. If a student misses more than 3 class sessions, they may fail the course and be required to retake it the following year.

GPA Requirements: AMC has an escalating GPA requirement for the OM program. All first year students must maintain at least a 2.0 or above. All second year students must maintain a 2.0 or above. All third year students must maintain a 3.0 or above" (If a student falls below the required GPA, they will be placed on Financial Aid Warning.

Americans with Disabilities Act (ADA504) Accommodations: Students requesting accommodations are asked to communicate with the Section 504 Coordinator, Yaly Flores-Soto, Academic Dean. Dean Soto may be reached at (305) 595-9500 or via e-mail at Dean@amcollege.edu. Her office is located at 10506 North Kendall Drive, Miami, FL 33176. Please refer to AMC's [Student Handbook](#) for more details on ADA Accommodation process.

Your final grade will be computed as follows:

Class Participation/Attendance	5%
2 Page Paper*(Library Integration)	5%
Quizzes	40%
Final Exam	<u>50%</u>
Final Grade	100%

Library Integration

Each student will write a two-page paper on a topic covered in this class using books/resources (including online library resources <http://www.amcollege.edu/library>) in AMC's library as references.

Grading: As listed in our school catalog, the following scale will be used:

A	90-100%	4.0	P	Pass (70% or above)
B	80-89%	3.0	F	Fail (below 70% for Pass/Fail courses)
C	70-79%	2.0	I	Incomplete
D	60-69%	1.0	W	Withdrawal
			WF	Withdrawal Failure
			WNA	Withdrawal, no attendance
			RPT	Repeat course – no GPA calculated

Calendar

Class 1: Thursday, 01/11/24

Content:

Complete blood count (Plasma, RBC count, Erythrocyte Sedimentation Rate(ESR), hemoglobin, hematocrit, platelet count, MCV, MCHC, RDW, MCH, WBC count, WBC differentiation, Throbocyte count).

Coagulation Screening (PT, PTT, BT)

Assignment: Review information in the book and class notes

Class 2: Thursday, 01/18/24

QUIZ 1

Content:

Hepatic Function Panel (AST, ALT, Bilirubin, Alkaline Phosphatase (ALP), α -Fetoprotein (AFP).

Serum protein electrophoresis (Albumin, Globulin, Fibrinogen)

Pancreatic Enzymes (Amylase, Calcium, Lipase)

Hepatitis Panel (Hepatitis A, B, C, D, E)

Review class 1

Assignment: Review information in the book and class notes

Class 3: Thursday, 01/25/24

QUIZ 2

Content:

Cardiac Injury (Creatine Kinase (CK), CK-MB, Myoglobin, Troponin I)

Lipid Panel (Total Cholesterol, **Lipoproteins**(LDL, HDL, VLDL), Triglycerides (TG))

Arterial Blood Gases (PCO₂, PO₂, pH, HCO₃)

Electrolytes (sodium, potassium, chloride, and CO₂ levels)

Review Class 2

Medical Errors Lecture

Assignment: Review information in the book and class notes

Class 4: Thursday, 02/01/24

QUIZ 3

Content:

Kidney Function Panel (Blood Urea Nitrogen (BUN), Creatinine, Glucose)

Thyroid Panel (TSH, T3, T4, Calcitonin)

Parathyroid Panel (PTH)

Prostate (total prostate specific antigen (PSA))

Reproductive hormones panel (pregnancy test (**Beta HCG**), estrogen, progesterone, testosterone)

Review Class 3

Assignment: Review information in the book and class notes

Class 5: Thursday, 02/08/24

QUIZ 4

Content:

Imaging Studies (X-Rays, Ultrasonography, Computed Tomography (CT), Magnetic Resonance Imaging (MRI), positron emission tomography (PET) scan, Endoscopy (colonoscopy, cystoscopy, bronchoscopy), Angiography, EKG, and electromyogram (EMG))

AIDS (HIV, ELISA, Western Blot, CD4 Count, CD4/CD8)

Review Class 4

Assignment: Review information in the book and class notes

Class 6: Thursday, 02/15/24

QUIZ 5

Content:

Urinalysis: Color, pH, clarity, protein, RBC, WBC, glucose, bacteria

Stool studies: Occult blood, lipids, culture

Microscopic studies: Acid fast stain, cultures

Assignment: Review information in the book and class notes

Class 7: Thursday, 02/22/24

Content: Review for Final Exam

Class 8: Thursday, 02/29/24
Content: Final Exam